The

New Jersey Historic Bridge Database

Based on survey data and recommendations prepared by
A.G. Lichtenstein & Associates, Inc.
For
The New Jersey Department of Transportation
Bureau of Environmental Services
And
The Federal Highway Administration
New Jersey Division
With
Modifications based on Consultation between
The New Jersey Department of Environmental Protection
Historic Preservation Office,
The New Jersey Department of Transportation, and Others

Survey - September, 1994
Database Modifications 2001

Introduction

The 1987 Surface Transportation and Uniform Relocation Assistance Act mandated that each state conduct a survey of all bridges on and off the system to determine their historicity. In response, NJDOT hired A. G Lichtenstein & Associates, Inc. to conduct the necessary survey and make recommendations about the eligibility of each bridge for listing in the National Register of Historic Places. For the purposes of the survey, NJDOT=s definition of a bridge as a structure 20 feet or greater in length was adopted and an end date of construction of 1946 was chosen.

The development of historic contexts for evaluating the bridges; collection of survey data; analysis; and the formulation of recommendations about eligibility were completed during 1991-1994. Consultation with the SHPO on elements of the survey was initiated as early as the fall of 1992, and after review by NJDOT Bureau of Environmental Services and FHWA NJ Division Office staff, sections of the survey report and data forms were transmitted to the SHPO for review and comment. By it=s conclusion, the survey included data forms on 2,065 structures.

The Historic Preservation Office provided comments on the entire survey by letter of June 30, 1995. These comments addressed approximately 600 structures and were silent on 1465. During the fall of 1995 staff from Lichtenstein, NJDOT and the SHPO worked to resolve issues associated with the survey. At the conclusion of that effort agreement had been reached [but not formalized] on approximately 2,000 of the bridges. Over the past few years, NJDOT has renewed its efforts to bring the survey to conclusion by resolving outstanding issues on individual bridges. This effort, required to bring closure to the survey and as an initial step in developing an analysis of whether individual bridges could be preserved and a plan for doing so when possible, was completed in March of 2001. Since then, information has been added to the data base about alterations to the bridges [demolitions, rehabilitations, significant alterations, etc.], status of projects involving bridges listed in the survey when available [project planning has been initiated, memorandum of agreement has been executed, etc.], and additional Section 106 consultation references as available to the database team. Not all of this information will appear on the forms which can be viewed in the Adobe Acrobat format. Information pertinent to project status becomes dated immediately and is included as a comment field only in the database, which forms the basis for the forms. Descriptive text and other information [including an introduction, description of methodology, narratives on the development of transportation networks and the evolution of bridge building technology in NJ County summaries, bibliography, etc.] from the original survey report are also available in the Adobe Acrobat format.

The information included in this database is only useful if it is maintained. Please provide information about any corrections or additions needed to NJDOT=s Bureau of Environmental Services Historic Bridge Database Team as soon as you are aware of them. Changes will be incorporated periodically.

Figure 1.

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES
NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # **CO** **OWNER** **MILEPOINT**
NAME & FEATURE INTERSECTED **FACILITY**

TOWNSHIP
TYPE **DESIGN** **MATERIAL**
 # SPANS **LENGTH** **WIDTH**

CONSTRUCTION DT **ALTERATION DT** **SOURCE**
DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT

1995 SURVEY RECOMMENDATION
CONSULT STATUS
CONSULT DOCUMENTS

SUMMARY

INFOR MATION

PHOTO: REVISED BY (DATE): QUAD:

A. G. Lichtenstein & Associates, Inc. performed initial survey.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

Data Form Design

The data form displayed in the NJHBD [Figure 1] has been modified slightly from those included in the 1995 survey for the purpose of clarity and including additional information. For example, the survey was comprised of an initial survey form and, for those structures, which were recommended as being eligible, a second Along form@ which provided additional descriptive information. These two forms have been combined into a single data form. The fields on the NJHBD form are described as follows:

Structure
Each bridge under state jurisdiction has been assigned a unique 7-digit number. The first two digits are a county code, and the five-digit suffix is a sequential route code for state bridges and often a variation of the old county numbering system for county-owned spans. All NJDOT records relevant to a particular bridge are filed by this unique number. A search on the structure number will let you know immediately if the bridge was included in the survey.

County
The county in which the bridge is located, or, in the instance of a joint-county span, the county, which assumes responsibility for the structure.

Owner
Governmental entity, agency, or corporation that owns the bridge. APrivate@ refers to a private owner or bridge commission. ARailroad@ is a generic entry indicating that a railroad company owns it, but not necessarily which one. ANJDOT@ refers to state-owned bridges.

Milepoint
State highways are measured west to east, or south to north from the 1) State line, or 2) origin of the route. Milepoints (referred to mileposts on railroads) are measured to the nearest hundredth of a mile.

Name & Feature Intersected
Name(s) of feature(s) carried and crossed

Facility
Name(s) of feature(s) the bridge carries. Local nomenclature is included in parenthesis.

Township
Local civil division where the bridge is located.

Type
A standardized entry based on a list of all bridge types found in the state [Figure 2].

Design
A standardized entry based on a list of bridge type designs found in the state [Figure 2]. Design assists with better identifying bridges with similar physical characteristics, such as the various trusses or concrete reinforcing systems.

Material
A standardized entry based on a list of the material of the primary members [Figure 2]. Spans are typed by primary material. When it is not known for certain if a span is steel or cast or wrought iron, Ametal@ is used.

Spans
Total number of spans.

Length
The backwall to backwall overall length of the bridge.

Width
The fascia-to-fascia width of the bridge

Construction Date
Date of erection. Circa dates are entered with Aca.@ after the year.

Alteration Date
Date(s) of significant alteration(s) that affect the appearance of span. Demolition dates are also included. Circa dates are entered with Aca.@ after the year.

Source
Source upon which the date(s) of construction/alterations(s) is/are based. In some instances Asource@ also refers to the source of historical data. ASTYLE@ is the convention used when the date is based on the physical evidence of the structure itself. ANJDOT@ refers to the date provided in the NJDOT structure database. That date was used when it was confirmed by physical evidence and research.

Designer/Patent
Identifies who designed the bridge or who patented the design or construction details. ANJ STATE HWY DEPT BRIDGE DIV@ is the convention used to identify bridges designed by the state highway department bridge engineers. AUNKNOWN@ was entered when research failed to identify the designer/patent. If no designer/patent was researched, then the category was left blank.

Builder
Identifies the person or company that actually built the span. When no research was conducted to identify the builder, the category was left blank. If research was conducted and no builder was identified then AUNKNOWN@ was entered.

Setting/Context
Surroundings and historic contexts are an important part of the National Register evaluation process. Frequently a bridge is found eligible because it is located in an identified potential, eligible, or listed historic district. For example, it might contribute to an historic context defined on the basis of industrial development or community planning. It could also be an area that once had historic significance but has been so altered that the significance has been lost. The bridge might be newer than it historic setting and therefore not contribute to it unless it is individually eligible. Individually eligible bridges also contribute to an historic district even if it does not relate to the significance of the district. Or, the span could be isolated in a setting surrounded by woods or fields. This category was defined to explain and assess the environment of the span as a means of better supporting the National Register recommendation. Because of space limitations, sometimes historical data, especially information about the road itself, was included in this category.

1995 Survey Recommendation
Provides the recommendation of the 1995 Historic Bridge Survey compiled by A.G. Lichtenstein & Associates, Inc. of whether the structure appears to meet the criteria for inclusion in the National Register of Historic Places. It is a studied and carefully considered opinion based on all of the information gathered statewide during the field work, research, and internal review phases of the survey. It reflects the perspective of historians and engineers. The process for reaching this recommendation is described in detail in the survey report and should be consulted by the reader. The recommendations of the survey do not necessarily correlate with the comments of the SHPO on the survey. Both are included in the database for the information of the users.

Consult Status
Describes the results of the most recent consultation with the SHPO in the context of the historic bridge database. Consultation comments made in the context of project specific discussions since the time of the survey have been included as available to the database team. The information included in this category is comprised of 1) the opinion offered by the NJ Historic Preservation Office on the survey results and/or any previous opinions offered by the Office on the individual eligibility of the structure to be listed in the National Register [findings include

AIndividually Listed@, AIndividually Eligible@, and ANot Individually Eligible@]; 2) the identity of any bridges and districts which are potentially eligible, eligible, or listed in the National Register at the location of the structure, with the date listed properties were actually listed in the Register [For example, AListed. South Randolphville Road Bridge. 09/17/1999"] ; 3) and an indication of whether the bridge is non-contributing, may contribute, contributes to the identified historic district, or has not been rated [For example, APotential Union County Park System Multiple Property nomination, May contribute@]. Since an analysis of the potential for each bridge to be within an historic district and evaluations of contributing/non-contributing status were not elements of the 1995 survey this information is not considered to be comprehensive and is included only when available to the database team. The term APotentially eligible@ in this context indicates there is recognition on the part of the HPO and the NJDOT that the area has either some historic significance or architectural character, which must be evaluated, to determine if an historic district indeed exists at that location. AAgreed historic district@ indicates that there is agreement by the two agencies that an historic district exists at that location, however full definition of the significance of the district and delineation of it=s boundaries has not been initiated. Use of past tense, as in ABridge was individually eligible@, indicates that the structure has been demolished or sufficiently altered such that it is no longer individually eligible for listing in the National Register. Properties listed only in the New Jersey Register of Historic Places and not in the National Register are also identified in this section.

Consult Documents

Enumerates the basis for the findings listed in AConsult Status@ and may include, SHPO letters [survey comments and project specific consultation status], SHPO opinions, and formal Determinations Eligibility from the Keeper of the National Register.

Summary

A narrative that briefly describes the bridge and significant alterations, and justifies and explains the National Register recommendation.

Information

Includes an expanded physical description, statement of historical and technological significance, boundary description, and a selected bibliography. This information is provided only for those bridges which 1) appeared to be eligible either individually or as a contributing resource in a potential historic district [if that district was identified at the time of the survey], 2) were of questionable eligibility which needed additional research to resolve, or 3) are in a listed National Register Historic District and were evaluated as being contributing resources [at the time of the survey]. This information does not appear for those bridges whose eligibility had previously been evaluated [National Park Service/Keeper of the National Register or SHPO has previously rendered a finding; bridges listed in the National Register individually or as contributing resources within districts; multiple property resources; or bridges recommended as being non-contributing to listed National Register Historic Districts].

Photo

Identifies the roll and negative number of images of this bridge. The date in parenthesis is the month and year the bridge was field inspected and photographed. Photographic images and negatives are retained by NJDOT=s Bureau of Environmental Services. At least two black and white photographs were taken of each bridge showing an elevation and through view. In rare instances field conditions precluded obtaining an elevation view.

Revised By (Date)

Records when the structure was re-evaluated or the survey form was revised after the database was finalized.

Quad

Identified the USGS 7.5 minute quadrangle map on which the bridge is located. Dates of the maps vary. A copy of the section of the quad map with the bridge marked on it is also on file with NJDOT=s Bureau of Environmental Services.

Copies of the original survey forms as submitted in final copy are on file with NJDOT=s Bureau of Environmental Services.

Figure 2.

BRIDGE TYPES

DECK TRUSS
PONY TRUSS
THRU TRUSS
CANTILEVER TRUSS
DECK GIRDER
THRU GIRDER
LATTICE GIRDER
MULTI GIRDER
ARCH
STEEL ARCH
3 HINGE ARCH
TIED ARCH
DECK ARCH
BRICK ARCH
OPEN SPANDREL ARCH
OPEN SPANDREL RIBBED ARCH
STONE ARCH
T BEAM
SINGLE LEAF BASCULE
DOUBLE LEAF BASCULE
ROLLING LIFT
VERTICAL LIFT
SWING SPAN
CABLE LIFT BASCULE
BOX BEAM
RIGID FRAME
BAILEY
SLAB
SUSPENSION
STRINGER
TUNNEL
OTHER

BRIDGE DESIGN

PRATT HALF HIP
PRATT
WARREN
K
HOWE
LENTICULAR
CAMELBACK
PARKER
BALTIMORE
HYBRID
DOUBLE INTERSECTION
TRIPLE INTERSECTION
SCHERZER
STRAUSS OVERHEAD
STRAUSS UNDERNEATH
HEEL TRUNNION
ELLIPTICAL
PARABOLIC
BARREL
ARCH
RIM BEARING
CENTER BEARING
ENCASED
PARTIALLY ENCASED
LAMINATED
TRUNNION
JACK ARCH (BRICK)
JACK ARCH (CONCRETE)
TUNNEL
CONTINUOUS
OPEN WEB

MATERIAL

STONE
BRICK
WOOD
CONCRETE
STEEL
WROUGHT IRON
METAL
REINFORCED CONCRETE

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0101151 **CO** ATLANTIC **OWNER** STATE AGENCY **MILEPOINT** 51.77

NAME & FEATURE INTERSECTED ATLANTIC CITY LINE (NJT) OVER US 9 **FACILITY** ATLANTIC CITY LINE (NJT)

TOWNSHIP ABSECON CITY

TYPE THRU GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 76 ft **WIDTH** 24 ft

CONSTRUCTION DT 1939 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT UNKNOWN **BUILDER** PUBLIC WORKS ADM.

SETTING / CONTEXT The bridge carries a single track of NJT's Atlantic City Line, former Pennsylvania Reading Seashore Line, over two-lanes of US 9. The right-of-way was originally developed by the Camden and Atlantic Railway in the 1850s, but above grade crossings were not systematically added until the first decades of the 20th century. The bridge is near the intersection of US 9 and US 30; the surroundings are heavily developed with commercial properties.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed, single-span ballasted-deck steel thru girder bridge with floor beams has scored concrete abutments and concrete end posts at the ends of the girders. The bridge was built in 1939 as a New Deal era grade elimination project by the Federal Works Agency, Public Works Administration. The bridge is a representative example of a common railroad overpass bridge type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 411:10-11 (05/92) REVISED BY (DATE): QUAD: Pleasantville

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0102151 **CO** ATLANTIC **OWNER** NJDOT **MILEPOINT** 51.25

NAME & FEATURE INTERSECTED US 9 OVER NACOTE CREEK **FACILITY** US 9

TOWNSHIP PORT REPUBLIC CITY

TYPE SINGLE LEAF BASCULE **DESIGN** STRAUSS UNDERNEATH **MATERIAL** Steel

 # SPANS 17 **LENGTH** 254 ft **WIDTH** 30 ft

CONSTRUCTION DT 1922 **ALTERATION DT** 1955 **SOURCE** PLANS

DESIGNER/PATENT STRAUSS BASCULE BRIDGE COMPANY **BUILDER**

SETTING / CONTEXT The bridge carries two-lanes of traffic over Nacote Creek south of its confluence with the Mullica River. The bridge is located in a broad wetlands and coastal meadow. A number of 20th-century residences are nearby, some of them built against the creek with timber pile pier foundations. The bridge has a wood frame tenders house, and next to the southern approach a wood frame outhouse.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 02/01/80

SUMMARY The bridge consists of a single-leaf Strauss bascule main span and 16 timber stringer approach spans. The superstructure of the main span is a deck girder with articulated counterweight. The bridge has had repairs to its substructure, the counterweight has been gunited, and the operating mechanism rebuilt (1955). The bridge is 1 of 4 1920s Strauss bascule bridges in the county, it is probably the least technologically distinguished because of its standard design and short 40' span.

INFOR MATION

Bibliography:
Atlantic County. County Engineer's Office. Bridge Cards. 1922.
New Jersey Department of Transportation. Bridge Plans and Files.

Physical Description: The main span of the US 9 over Nacote Creek bridge is an operable single-leaf Strauss bascule with underneath counterweight. The superstructure consists of two deck girders with floor beams and stringers. The girders measure 40' from trunnion to toe, and taper from approximately 5' depth at the main trunnion to 2'8-1/2" depth at the toe. The counterweight is concrete in a metal frame connected to the end of the bridge girders by counterweight trunnions. The counterweight has been sprayed with gunite. The main trunnion is supported by steel posts of channels with lacing. The main trunnion posts are supported on a concrete pier while the toe rests on timber pile bents. The main span has pipe railings and steel grid deck. The main span was originally operated manually with a capstan, but in 1955 an electric motor was added. The electric motor was installed below the superstructure on a steel platform, and the gearing and shafting rehabilitated to accommodate the new power source. The operating mechanism is engaged from a single-bay, wood frame operator's house on the bridge's southeast elevation, also added in 1955.In 1961 the steel grid deck was installed replacing a wood deck.

The bridge has timber stringer approach spans, 7 to the north of the main span and 8 to the south. The timber stringer spans rest on timber pile piers with cross bracing. The approaches have a wood railing with outriggers for support. Although reconstruction records have not been located, it is most likely the approach span members have been replaced more than once since the bridge's original construction. On the upstream side of the southern approach is a wood-frame tenders house used by the bridge tenders for a place to rest and store their belongings. The tenders house is not shown in the plans and may have been added at a later date. An unusual feature of the bridge is a wood-frame outhouse next to the southwestern abutment. The bridge has an older set of manually-operated lattice rail gates, probably original to the bridge, but new automatic gates have been added.

Historical and Technological Significance: In 1922 the Nacote Creek bridge was built by the county with state funding as part of the improvement of the newly-created NJ Route 4, later redesignated US 9.The single-leaf Strauss bascule bridge was designed by the Strauss Bascule Bridge Company of Chicago, Illinois, the nation's foremost engineer of movable bascule bridges. It is one of four documented surviving movable 1920s Strauss bascule highway bridges in Atlantic County. Due to alterations to the operating mechanism, and the application of a standard Strauss design for a relatively short-span movable crossing, the US 9 over Nacote Creek bridge is not the most historically or technologically distinguished of the county's movable spans. It does not have National Register significance.

PHOTO: 411:14-19 (05/92) REVISED BY (DATE): QUAD: New Gretna

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0103152 **CO** ATLANTIC **OWNER** NJDOT **MILEPOINT** 56.75

NAME & FEATURE INTERSECTED US 30 OVER BEACH THOROFARE **FACILITY** US 30

TOWNSHIP ATLANTIC CITY

TYPE SINGLE LEAF BASCULE **DESIGN** TRUNNION **MATERIAL** Steel

 # SPANS 7 **LENGTH** 473 ft **WIDTH** 74 ft

CONSTRUCTION DT 1942-46 **ALTERATION DT** 1989 **SOURCE** NJDOT

DESIGNER/PATENT HOWARD,NEEDLES,TAMMEN,BERGENOF **BUILDER** OLE HANSEN CONSTRUCTION

SETTING / CONTEXT The bridge carries 6-lanes of US 30 over Beach Thorofare in the tidal meadows west of downtown Atlantic City. The surrounding area is undistinguished with billboards, parking lots, and a scattering of commercial establishments along the highway. The bridge was designed just before the outbreak of WWII, but its completion was interrupted by the war.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-leaf bascule bridge has 6 encased stringer approach spans. The 80'-long bascule has a deck girder superstructure, underneath counterweight, and operators house. The bridge is the newest of at least 5 surviving pre-1946 bascule spans in the county, it has no distinctive details or features. Much of the machinery was replaced and the superstructure rehabilitated in 1989. The operators house was also enlarged. The altered bridge is not technologically noteworthy.

INFOR MATION

PHOTO: 171:7-19 (05/92) REVISED BY (DATE): QUAD: Oceanville

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NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0107150 **CO** ATLANTIC **OWNER** NJDOT **MILEPOINT** 47.4

NAME & FEATURE INTERSECTED US 40 OVER BABCOCK CREEK **FACILITY** US 40

TOWNSHIP HAMILTON TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Wood

 # SPANS 6 **LENGTH** 72 ft **WIDTH** 30 ft

CONSTRUCTION DT 1921 **ALTERATION DT** Unknown **SOURCE** NJDOT

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The 2-lane bridge spans Babcocks Creek east of downtown Mays Landing. West of the bridge is a municipal park and marina. The bridge is within the boundaries of the Mays Landing Historic District, which includes a number of nearby 19th- and 20th-century residential structures.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Listed. Mays Landing Historic District. 08/20/1990. Noncontributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 6-span timber stringer bridge has timber pile substructure and wood deck with asphalt road surface. Two-high beam guide rails have been added. Dated 1921 by NJDOT, the bridge appears to have been rebuilt inkind within the past 25 years. No plans or records have been located, but based on its present appearance, it appears that it was rebuilt after the 1837-1935 period of significance of the Mays Landing Historic District. The span is too new to be evaluated as contributing.

INFOR MATION

PHOTO: 407:21-22 (05/92) REVISED BY (DATE): QUAD: Mays Landing

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0107151 **CO** ATLANTIC **OWNER** NJDOT **MILEPOINT** 46.8

NAME & FEATURE INTERSECTED US 40 & NJ 50 OVER GREAT EGG HARBOR RIVER **FACILITY** US 40 & NJ 50

TOWNSHIP HAMILTON TOWNSHIP

TYPE MULTI GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 77 ft **WIDTH** 41 ft

CONSTRUCTION DT 1928 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The 2-lane bridge spans the Great Egg Harbor River on the western side of downtown Mays Landing. The bridge lies within the boundaries of the Mays Landing Historic District, which includes 19th- and 20th-century houses on both sides of the river from the bridge. The river is navigable and east of the bridge is a marina.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Not Individually Eligible. Listed. Mays Landing Historic District. 08/20/1990. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 1928 deck multi girder bridge consists of three encased plate girders with concrete slab deck, cantilevered sidewalks, concrete balustrades, and scored concrete abutments. The bridge was built as part of the reconstruction of NJ 48, redesignated US 40 in the early 1950s. It lies within the period of significance (1837-1935) of the Mays Landing Historic District, and should be considered a contributing structure that reflects the impact of highway improvements on the community.

INFOR MATION

Bibliography:
Office of New Jersey Heritage. National Register
File. Mays Landing Historic District. 1990.

Physical Description: The 77'-long one-span bridge is composed of three encased built-up deck girders supported on a concrete substructure with flared wing walls that are scored. The cantilevered sidewalks have concrete balustrades with paneled posts. Wood sheet piling has been added as scour protection to the abutments, and beam guide rails separate the roadway from the sidewalks.

Historical and Technological Significance: The concrete-encased multi deck girder bridge is not individually technologically distinguished, but it is historically significant as a contributing resource to the Mays Landing Historic District, listed in 1990.The bridge was not rated in the nomination, but it was built within the 1837 to 1935 period of significance of the district. The district is eligible under Criterion A of the National Register for its significance in architecture, industry, politics/government, and community development. US 40 and NJ 50 is the main road through the community that was designated as the county seat in 1837, and the road has had a dramatic impact on the historic development of the district.

The bridge is a standard type and design used by the New Jersey State Highway Department throughout the state. It was built as part of the 1928 redevelopment of NJ 14, one of the original 15 state highway routes. NJ 14 went from Egg Harbor City to Cape May City by way of Mays Landing, Tuckahoe, and Cape May Court House. The designation was changed to NJ 48 in 1928. It became US 40 in the 1953 redesignation.

Boundary Description and Justification: The bridge is within the boundaries of the Mays Landing Historic District as delineated in the Mays Landing USGS Quad Map accompanying the nomination. The bridge including its superstructure, substructure, and right-of-way over the river is a contributing resource.

PHOTO: 407:16-17 (05/92) REVISED BY (DATE): QUAD: Mays Landing

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0107152 **CO** ATLANTIC **OWNER** NJDOT **MILEPOINT** 46.92

NAME & FEATURE INTERSECTED US 40 & NJ 50 OVER PLEASANTVILLE SECTION RR **FACILITY** US 40 & NJ 50

TOWNSHIP HAMILTON TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 112 ft **WIDTH** 40.3 ft

CONSTRUCTION DT 1929 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT PENNSYLVANIA RR ENGINEERING **BUILDER** UNKNOWN

SETTING / CONTEXT The 2-lane bridge spans the abandoned right-of-way of the Pennsylvania Railroad's Pleasantville Section, originally developed in 1880 by the West Jersey Railroad. The bridge is located in the Mays Landing Historic District, and near the bridge are numerous contributing 19th- and 20th-century residences. Under the bridge is the former loading platform for the railroad, and just north an abandoned single-story, hipped roof, brick station house.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Not Individually Eligible. Listed. Mays Landing Historic District. 08/20/1990. Noncontributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The three-span encased steel stringer bridge has paneled parapets and a concrete substructure with arched piers. It was constructed in 1929 as a grade elimination project associated with improvements to NJ 48, and is a representative example of a bridge type used by the PARR for other overpasses. It falls within the period of significance of the Mays Landing Historic District (1837-1935) and is a contributing element reflecting both rail and road transport.

INFOR MATION

Bibliography:
Office of New Jersey Heritage. National Register File. Mays Landing Historic District. 1990.

Physical Description: The three-span bridge with concrete parapets is composed of encased rolled steel stringer spans supported on concrete abutments and concrete bents with arched struts and crash walls. The 1929 Pennsylvania Railroad station, a hip-roofed one-story brick building, is adjacent the bridge at the track level. It is not in use and the track is abandoned.

Historical and Technological Significance: The 1929 encased stringer overpass is not individually distinguished, but is a contributing resource in the Mays Landing Historic District, listed in the National Register in 1990 for its significance in architecture, industry, politics/government, and community development. The district is eligible under Criterion A. The period of significance is from 1837, when the town was designated the Atlantic County seat, until 1935. The overpass and adjacent station were constructed by the Pennsylvania Railroad as part of a grade elimination agreement in 1929. The Pennsylvania Railroad was successor to the West Jersey and Atlantic Railroad that initially developed the right-of-way to Mays Landing in 1880. Because the bridge is located within the district, is unaltered, reflects the historic rail and highway development of the community, and was built within the National Register nomination's period of significance, it is evaluated as a contributing resource.

Boundary Description and Justification: The bridge is within the boundaries of the Mays Landing Historic District as delineated on the Mays Landing USGS Quad Map accompanying the district nomination. The bridge including the superstructure, substructure, and right-of-way over the railroad line, is a contributing resource.

PHOTO: 407:13-15 (04/92) REVISED BY (DATE): QUAD: Mays Landing

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0108150 **CO** ATLANTIC **OWNER** RAILROAD **MILEPOINT** 59.55

NAME & FEATURE INTERSECTED LINWOOD SECONDARY OVER US 40 **FACILITY** LINWOOD SECONDARY

TOWNSHIP PLEASANTVILLE CITY

TYPE THRU GIRDER **DESIGN** PARTIALLY ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 111 ft **WIDTH** 25.5 ft

CONSTRUCTION DT 1934 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries a single track of ConRail's Linwood Section over 4-lanes and median of US 40 near downtown Pleasantville City. The surrounding neighborhood has mostly undistinguished 20th-century residential and commercial structures. The railroad right-of-way was originally developed in 1880 by the Pleasantville and Ocean City Railroad. In the 1930s, when the current bridge was constructed, the railroad was owned and operated by the Pennsylvania Railroad Company.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed 2-span bridge is a thru-girder with encased floor beams, ballasted deck, and concrete abutments and center pier. In 1934 the bridge was built as a grade elimination highway underpass during the widening of NJ 48 (current US 40). A chainlink fence has been attached to the bridge girders. The bridge is not associated with the historically significant period of development of the railway, and is a technologically undistinguished example of a common railroad overpass bridge type.

INFOR MATION

PHOTO: 411:1-2 (05/92) REVISED BY (DATE): QUAD: Pleasantville

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0110150 **CO** ATLANTIC **OWNER** NJDOT **MILEPOINT** 49.84

NAME & FEATURE INTERSECTED NJ 49 OVER TUCKAHOE RIVER **FACILITY** NJ 49

TOWNSHIP ESTELL MANOR CITY

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 3 **LENGTH** 38 ft **WIDTH** 40 ft

CONSTRUCTION DT 1929 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries two lanes of NJ 49 over the Tuckahoe River, which forms the boundary between Cape May and Atlantic Counties. Upstream from the bridge, and extending between the bridge abutments, is a concrete dam/spillway with a three bay gate frame with concrete support walls running from the dam to the bridge's piers. The bridge is located in an undeveloped area of the Pine Barrens, and is within the boundaries of NJDEPE's Peaslea Wildlife Management Area.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 3-span bridge is a concrete slab with concrete substructure and balustrades. A beam guide rail has been added. In 1929 the bridge was constructed as part of the NJ 47 highway improvements. The route was later redesignated NJ 49. The bridge is a representative example of a common 1920s NJ State Highway Department concrete slab bridge, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 408:25-26 (04/92) REVISED BY (DATE): QUAD: Tuckahoe

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0111152 **CO** ATLANTIC **OWNER** NJDOT **MILEPOINT** 17.42

NAME & FEATURE INTERSECTED NJ 50 OVER SOUTH RIVER **FACILITY** NJ 50

TOWNSHIP WEYMOUTH TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 47 ft **WIDTH** 40 ft

CONSTRUCTION DT 1927 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries 2-lanes of traffic over the South River in the Pine Barrens south of the village of Belcoville. The surrounding neighborhood has scattered 20th-century residences and a mobile home park. Just downstream from the bridge are the concrete abutments of an abandoned bridge.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span encased steel stringer bridge has concrete substructure and balustrades. A beam guide rail has been added. The bridge was constructed in 1927 as part of the NJ 14 route improvements. The highway was later redesignated NJ 50. The bridge is a representative example of a common 1920s NJ State Highway Department bridge type found throughout the state. It is not historically or technologically distinguished.

INFOR MATION

PHOTO: 408:33-34 (04/92) REVISED BY (DATE): QUAD: Mays Landing

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0112152 **CO** ATLANTIC **OWNER** NJDOT **MILEPOINT** 20.75

NAME & FEATURE INTERSECTED NJ 50 OVER WATERING RACE **FACILITY** NJ 50

TOWNSHIP HAMILTON TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 24 ft **WIDTH** 40 ft

CONSTRUCTION DT 1926 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The 2-lane bridge spans a manmade water feature south of a large blueberry field. The bridge is west of the busy NJ 50 and US 322 interchange. The area is moderately developed with some 20th-century residences.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span concrete slab bridge has concrete balustrades and ashlar abutments with concrete wingwalls. The abutments date to a previous county-owned bridge (c.1900) located on Cape May Avenue before the state took over the highway in the early 1920s. The original state route designation of the highway and bridge was NJ 14, later redesignated NJ 50. The bridge is a common 1920s NJ State Highway Department bridge type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 407:29-30 (04/92) REVISED BY (DATE): QUAD: Mays Landing

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0112153 **CO** ATLANTIC **OWNER** NJDOT **MILEPOINT** 21.05

NAME & FEATURE INTERSECTED NJ 50 OVER US 322 **FACILITY** NJ 50

TOWNSHIP HAMILTON TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 85 ft **WIDTH** 42 ft

CONSTRUCTION DT 1931 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries 4-lanes, median, and 2 sidewalks of NJ 50 over 4-lanes of US 322. The interchange is a modern clover-leaf design with landscaping. The surrounding area is moderately developed with 20th-century housing. Southeast of the bridge is a residential development of 1950s split-level ranches appropriately named "Clover Leaf."

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS DOE 01/19/95. SHPO Letter 11/22/95.

SUMMARY The two-span encased steel stringer bridge has scored concrete abutments and piers, concrete balustrades with bracketed end posts, and paneled fascia with a textured finish. In 1931 the bridge was constructed as part of the 4-lane widening of NJ 42, later redesignated US 322, a major route leading to Atlantic City. The architectonic features are typical of 1930s style interchanges built by the NJ State Highway Dept. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 407:31-32 (04/92 JPH (5/96)) REVISED BY (DATE): QUAD: Mays Landing

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0114154 **CO** ATLANTIC **OWNER** NJDOT **MILEPOINT** 6.32

NAME & FEATURE INTERSECTED NJ 54 OVER CAPE MAY LINE & HOSPITALITY BROOK **FACILITY** NJ 54

TOWNSHIP FOLSOM BOROUGH

TYPE THRU GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 8 **LENGTH** 418 ft **WIDTH** 30 ft

CONSTRUCTION DT 1937 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT PENNSYLVANIA READING RAILROAD **BUILDER**

SETTING / CONTEXT The bridge carries two lanes of NJ 54 over New Jersey Transit's Cape May Line and over Hospitality Brook. The bridge is located in the Pine Barrens near the US 322 intersection and a concrete pipe manufacturer. The railroad right-of-way was originally developed in 1890 by the Atlantic City Railroad as a branch line to Cape May. In 1933 the Atlantic City RR was consolidated under the control of the Pennsylvania-Reading Seashore Lines (PRSL RR).

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 418'-long 8-span bridge consists of 2 skewed thru girder with encased floor beam spans, and 6 encased stringer spans. The thru girder spans rest on large single column concrete piers at each girder bearing, while the encased stringer approach spans have triple column piers, concrete abutments, and concrete parapets. Bracing has been added at several piers. The bridge is not historically or technologically distinguished, and is similar in design to other late-1930s PRSL RR bridge projects.

INFOR MATION

PHOTO: 409:8-10,13-14a (04/92) REVISED BY (DATE): QUAD: Newtonville

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0114155 **CO** ATLANTIC **OWNER** NJDOT **MILEPOINT** 6.72

NAME & FEATURE INTERSECTED NJ 54 OVER US 322 **FACILITY** NJ 54

TOWNSHIP FOLSOM BOROUGH

TYPE T BEAM **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 2 **LENGTH** 101 ft **WIDTH** 56 ft

CONSTRUCTION DT 1942 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries 4-lanes and 2 sidewalks of NJ 54 over 4-lanes of US 322. The bridge is part of a clover leaf intersection. It is located in the Pine Barrens of western Atlantic County. The surrounding area is sparsely developed with some commercial structures along US 322, and some 20th-century lakefront residences in the vicinity of privately-owned Jay's Lake to the west.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span T-beam bridge has concrete balustrades with paneled posts and bracketed end posts, and a concrete substructure with horizontally-scored piers and wingwalls. Beam guide rails have been added. The bridge and clover-leaf interchange were built in 1942 as part of the NJ 54 highway improvements. The bridge is a representative example of T-beam construction, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 409:6a-7a (04/92) REVISED BY (DATE): QUAD: Newtonville

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0114157 **CO** ATLANTIC **OWNER** NJDOT **MILEPOINT** 6.93

NAME & FEATURE INTERSECTED NJ 54 OVER GREAT EGG HARBOR RIVER **FACILITY** NJ 54

TOWNSHIP FOLSOM BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 43 ft **WIDTH** 40.2 ft

CONSTRUCTION DT 1941 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The two-lane bridge spans the Great Egg Harbor River in the Pine Barrens of western Atlantic County. The bridge is north of the intersection of US 322 and NJ 54, and is opposite the NJDOT Folsom Maintenance Area. The neighborhood is moderately developed with 20th-century housing and some wooded lots. Upstream is a concrete dam/spillway, and downstream the ashlar and concrete abutments of an abandoned bridge.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span encased stringer bridge has a concrete substructure and balustrades. The bridge carries a sidewalk on the upstream side, and beam guide rails have been added. The bridge was built in 1941 when the State Highway Department took over the right-of-way from the county. It is a representative example of a common State Highway Department bridge type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 409:4a-5a (04/92) REVISED BY (DATE): QUAD: Newtonville

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0114159 **CO** ATLANTIC **OWNER** NJDOT **MILEPOINT** 8.15

NAME & FEATURE INTERSECTED NJ 54 OVER PENNYPOT STREAM **FACILITY** NJ 54

TOWNSHIP HAMMONTON TOWN

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 23 ft **WIDTH** 38.2 ft

CONSTRUCTION DT 1941 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The two-lane bridge spans Pennypot Stream south of the busy intersection of NJ 54 and the Atlantic City Expressway. Downstream from the bridge are the masonry and concrete abutments of an abandoned bridge. The surrounding area is mixed use with the modern offices of South Jersey Gas Company, 20th-century residences, farm fields, and open lots.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span concrete slab bridge has concrete balustrades and substructure. Beam guide rails have been added. The bridge was built in 1941 when the State Highway Department took over the right-of-way from the county. It is a representative example of a common State Highway Department bridge type found throughout the state, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 408:3-4 (04/92) REVISED BY (DATE): QUAD: Newtonville

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0118152 **CO** ATLANTIC **OWNER** NJDOT **MILEPOINT** 2.88

NAME & FEATURE INTERSECTED US 206 OVER GREAT SWAMP BRANCH **FACILITY** US 206

TOWNSHIP HAMMONTON TOWN

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 32 ft **WIDTH** 40 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The two-lane bridge spans a small creek in a wooded undeveloped section of the Pine Barrens in western Atlantic County. The bridge is within the boundaries of the NJDEPE's Wharton State Forest.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed, single-span concrete slab bridge has a concrete substructure and balustrades. Beam guide rails have been added. In 1930 the bridge was built as part of the NJ Route 39 improvements. In the early 1950s the highway was redesignated US 206. The bridge is a representative example of a common State Highway Department bridge type found throughout the state, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 409:22a-23a (04/92) REVISED BY (DATE): QUAD: Hammonton

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0118153 **CO** ATLANTIC **OWNER** NJDOT **MILEPOINT** 3.74

NAME & FEATURE INTERSECTED US 206 OVER ALBERTSONS BROOK **FACILITY** US 206

TOWNSHIP HAMMONTON TOWN

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 35 ft **WIDTH** 40.2 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The two-lane bridge spans a small creek in an undeveloped area of the Pine Barrens in western Atlantic County. The bridge is within the boundaries of the NJDEPE's Wharton State Forest.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span encased steel stringer bridge has concrete substructure and balustrades. The bridge is spalling and beam guide rails have been added. In 1930 the bridge was built as part of the NJ Route 39 improvements. In the early 1950s the highway was redesignated US 206. The bridge is a representative example of a common NJ State Highway Department bridge type found throughout the state, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 409:26a-27a (04/92) REVISED BY (DATE): QUAD: Hammonton

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0118154 **CO** ATLANTIC **OWNER** NJDOT **MILEPOINT** 5.03

NAME & FEATURE INTERSECTED US 206 OVER CLARKS CREEK **FACILITY** US 206

TOWNSHIP HAMMONTON TOWN

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 22 ft **WIDTH** 40.7 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The two-lane bridge spans a small creek in the Pine Barrens of western Atlantic County. The surrounding area is undeveloped and lies within the boundaries of the NJDEPE's Wharton State Forest.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single span concrete slab bridge has a concrete substructure and balustrades. The bridge is spalling and beam guide rails have been added. In 1930 the bridge was built as part of the NJ Route 39 improvements. In the early 1950s the highway was redesignated US 206. The bridge is a representative example of a common NJ State Highway Department bridge type found throughout the state, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 409:28a-29a (04/92) REVISED BY (DATE): QUAD: Atsion

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0118155 **CO** ATLANTIC **OWNER** NJDOT **MILEPOINT** 5.13

NAME & FEATURE INTERSECTED US 206 OVER SLEEPERS BROOK **FACILITY** US 206

TOWNSHIP HAMMONTON TOWN

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 22 ft **WIDTH** 40 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The two-lane bridge spans a small creek in the Pine Barrens of western Atlantic County. The surrounding area is undeveloped and lies within the boundaries of the NJDEPE's Wharton State Forest.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span concrete slab bridge has a concrete substructure and balustrades. The bridge is spalling and beam guide rails have been added. In 1930 the bridge was built as part of the NJ Route 39 improvements. In the early 1950s the highway was redesignated route US 206. The bridge is a common NJ State Highway Department bridge type found throughout the state, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 409:30a-31a (04/92) REVISED BY (DATE): QUAD: Atsion

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0119150 **CO** ATLANTIC **OWNER** NJDOT **MILEPOINT** 34.51

NAME & FEATURE INTERSECTED US 322 OVER CAPE MAY LINE **FACILITY** US 322

TOWNSHIP FOLSOM BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 5 **LENGTH** 145 ft **WIDTH** 56.3 ft

CONSTRUCTION DT 1931 **ALTERATION DT** 1980ca **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries 4-lanes of traffic and two sidewalks over a single track of NJT's Cape May Line, the former Pennsylvania Reading Seashore Line Railroad. The bridge is located in the Pine Barrens, and the surrounding area is moderately developed with 20th-century lakefront homes and commercial structures. The bridge is just west of the NJ 54 and US 322 interchange.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed 5-span encased steel stringer bridge has a central span of 39' length over the rails, and approach spans each of 26' length. It has concrete abutments and piers with columns, and concrete balustrades. It was built in 1931 as part of a grade elimination project and widening of NJ Route 42, later redesignated US Route 322. The bridge has beam guide rails and median barriers added, and repairs to the abutment-end bearings (c.1980). It is not historically or technologically significant.

INFOR MATION

PHOTO: 409:19a-21a (04/92) REVISED BY (DATE): QUAD: Newtonville

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0119154 **CO** ATLANTIC **OWNER** NJDOT **MILEPOINT** 41.53

NAME & FEATURE INTERSECTED US 322 OVER GREAT EGG HARBOR RIVER **FACILITY** US 322

TOWNSHIP HAMILTON TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 77 ft **WIDTH** 76.1 ft

CONSTRUCTION DT 1931 **ALTERATION DT** 1959 **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries 4-lanes of traffic and two sidewalks over the Great Egg Harbor River in the Pine Barrens of western Atlantic County. US 322 is a modern commercial strip with a pizza restaurant and garage opposite the bridge.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 2-span bridge was originally built in 1931 as an encased steel stringer with concrete substructure, but in 1959 was widened on both sides with prestressed concrete box beams as part of the US 322 reconstruction. New concrete parapets with pipe railings were also added. The bridge has been significantly altered, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 408:15-16 (04/92) REVISED BY (DATE): QUAD: Newtonville

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0119155 **CO** ATLANTIC **OWNER** NJDOT **MILEPOINT** 41.75

NAME & FEATURE INTERSECTED US 322 OVER LITTLE MILL CREEK **FACILITY** US 322

TOWNSHIP HAMILTON TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 2 **LENGTH** 39 ft **WIDTH** 76.3 ft

CONSTRUCTION DT 1931 **ALTERATION DT** 1959 **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries 4-lanes of traffic and 2 sidewalks over a small creek in the Pine Barrens. US 322 is a commercial strip, and adjacent to the bridge is a saloon and the NJDOT Weymouth Maintenance Yard.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The original 1931 2-span concrete slab bridge with concrete substructure has been significantly altered by widening with prestressed concrete beams on both sides, and by the addition of modern concrete parapets with pipe railings (1959). The alterations were part of the US 322 reconstruction. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 413:41-42 (04/92) REVISED BY (DATE): QUAD: Newtonville

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US
November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0119156 **CO** ATLANTIC **OWNER** NJDOT **MILEPOINT** 43.35

NAME & FEATURE INTERSECTED US 322 OVER BIG DITCH **FACILITY** US 322

TOWNSHIP HAMILTON TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 2 **LENGTH** 39 ft **WIDTH** 79.3 ft

CONSTRUCTION DT 1931 **ALTERATION DT** 1959 **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries 4-lanes of traffic and 2 sidewalks over a small creek in the Pine Barrens. US 322 is a modern commercial strip with a farm stand and used car dealership adjacent to the bridge.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The original 1931 2-span concrete slab bridge with concrete substructure has been significantly altered by widening with prestressed concrete beams on both sides and the addition of modern concrete parapets with pipe railings. The alterations were part of the 1959 reconstruction of US 322. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 407:37-38 (04/92) REVISED BY (DATE): QUAD: Dorothy

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0119159 **CO** ATLANTIC **OWNER** NJDOT **MILEPOINT** 45.9

NAME & FEATURE INTERSECTED US 322 OVER WATERING RACE BRANCH **FACILITY** US 322

TOWNSHIP HAMILTON TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 2 **LENGTH** 34 ft **WIDTH** 80 ft

CONSTRUCTION DT 1931 **ALTERATION DT** 1959 **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries 6-lanes of traffic and 2 sidewalks over a small irrigation water feature in the Pine Barrens. The bridge is near the intersection of US 322 and NJ 50. US 322 is a modern commercial strip, and a farm stand and bar are adjacent to the bridge. The surrounding area is moderately developed with 20th-century homes. To the south are blueberry fields.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The original 1931 concrete slab bridge with concrete substructure has been significantly altered by widening in 1959 with prestressed concrete beams on both sides of the bridge, and by the addition of modern concrete parapets with pipe rails. A median barrier has also been added. The bridge is a common type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 407:35-36 (04/92) REVISED BY (DATE): QUAD: Mays Landing

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0119161 **CO** ATLANTIC **OWNER** NJDOT **MILEPOINT** 47.2

NAME & FEATURE INTERSECTED US 322 OVER BABCOCK CREEK **FACILITY** US 322

TOWNSHIP HAMILTON TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 2 **LENGTH** 39 ft **WIDTH** 74 ft

CONSTRUCTION DT 1931 **ALTERATION DT** 1958 **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries 4 lanes of traffic over a small creek in the Pine Barrens. The bridge is near the intersection of NJ 50 and US 322, but the immediate surrounding area is otherwise undeveloped.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The original 1931 concrete slab bridge with concrete substructure has been significantly altered by widening with prestressed concrete beam additions on both sides of the bridge, and by the addition of concrete parapets with pipe railings. The alterations were part of the 1959 reconstruction of US 322. The bridge is a common type and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 407:33-34 (04/92) REVISED BY (DATE): QUAD: Mays Landing

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0150160 **CO** ATLANTIC **OWNER** UNKNOWN **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED SHORE ROAD (CR 585) OVER LINWOOD SECONDARY **FACILITY** SHORE ROAD (CR 585)

TOWNSHIP SOMERS POINT CITY

TYPE THRU GIRDER **DESIGN** PARTIALLY ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 93 ft **WIDTH** 30.1 ft

CONSTRUCTION DT 1938 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT PA-READING SEASHORE RAILROAD **BUILDER** PHOENIX BRIDGE COMPANY

SETTING / CONTEXT The two-lane bridge with sidewalks spans the abandoned & filled-in right-of-way of ConRail's Linwood Section, the former Pleasantville and Ocean City Railroad, established 1890. West of the bridge is the ONJH Somers Point Mansion (c.1725). The bridge does not lie within the Bay Front Historic District (c.1890-1935) which begins one block south. The area southwest of the bridge originally contained the railroad station and ferry, but the buildings have been removed for newer structures.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The thru girder with encased floorbeams bridge has a concrete substructure and cantilevered sidewalks with riveted steel plate parapets. It was designed in 1938 by the PRSL RR engineering department, and fabricated by the Phoenix Bridge Company. The parapets are the bridge's only technologically distinguishing feature and do not merit NR significance on an otherwise common example of a 1930s thru girder overpass.

INFOR MATION

PHOTO: 131:21-24 (04/92) REVISED BY (DATE): QUAD: Ocean City

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0161150 **CO** ATLANTIC **OWNER** STATE AGENCY **MILEPOINT** 31.18

NAME & FEATURE INTERSECTED CAPE MAY LINE (NJT) OVER HOSPITALITY CREEK **FACILITY** CAPE MAY LINE (NJT)

TOWNSHIP FOLSOM BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 60 ft **WIDTH** 27 ft

CONSTRUCTION DT 1924 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT PHILADELPHIA & READING RR **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a single-track of New Jersey Transit's Cape May Line over Hospitality Creek in the Pine Barrens of western Atlantic County. The Cape May Line was built in 1880 by the Atlantic City Railroad. The bridge is located downstream from an 8-span highway overpass of the railroad and creek. The surrounding area is moderately developed with 20th-century homes, and a concrete pipe factory to the west.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased steel stringer bridge has a concrete substructure, braced post pipe railing, and ballasted deck. It was built in 1924 by the Philadelphia & Reading Railroad, which purchased the Atlantic City Railroad in 1890, and is not original to the line. The bridge is a common type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 409:11a-12a (04/92) REVISED BY (DATE): QUAD: Newtonville

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0161151 **CO** ATLANTIC **OWNER** STATE AGENCY **MILEPOINT** 48.7

NAME & FEATURE INTERSECTED TUCKAHOE ROAD (CR 557) OVER CAPE MAY LINE (NJT) **FACILITY** TUCKAHOE ROAD (CR 557)

TOWNSHIP ESTELL MANOR CITY

TYPE THRU GIRDER **DESIGN** PARTIALLY ENCASED **MATERIAL** Steel

 # SPANS 6 **LENGTH** 402 ft **WIDTH** 30 ft

CONSTRUCTION DT 1937 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT PA-READING SEASHORE LINES **BUILDER** UNKNOWN

SETTING / CONTEXT The two-lane bridge spans a single track of New Jersey Transit's Cape May Line in an isolated area of the Pine Barrens. The surrounding area is densely wooded. The Cape May Line was originally built in 1880 by the Atlantic City RR, and later absorbed into the Pennsylvania-Reading Seashore Lines. At one time the bridge was next to Anderson Station, a small stop on the Cape May Line with a side track and a section house.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 6-span overpass has 4 thru girder with encased floorbeams spans and 2 steel stringer approach spans with parapets and encased fascia. The substructure consists of concrete piers and abutments. Some of the piers have been shored with bracing. The bridge is similar to other late 1930s PRSL overpasses in the county. No records have been found to explain the construction of so large a bridge at this location. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 408:27-32 (04/92) REVISED BY (DATE): QUAD: Tuckahoe

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0162150 **CO** ATLANTIC **OWNER** STATE AGENCY **MILEPOINT** 32.35

NAME & FEATURE INTERSECTED WEYMOUTH ROAD (CR 640) OVER ATLANTIC CITY LINE **FACILITY** WEYMOUTH ROAD (CR 640)

TOWNSHIP HAMMONTON TOWN

TYPE THRU GIRDER **DESIGN** PARTIALLY ENCASED **MATERIAL** Steel

 # SPANS 4 **LENGTH** 235 ft **WIDTH** 30 ft

CONSTRUCTION DT 1937 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT PA-READING SEASHORE LINES **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries two lanes of traffic and a sidewalk over a single track of New Jersey Transit's Atlantic City Line on the western outskirts of Hammonton. The surrounding area is mixed use with a modern warehouse, junkyard, and a mixture of 19th- and 20th-century housing. The rail line was originally developed in the 1850s by the Atlantic City Railroad, and absorbed into the Pennsylvania-Reading Seashore Lines in 1933.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 4-span bridge consists of three encased steel stringer spans and one thru girder with encased floorbeams span. The steel stringer spans have concrete parapets with vertically scored posts. The substructure consists of concrete abutments and 3-column piers. The bridge is similar in style to other PRSL RR overpasses in the county. Thru girders were commonly employed by railroads for highway overpasses, and the bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 408:37-38 (04/92) REVISED BY (DATE): QUAD: Newtonville

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0162152 **CO** ATLANTIC **OWNER** STATE AGENCY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BERLIN AVENUE OVER ATLANTIC CITY LINE (NJT) **FACILITY** BERLIN AVENUE

TOWNSHIP EGG HARBOR TOWNSHIP

TYPE THRU GIRDER **DESIGN** CONTINUOUS **MATERIAL** Steel

 # SPANS 3 **LENGTH** 91 ft **WIDTH** 16.4 ft

CONSTRUCTION DT 1905 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT WEST JERSEY & SEASHORE RR **BUILDER** SCHUYLKILL BRIDGE WORKS

SETTING / CONTEXT The single-lane bridge has been closed to vehicular traffic. It spans a single track of New Jersey Transit's Atlantic City Line, the former right-of-way of the West Jersey and Seashore Railroad. The surrounding area is sparsely developed with some scattered 19th- and 20th-century housing.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 3-span continuous steel thru girder bridge with floorbeams has a timber deck, ashlar abutments, and steel column piers. The bridge is not maintained and the flooring system has seriously deteriorated. It was built in 1905 by the Schuylkill Bridge Works for the West Jersey and Seashore RR. A more complete bridge of similar style and date (0162153) spans the railroad just to the south. This span is a representative example of a common early-20th century bridge type.

INFOR MATION

PHOTO: 412:9-10 (04/92) REVISED BY (DATE): QUAD: Egg Harbor City

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0162153 **CO** ATLANTIC **OWNER** STATE AGENCY **MILEPOINT** 43.25

NAME & FEATURE INTERSECTED FRANKFURT AVENUE OVER ATLANTIC CITY LINE (NJT) **FACILITY** FRANKFURT AVENUE

TOWNSHIP EGG HARBOR TOWNSHIP

TYPE THRU GIRDER **DESIGN** CONTINUOUS **MATERIAL** Steel

 # SPANS 3 **LENGTH** 88 ft **WIDTH** 16.4 ft

CONSTRUCTION DT 1905 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT WEST JERSEY & SEASHORE RR **BUILDER** SCHUYLKILL BRIDGE WORKS

SETTING / CONTEXT The bridge carries a single lane of traffic over a single-track of New Jersey Transit's Atlantic City Line. The bridge is located in the Pine Barrens, and the area is moderately developed with 19th- and 20th-century homes and businesses. US 30 intersects Frankfurt Avenue a short distance to the north. The rail line was originally developed in the mid-19th century by the Camden and Atlantic City Railroad.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The three-span continuous steel thru girder with floorbeams bridge has a timber deck, ashlar abutments, steel column piers, and steel railings. It is an unusually complete example of an early thru girder overpass, and is one of the two oldest remaining in Atlantic County. The railroads played a significant role in the development of the county, and the bridge is representative of the efforts made to protect rural traffic from the high speed passenger trains.

INFOR MATION

PHOTO: 412:5-8 (04/92) REVISED BY (DATE): QUAD: Green Bank

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0162154 **CO** ATLANTIC **OWNER** STATE AGENCY **MILEPOINT** 44.36

NAME & FEATURE INTERSECTED TILTON ROAD (CR 563) OVER ATLANTIC CITY LINE (NJT) **FACILITY** TILTON ROAD (CR 563)

TOWNSHIP GALLOWAY TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 3 **LENGTH** 194 ft **WIDTH** 44 ft

CONSTRUCTION DT 1940 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT PA-READING SEASHORE LINES RR **BUILDER** UNKNOWN

SETTING / CONTEXT The two-lane bridge spans a single track of New Jersey Transit's Atlantic City Line. It is located in the Pine Barrens just south of the intersection of CR 563 and US 30. The area between the tracks and US 30 is moderately developed with modern commercial structures and warehouses.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed 3-span steel stringer bridge has concrete parapets, encased fascia stringers, and concrete piers and scored abutments. The bridge was built in 1940 by the Pennsylvania-Reading Seashore Lines, and replaced an earlier overpass. Steel stringers are a common bridge type, and the bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 412:3-4 (04/92) REVISED BY (DATE): QUAD: Pleasantville

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0162164 **CO** ATLANTIC **OWNER** STATE AGENCY **MILEPOINT** 54.86

NAME & FEATURE INTERSECTED ATLANTIC CITY LINE (NJT) OVER JONATHAN'S THOROFARE **FACILITY** ATLANTIC CITY LINE (NJT)

TOWNSHIP ATLANTIC CITY

TYPE DECK GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 27 ft **WIDTH** 28.7 ft

CONSTRUCTION DT 20th Century **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a single track of New Jersey Transit's Atlantic City Line over Jonathan's Thorofare in the tidal meadowlands between Absecon Island and the mainland. The bridge is located parallel the Atlantic City Water Mains, and between US 30 and the Atlantic City Expressway. Access to the bridge is limited.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge is a single-span deck plate girder with ashlar abutments. Records for the bridge's construction could not be located but the bridge is similar in style to many plate girder bridges constructed by the West Jersey and Seashore Railroad, a line controlled by the Pennsylvania Railroad, in the first decades of the 20th century. It is not historically or technologically distinguished.

INFOR MATION

PHOTO: 413:38-39 (06/92) REVISED BY (DATE): QUAD: Oceanville

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0170150 **CO** ATLANTIC **OWNER** NJDOT **MILEPOINT** 110.3

NAME & FEATURE INTERSECTED WINSLOW INDUSTRIAL TRACK OVER CEDAR LAKE CREEK **FACILITY** WINSLOW INDUST TRACK

TOWNSHIP FOLSOM BOROUGH

TYPE STRINGER **DESIGN** **MATERIAL** Wood

 # SPANS 8 **LENGTH** 57 ft **WIDTH** 11 ft

CONSTRUCTION DT 1910 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT WEST JERSEY RAILROAD **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a single-track of the Winslow Industrial Track over a small creek in a sparsely developed area of the Pine Barrens in western Atlantic County. Near the bridge is a single 20th-century residence and a cinder block garage. The Winslow Industrial Track was developed in the late-19th century by the West Jersey Railroad as a connector from Vineland to Winslow Junction.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 8-span open-deck timber stringer railroad bridge rests on timber pile bents. The original construction date is given as 1910, but it is unlikely that any original wood fabric remains, and timber pile stumps in the stream indicate that the bridge members have been replaced at least once. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 409:17a-18a (04/92) REVISED BY (DATE): QUAD: Buena

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 01A0004 **CO** ATLANTIC **OWNER** COUNTY **MILEPOINT** 11.5

NAME & FEATURE INTERSECTED MILL ROAD (CR 651) OVER ABSECON CREEK **FACILITY** MILL ROAD (CR 651)

TOWNSHIP ABSECON CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 34 ft **WIDTH** 26 ft

CONSTRUCTION DT 1929 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT A. H. NELSON, COUNTY ENGINEER **BUILDER** GEORGE HANSELMAN

SETTING / CONTEXT The bridge carries two-lanes of traffic over a small creek downstream from the Atlantic City Reservoir and Dam. The surroundings are undeveloped with wooded lots and wetlands.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 03/12/01

SUMMARY The single-span encased steel stringer has a concrete substructure and pipe railings. It is a representative example of at least 8 similar short-span bridges built in Atlantic County from 1914 to 1931. The bridge has stepped wing walls and some spalling is visible. Builder George Hanselman was a local contractor who built at least six other similar bridges in Atlantic County. The bridge is not historically or technologically significant.

INFOR MATION

PHOTO: 411:12-13 (05/92 JPH (5/96)) REVISED BY (DATE): QUAD: Pleasantville

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 01A0006 **CO** ATLANTIC **OWNER** COUNTY **MILEPOINT** 0.46

NAME & FEATURE INTERSECTED DELILAH ROAD (CR 646) OVER NJT ATLANTIC CITY LINE **FACILITY** DELILAH ROAD (CR 646)

TOWNSHIP ABSECON CITY

TYPE THRU GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 7 **LENGTH** 385 ft **WIDTH** 40 ft

CONSTRUCTION DT 1937 **ALTERATION DT** **SOURCE** COUNTY RECORDS

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER** EASTERN ENGINEERING CO.

SETTING / CONTEXT The bridge carries two lanes of traffic over a single track of New Jersey Transit's Atlantic City Line, the former Pennsylvania-Reading Seashore Lines. The bridge is located in the back-bay wetlands between Atlantic City and the mainland. It is near the intersection of Delilah Road and US 30, and was built at the same time as the Delilah Road over US 30 bridge (O1A0007).

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The main span is an encased thru girder with floorbeams and the 6 approach spans are encased steel stringers. The bridge rests on concrete abutments and piers and has concrete balustrades. The bridge was constructed in 1937 as part of the US 30 (former NJ 56) connector improvements at Delilah Road. The multi-span combination thru girder and steel stringer bridge is a common 1930s bridge type, and is not historically or technologically significant.

INFOR MATION

PHOTO: 411:6-7 (05/92) REVISED BY (DATE): QUAD: Oceanville

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 01A0007 **CO** ATLANTIC **OWNER** COUNTY **MILEPOINT** 0.22

NAME & FEATURE INTERSECTED DELILAH ROAD (CR 646) OVER US 30 **FACILITY** DELILAH ROAD (CR 646)

TOWNSHIP ABSECON CITY

TYPE THRU GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 212 ft **WIDTH** 24 ft

CONSTRUCTION DT 1936-37 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER** EASTERN ENGINEERING CO

SETTING / CONTEXT The bridge carries two-lanes of traffic over 4-lanes of US 30 at the busy intersection of US 30 and Delilah Road. The bridge is located in the backbay wetlands between Atlantic City and the mainland. The area along US 30 is commercially developed with hotels and restaurants. East of the bridge is another bridge of similar style and date carrying Delilah Road over New Jersey Transit's Atlantic City Line (01A0006), also built in 1936-37 as part of the US 30 interchange improvements.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The main span of the 3-span bridge is an encased thru girder with floorbeams, approximately 97' long. The approach spans are encased steel stringers. The approach spans have concrete balustrades, while the main span has concrete pylons decorated with tile mosaic bands. Light standards have been removed. It is similar in style and date to numerous other NJ State Highway Department overpasses, but is not one of the more historically or technologically distinguished examples.

INFOR MATION

PHOTO: 411:3,8-9 (05/92) REVISED BY (DATE): QUAD: Oceanville

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 01A0008 **CO** ATLANTIC **OWNER** COUNTY **MILEPOINT** 0.65

NAME & FEATURE INTERSECTED DELILAH ROAD OVER ATLANTIC CITY WATER MAINS **FACILITY** DELILAH ROAD (CR 646)

TOWNSHIP PLEASANTVILLE CITY

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 24 **LENGTH** 260 ft **WIDTH** 38.8 ft

CONSTRUCTION DT 1939 **ALTERATION DT** 1958 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT A. H. NELSON, COUNTY ENGINEER **BUILDER** MONIHAN CONSTRUCTION CO

SETTING / CONTEXT The bridge carries two lanes of traffic over the Atlantic City Municipal Water Authority's above ground water main pipes in the backbay wetlands between Atlantic City and the mainland. The bridge is east of the US 30 and Delilah Road intersection.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 24-span bridge consists of 3 main spans of steel stringers over the water main pipes and 21 approach spans of timber stringers, 5 spans to the east of the main spans and 16 to the west. The bridge is entirely supported on timber piles. The original wood railings have been replaced with beam guide rails. The timber and steel structural members show signs of numerous repairs. In 1958 the timber deck was replaced. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 411:4-5 (05/92) REVISED BY (DATE): QUAD: Pleasantville

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 01BV003 **CO** ATLANTIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED EIGHTH STREET OVER GREAT EGG HARBOR RIVER **FACILITY** EIGHTH STREET

TOWNSHIP FOLSOM BOROUGH

TYPE STRINGER **DESIGN** **MATERIAL** Wood

 # SPANS 3 **LENGTH** 40 ft **WIDTH** 38 ft

CONSTRUCTION DT 1937 **ALTERATION DT** 1979 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT A. H. NELSON, COUNTY ENGINEER **BUILDER** COUNTY BRIDGE MAINTENANCE

SETTING / CONTEXT The two-lane bridge spans the Great Egg Harbor River in the Pine Barrens near the intersection of Eighth Street and US 322. Next to the bridge is Penny Pot County Park with picnic benches and canoe launch. The area to the north is sparsely developed while the area to the south near US 322 has some commercial and residential structures.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 3-span timber stringer bridge has timber pile substructure and timber deck. In 1979 the bridge was substantially reconstructed. Beam guide rails have been added. The bridge is 1 of at least 8 similar timber stringer bridges in the county originally constructed from 1936 to 1947 but since materially rebuilt. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 408:39-40 (04/92) REVISED BY (DATE): QUAD: Newtonville

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 01BV006 **CO** ATLANTIC **OWNER** COUNTY **MILEPOINT** 0.97

NAME & FEATURE INTERSECTED PHILADELPHIA AVENUE OVER GREAT EGG HARBOR RIVER **FACILITY** PHILADELPHIA AVENUE (CR SPUR 561)

TOWNSHIP FOLSOM BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 39 ft **WIDTH** 30 ft

CONSTRUCTION DT 1934 **ALTERATION DT** **SOURCE** COUNTY RECORDS

DESIGNER/PATENT A. H. NELSON, COUNTY ENGINEER **BUILDER** MORRELL B. TOMLIN

SETTING / CONTEXT The bridge carries two lanes of traffic over the Great Egg Harbor River in the Pine Barrens. The surrounding area is wooded and undeveloped.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span, encased steel stringer bridge has a concrete substructure, concrete balustrades, and paneled fascia stringers. It is a representative example of a bridge type commonly built in the 1930s, and found throughout the state. It is not historically or technologically distinguished.

INFOR MATION

PHOTO: 408:1-2 (04/92) REVISED BY (DATE): QUAD: Newtonville

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 01BV007 **CO** ATLANTIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED EIGHTH STREET OVER HOSPITALITY BRANCH **FACILITY** EIGHTH STREET

TOWNSHIP FOLSOM BOROUGH

TYPE PONY TRUSS **DESIGN** WARREN **MATERIAL** Steel

 # SPANS 1 **LENGTH** 59 ft **WIDTH** 15 ft

CONSTRUCTION DT 1915 **ALTERATION DT** 1937 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT A. H. NELSON, COUNTY ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a single lane of traffic over Penny Pot Lake, a privately owned lake with 20th-century lakefront homes. The bridge is near the intersection of Eighth Street and US 322 in the Pine Barrens.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 11/22/95

SUMMARY The single-span bridge is a 6-panel rivet-connected Warren pony truss. County records indicate that in 1937 the bridge was moved to this site from an unspecified location and reassembled. Stylistically it dates from c.1915. The bridge has had repairs including new substructure and welded repairs, but it is one of fewer than five surviving metal truss bridges in southern New Jersey. Because the bridge is a rare survivor in the region and a representative example of a once common truss bridge type, it is technologically significant.

INFOR MATION

Bibliography:
Atlantic County. County Engineer's Office. Bridge Cards and Files. 1937.

Physical Description: The one-span rivet and square-head bolt connected Warren with verticals Pony truss bridge is supported on timber substructure. The span is traditionally composed of built-up box members for the top chord and inclined end posts. The verticals are closely spaced angles with lacing, and the diagonals are toe-up angles joined by battens. The built-up floor beams connect to the top chord and verticals by bolts. Replacement stringers carry a plank deck. The bottom lateral bracing is pin-connected eye bars. Alterations appear to be limited to minor reinforcing at the center panels of the bottom chord and a few lower panel points.

Historical and Technological Significance: The Eighth Street bridge (c.1910) is one of fewer than five surviving metal truss bridges in southern New Jersey. It is eligible under National Register Criterion C. It is a fairly complete example of a rivet and bolt-connected Warren with verticals truss that was very common around the turn of the century. Although metal truss bridges were never as numerous in the southern parts of the state as in the north, they played an important role in the region's highway development. Other surviving trusses in Atlantic County include Weymouth Road over Great Egg Harbor (01HML22, Hamilton Township, 1920) and Mays Landing-Somers Point Road over English Creek (01EH021, Egg Harbor Township, 1914). The latter bridge is significantly altered. In Cape May County the only known surviving highway metal truss bridge is Marshallville Road over Mill Creek (0500019, Upper Township, 1901). No metal truss bridges, exclusive of movable spans, are known to survive in Cumberland, Gloucester, Ocean, and Salem Counties.

The Eighth Street bridge was moved to this location in 1937. Its original location and name of fabricator are not documented in the County Engineer's records, but stylistically it dates from ca. 1910. Although the span does not display any distinctive details, it is technologically significant as a rare survivor of an important bridge type.

Boundary Description and Justification: The bridge is individually eligible, in and of itself, including the superstructure, substructure, and right-of-way over the river.

PHOTO: 408:41-44 (04/92) REVISED BY (DATE): QUAD: Newtonville

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 01EH007 **CO** ATLANTIC **OWNER** COUNTY **MILEPOINT** 3.35

NAME & FEATURE INTERSECTED MILL ROAD (CR 662) OVER PATCONG CREEK **FACILITY** MILL ROAD (CR 662)

TOWNSHIP EGG HARBOR TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 28 ft **WIDTH** 30 ft

CONSTRUCTION DT 1931 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT A. H. NELSON, COUNTY ENGINEER **BUILDER** GEORGE HANSELMAN

SETTING / CONTEXT The bridge carries two lanes of traffic over a small creek downstream from a small dam and reservoir. Nearby is an overpass of the Garden State Parkway over Mill Road. The surrounding area is moderately developed with 20th-century residences.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed single-span encased steel stringer bridge has a concrete substructure and original pipe railings. Beam guide rails have been added. It is a representative example of at least 8 other short-span encased steel stringer bridges built in Atlantic County. George Hanselman was a local contractor who built at least 6 other encased steel stringer bridges in the county. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 131:29-30 (04/92) REVISED BY (DATE): QUAD: Pleasantville

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 01EH011 **CO** ATLANTIC **OWNER** COUNTY **MILEPOINT** 0.5

NAME & FEATURE INTERSECTED CENTRAL AVENUE OVER PATCONG CREEK **FACILITY** CENTRAL AVENUE

TOWNSHIP LINWOOD CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 28 ft **WIDTH** 30 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT A. H. NELSON, COUNTY ENGINEER **BUILDER** F. W. SCHWIERS, JR. CO.

SETTING / CONTEXT The bridge carries two lanes of traffic over the spillway from Mill Pond in northeastern Linwood City. Between the abutments on the bridge's upstream side is a 4 bay concrete gate frame for the spillway's wooden gates. The surrounding neighborhood is residential with late-19th and 20th-century lakefront homes.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span encased steel stringer bridge has pipe railings and a concrete substructure with stepped wing walls on the downstream side. Beam guide rails have been added. The bridge is spalling and has a sidewalk added to the upstream side. The bridge is an example of a common bridge type in Atlantic County, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 131:26-28 (04/92) REVISED BY (DATE): QUAD: Ocean City

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 01EH021 **CO** ATLANTIC **OWNER** COUNTY **MILEPOINT** 5.33

NAME & FEATURE INTERSECTED MAYS LANDING-SOMERS POINT ROAD OVER ENGLISH CREEK **FACILITY** MAYS LANDING-SOMERS POINT ROAD (CR 559)

TOWNSHIP EGG HARBOR TOWNSHIP

TYPE PONY TRUSS **DESIGN** WARREN **MATERIAL** Steel

 # SPANS 1 **LENGTH** 53 ft **WIDTH** 30 ft

CONSTRUCTION DT 1914 **ALTERATION DT** 1972, 1991 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT A. H. NELSON, COUNTY ENGINEER **BUILDER** JOHN E. KAHLE

SETTING / CONTEXT The bridge carries two lanes of traffic over a tidal creek in a broad tidal marsh near the Great Egg Harbor River. East of the bridge is the small 19th-century crossroads village of English Creek. The residential structures in the village have many modern alterations and additions.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 1914 single-span 4-panel rivet-connected Warren pony truss has been significantly altered. In 1972 steel channels were welded to the lower chords and 16 timber piles driven to support the bridge. In 1991 intermediate piles were driven to independently support the floor beams, and masonry abutments reconstructed. The bridge no longer effectively functions as a truss and lacks integrity. It is not historically or technologically distinguished.

INFOR MATION

SOURCES: Atlantic County. Bridge Cards and Plans. 1914-1991.

PHYSICAL DESCRIPTION:
The 1914 rivet-connected steel Warren pony truss measuring 52' span from end-bearing to bearing has been significantly altered and no longer functions as a truss. In 1972 welded steel channels were added to the lower chord which had seriously deteriorated. At the same time, steel stringers were replaced and the span supported with the addition of timber pile piers. In 1991 further repairs were made to the bridge by the addition of intermediate piles to support each end of the truss's three floor beams independent of the truss. Also in 1991 the masonry abutments were reconstructed with concrete.

HISTORICAL AND TECHNOLOGICAL SIGNIFICANCE
The Warren pony truss is a highly altered, yet representative example of a common early-20th century bridge type. The Mays Landing-Somers Point Road bridge over English Creek was designed by county engineer Alexander H. Nelson, and constructed by local contractor John H. Kahle. It is one of three known surviving Warren pony truss highway bridges in Atlantic County, and it is the least well preserved. The Weymouth Road bridge (01HML22, Hamilton Township, 1920) over the Great Egg Harbor River is a better example of the bridge type. Due to alterations and the fact that it is a standardized design, the bridge is not historically or technologically distinguished.

PHOTO: 131:14-18 (04/92) REVISED BY (DATE): QUAD: Marmora

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 01EH029 **CO** ATLANTIC **OWNER** COUNTY **MILEPOINT** 3.5

NAME & FEATURE INTERSECTED MAYS LANDING-SOMERS POINT ROAD OVER LAKES CREEK **FACILITY** MAYS LANDING-SOMERS POINT ROAD (CR 559)

TOWNSHIP EGG HARBOR TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 32 ft **WIDTH** 30 ft

CONSTRUCTION DT 1914 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT A. H. NELSON, COUNTY ENGINEER **BUILDER** JOHN E. KAHLE

SETTING / CONTEXT The bridge carries two-lanes of traffic across a small creek in a wetlands north of the 19th-century village of Scullville on the Great Egg Harbor River. South of the bridge are a number of 19th-century residential structures. The village does not appear to have enough architectural integrity to qualify as a historic district.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased steel stringer bridge has a concrete substructure and pipe railings. Beam guide rails have been added. Builder John E. Kahle was a local contractor who constructed several short-span bridges in Atlantic County in the 1910s. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 131:19-20 (04/92) REVISED BY (DATE): QUAD: Marmora

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US
November 12, 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 01EHC06 **CO** ATLANTIC **OWNER** COUNTY **MILEPOINT** 0.62

NAME & FEATURE INTERSECTED CLARKS LANDING ROAD (CR 624) OVER UNION CREEK **FACILITY** CLARKS LANDING ROAD (CR 624)

TOWNSHIP EGG HARBOR CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 28 ft **WIDTH** 30 ft

CONSTRUCTION DT 1938 **ALTERATION DT** **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** KOLYN CONSTRUCTION CO

SETTING / CONTEXT The bridge carries two lanes of traffic over a tidal creek in the Pine Barrens near the Mullica River. The surrounding area is wooded and undeveloped.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span encased steel stringer bridge has a concrete substructure, concrete balustrades, and paneled fascia stringers. The bridge was built in 1938 as a New Deal works project; Kolyn Construction Company provided the equipment, materials, and supervision, and the county WPA forces provided the labor. The bridge is a common bridge type in New Jersey. It is not historically or technologically distinguished.

INFOR MATION

PHOTO: 410:19-20 (04/92) REVISED BY (DATE): QUAD: Green Bank

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 01EHC08 **CO** ATLANTIC **OWNER** COUNTY **MILEPOINT** 19.52

NAME & FEATURE INTERSECTED EGG HARBOR-GREEN BANK ROAD OVER INDIAN CABIN CREEK **FACILITY** EGG HARBOR-GREEN BANK ROAD (CR 563)

TOWNSHIP EGG HARBOR CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 27 ft **WIDTH** 30 ft

CONSTRUCTION DT 1919 **ALTERATION DT** 1941 **SOURCE** PLAQUE

DESIGNER/PATENT A. H. NELSON **BUILDER** GEORGE HANSELMAN

SETTING / CONTEXT The bridge carries two lanes of traffic over the reservoir at Egg Harbor City Park, a municipal recreation area with lakefront beach and picnic area. The bridge crosses the northern portion of the lake. Except for the park, the surrounding area is sparsely developed Pine Barrens with a scattering of 20th-century residential structures.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span encased steel stringer bridge has a concrete substructure and pipe railings. It is similar in design to at least 8 other encased steel stringer bridges built in the county from 1914 to 1931. In 1941 the WPA added a 5' timber stringer sidewalk to the downstream side of the bridge. Builder George Hanselman was a local contractor who constructed at least 6 other similar bridges in the county. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 410:13-14 (04/92) REVISED BY (DATE): QUAD: Green Bank

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 01EHC10 **CO** ATLANTIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED INDIAN CABIN ROAD OVER UNION CREEK **FACILITY** INDIAN CABIN ROAD

TOWNSHIP EGG HARBOR CITY

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 25 ft **WIDTH** 20 ft

CONSTRUCTION DT 1936 **ALTERATION DT** 1981 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT A. H. NELSON, COUNTY ENGINEER **BUILDER** COUNTY WPA FORCES

SETTING / CONTEXT The bridge carries an unimproved road over a small creek in the Pine Barrens east of Egg Harbor City Park, a lakefront recreation area. The surrounding area is wooded and undeveloped.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span steel stringer bridge has timber pile abutments and timber deck. In 1981 the bridge was reconstructed with new substructure and deck. Beam guide rails were added. Steel stringers are a common bridge type, and the bridge is not historically or technologically distinguished. Several bridges in the county were built as Depression-era relief programs.

INFOR MATION

PHOTO: 410:17-18 (04/92) REVISED BY (DATE): QUAD: Green Bank

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 01EHC17 **CO** ATLANTIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED LONDON AVENUE OVER LANDING CREEK **FACILITY** LONDON AVENUE

TOWNSHIP EGG HARBOR CITY

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 23 ft **WIDTH** 26 ft

CONSTRUCTION DT 1906 **ALTERATION DT** 1941 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** JOSEPH C. BROWN

SETTING / CONTEXT The two-lane bridge is located in Egg Harbor City Park. On either side of the bridge are separately supported sidewalks: one a concrete slab and the other a timber stringer. Downstream the small creek feeds into the ruins of what appears to have been a serpentine water garden. West of the bridge is the municipal building (c.1970), playing fields, and an octagon-shaped frame building with cupola (c.1930) that is currently used for storage.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span bridge is a steel stringer with concrete deck, pipe railings, and stone abutments. The pipe railing is terminated at each corner of the bridge by masonry parapet walls and posts. The bridge's ornamental stone work is in setting with the city park, but the park itself has too many modern intrusions and alterations to merit historic district status. Of itself, the bridge is not historically or technologically noteworthy.

INFOR MATION

PHOTO: 412:11-12 (05/92) REVISED BY (DATE): QUAD: Egg Harbor City

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 01EHC39 **CO** ATLANTIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED INDIAN CABIN ROAD OVER INDIAN CABIN CREEK **FACILITY** INDIAN CABIN ROAD

TOWNSHIP EGG HARBOR CITY

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 27 ft **WIDTH** 30.3 ft

CONSTRUCTION DT 1941 **ALTERATION DT** 1970ca **SOURCE** COUNTY RECORDS

DESIGNER/PATENT A. H. NELSON, COUNTY ENGINEER **BUILDER** EGG HARBOR CITY WPA CREW

SETTING / CONTEXT The bridge carries two-lanes of an unimproved road over Indian Cabin Creek downstream from the dam and spillway that create Egg Harbor City Lake, a municipal park with picnic areas and beach. The bridge is located in the Pine Barrens, and the surrounding area is wooded.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span steel stringer bridge has timber pile abutments, timber deck, and exterior timber nailers to support beam guide rails. The bridge was constructed in 1941 but substantially rebuilt in c.1970. Steel stringers are a common bridge type, and the bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 410:15-16 (04/92) REVISED BY (DATE): QUAD: Green Bank

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 01H0012 **CO** ATLANTIC **OWNER** COUNTY **MILEPOINT** 3.05

NAME & FEATURE INTERSECTED ATSION ROAD OVER GREAT SWAMP BRANCH **FACILITY** ATSION ROAD

TOWNSHIP HAMMONTON TOWN

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 24 ft **WIDTH** 23 ft

CONSTRUCTION DT 1911 **ALTERATION DT** **SOURCE** COUNTY RECORDS

DESIGNER/PATENT E. D. RIGHTMIRE, CO. ENG. **BUILDER** GEORGE HANSELMAN

SETTING / CONTEXT The bridge carries 2-lanes of traffic over a small creek in Wharton State Forest. The surrounding area in the Pine Barrens is wooded and undeveloped.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single span concrete slab bridge has ashlar abutments and pipe railings. Beam guide rails have been added. It was constructed in 1911 by George Hanselman, a local contractor. It is located on what was historically the main road to Trenton. The bridge is not a particularly early or technologically distinguished example of concrete slab construction.

INFOR MATION

PHOTO: 409:24a-25a (04/92) REVISED BY (DATE): QUAD: Hammonton

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 01HML22 **CO** ATLANTIC **OWNER** COUNTY **MILEPOINT** 20.53

NAME & FEATURE INTERSECTED WEYMOUTH ROAD (CR 559) OVER GREAT EGG HARBOR RIVER **FACILITY** WEYMOUTH ROAD (CR 559)

TOWNSHIP HAMILTON TOWNSHIP

TYPE PONY TRUSS **DESIGN** WARREN **MATERIAL** Steel

 # SPANS 1 **LENGTH** 46 ft **WIDTH** 18.6 ft

CONSTRUCTION DT 1920 **ALTERATION DT** **SOURCE** COUNTY RECORDS

DESIGNER/PATENT A. H. NELSON, COUNTY ENGINEER **BUILDER** HENRY S. KRAUS

SETTING / CONTEXT The bridge carries two lanes of traffic over the Great Egg Harbor River next to Weymouth County Park. The park is located at the ruins of an early 19th-century iron furnace that ceased operations in 1862. The bridge is located north of the intersection of Weymouth Road and US 322. The area around the bridge and park is moderately developed with 20th-century residences.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 4-panel, rivet-connected Warren pony truss bridge a well-preserved example of an increasingly rare metal truss bridge technology in South Jersey. The bridge was built on standard specifications by a local contractor based upon designs approved by the county engineer. It is not within the historical period of significance of the adjacent iron furnace, but stands on its own as a rare representative example of a regionally important engineering achievement.

INFOR MATION

Bibliography:
Atlantic County. County Engineers Office. Bridge Cards and Plans, 1920.
New Jersey Department of Transportation. Bureau of Environmental Analysis. "Cultural Resources Survey for Weymouth Road and Bridge (Route 559)." 1983.

Physical Description: The 4-panel riveted Warren pony truss is 44'-long (c/c from end bearings) and is 7'3" high. The bridge is composed of rolled steel sections. The end posts and top chords are built-up box beams, and the diagonals, verticals, and lower chords are angles with battens. The floor beams are I-beams attached at the lower chord panel points by gusset plates and riveted connections. The stringers are also I-beams inset into the floor beams with riveted stiffeners. The deck is wood plank with at least one layer of asphalt. The bridge has lower lateral tie rods. The abutments and wing walls are concrete. The bridge has a maker's plaque reading, "Atlantic County, 1920. Henry S. Kraus, Contractor."

Historical and Technological Significance: The Warren pony truss bridge (1920) is one of the best preserved metal truss bridges in southern New Jersey. It is eligible under National Register Criterion C. In Atlantic County only two other metal truss bridges, exclusive of movable spans, are known to survive: Eighth Street over Hospitality Brook (01BV007, Folsom Borough, c.1910), and Mays Landing-Somers Point Road over English Creek (01EH021, Egg Harbor Township, 1914). The latter is significantly altered. No metal truss highway bridges, are known to survive in neighboring Cumberland, Gloucester, Ocean and Salem Counties. In Cape May only one metal truss bridge survives (0500019, Marshallville Road over Mill Creek, Upper Township, 1901) Metal truss bridges were never as numerous in South Jersey as in the northern part of the state, yet they played a significant role in the improvement of local highways in the late-19th and early-20th century.

In Atlantic County at least 6 other Warren pony truss bridges similar to the Weymouth Road bridge are known to have been built in the first two decades of the 20th century. Like the Weymouth Road bridge, they followed a standardized Warren pony truss design prepared by the county engineer, and were usually constructed by local contractors. The Weymouth Road bridge is built upon plans prepared by county engineer Alexander H. Nelson and was constructed by Henry S. Kraus.

The county park adjacent to the bridge is on the site of the Weymouth Iron Furnace that operated from the early 19th century to 1862. From 1862 to 1887 the site was operated as a paper mill, but this too closed due to lack of financial success. The current bridge, while on the site of earlier bridges, is not historically associated with the development of the industrial site, and belongs to a period of road improvements that post-date the iron industry in South Jersey.

A 1983 NJDOT Bureau of Environmental Analysis report recommends that the Weymouth Road bridge be considered ineligible for inclusion in the National Register because it is a standardized design. If the bridge were located in a region with more numerous surviving trusses the ineligible status might be warranted, but given that the bridge is one of the only extant example of its type in southern New Jersey, eligible status is recommended.

Boundary Description and Justification: The bridge is individually eligible, in and of itself, including the superstructure, substructure, and right-of-way over the river.

PHOTO: 408:17-20 (04/92) REVISED BY (DATE): QUAD: Newtonville

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 01HML25 **CO** ATLANTIC **OWNER** COUNTY **MILEPOINT** 19.62

NAME & FEATURE INTERSECTED WEYMOUTH ROAD (CR 559) OVER DEEP RUN **FACILITY** WEYMOUTH ROAD (CR 559)

TOWNSHIP HAMILTON TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 34 ft **WIDTH** 30 ft

CONSTRUCTION DT 1924 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT A. H. NELSON, COUNTY ENGINEER **BUILDER** GEORGE HANSELMAN

SETTING / CONTEXT The bridge carries two-lanes of traffic over a small creek in the Pine Barrens. The surrounding area is sparsely developed with wooded lots and a scattering of 19th- and 20th-century residential structures.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span encased steel stringer bridge has a concrete substructure and pipe railing. It is a representative example of at least 8 other similar bridges built in the county from 1914 to 1931. The bridge has significant spalling and deterioration to the encasement. Beam guide rails have been added. Builder George Hanselman was a local contractor who constructed several similar bridges in Atlantic County. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 408:21-22 (04/92) REVISED BY (DATE): QUAD: Newtonville

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 01HML35 **CO** ATLANTIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED OLD EGG HARBOR ROAD OVER BABCOCK CREEK **FACILITY** OLD EGG HARBOR ROAD

TOWNSHIP HAMILTON TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Wood

 # SPANS 2 **LENGTH** 24 ft **WIDTH** 24 ft

CONSTRUCTION DT 1944 **ALTERATION DT** 1971, 1976 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT A. H. NELSON, COUNTY ENGINEER **BUILDER** COUNTY BRIDGE MAINTENANCE

SETTING / CONTEXT The bridge carries a two-lane road over a small creek in the Pine Barrens east of the village of Mays Landing. South of the bridge is a community recreation area with baseball fields. The area to the north is sparsely developed.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 2-span timber stringer bridge has timber pile substructure and timber deck. In 1971 the bridge was redecked and in 1976 the stringers were replaced and the bridge redecked again. Beam guide rails have been added. The bridge is 1 of at least 8 similar timber stringer bridges in the county originally constructed from 1936 to 1947, but since materially rebuilt, according to county records. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 407:27-28 (04/92) REVISED BY (DATE): QUAD: Mays Landing

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 01HML37 **CO** ATLANTIC **OWNER** COUNTY **MILEPOINT** 13.98

NAME & FEATURE INTERSECTED MAYS LANDING-SOMERS POINT ROAD OVER BABCOCK CREEK **FACILITY** MAYS LANDING-SOMERS POINT ROAD (CR 559)

TOWNSHIP HAMILTON TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 56 ft **WIDTH** 30 ft

CONSTRUCTION DT 1941 **ALTERATION DT** **SOURCE** COUNTY RECORDS

DESIGNER/PATENT A. H. NELSON, COUNTY ENGINEER **BUILDER** COUNTY WPA CREW

SETTING / CONTEXT The two-lane bridge is located at the eastern end of A. C. Gaskill city park in Mays Landing. The park is an open green space with gazebo, marina, and playground on the Egg Harbor River near its confluence with Babcock Creek. The bridge is located within the boundaries of the Mays Landing Historic District, and the surrounding area has numerous 19th- and early-20th century residential and commercial structures. Just upstream from the bridge is the US 40 crossing of Babcock Creek.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Listed. Mays Landing Historic District. 08/20/1990. Noncontributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 1941 encased steel stringer bridge has pipe railings, paneled fascias and a concrete substructure. Although located within the Mays Landing Historic District, the bridge falls outside the district's period of significance (1837-1935). Encased steel stringer bridges are a common 20th-century bridge type, and the bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 407:18-20 (04/92) REVISED BY (DATE): QUAD: Mays Landing

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 01HML40 **CO** ATLANTIC **OWNER** COUNTY **MILEPOINT** 12.13

NAME & FEATURE INTERSECTED MAYS LANDING-SOMERS POINT ROAD OVER GRAVELY RUN **FACILITY** MAYS LANDING-SOMERS POINT ROAD

TOWNSHIP HAMILTON TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 24 ft **WIDTH** 30 ft

CONSTRUCTION DT 1914 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT A. H. NELSON, COUNTY ENGINEER **BUILDER** JOHN E. KAHLE

SETTING / CONTEXT The bridge carries two lanes of traffic over a small creek in a sparsely developed area of the Pine Barrens. The surrounding area is wooded with a few scattered 19th- and 20th-century residences.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span encased steel stringer bridge has a concrete substructure and pipe railings. It is similar to at least 8 other surviving encased steel stringer bridges built in the county from 1914 to 1931. The bridge is spalling and has concrete repairs to the encasements. Beam guide rails have been added. Builder John E. Kahle was a local contractor who built several short-span bridges in the county. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 407:25-26 (04/92) REVISED BY (DATE): QUAD: Mays Landing

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 01HML54 **CO** ATLANTIC **OWNER** COUNTY **MILEPOINT** 14.78

NAME & FEATURE INTERSECTED MILL STREET (CR 559) OVER GREAT EGG HARBOR RIVER **FACILITY** MILL STREET (CR 559)

TOWNSHIP HAMILTON TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 101 ft **WIDTH** 30 ft

CONSTRUCTION DT 1940 **ALTERATION DT** **SOURCE** COUNTY RECORDS

DESIGNER/PATENT A. H. NELSON, COUNTY ENGINEER **BUILDER** COUNTY WPA CREW

SETTING / CONTEXT The bridge carries two-lanes of traffic and two sidewalks over the Great Egg Harbor River. Upstream is the concrete dam (c.1920) that creates Lenape Lake north of Mays Landing. The bridge is within the boundaries of the Mays Landing Historic District, and is opposite the 19th and early-20th century brick factory complex that was once the cotton mill, but is now owned by Wheaton Plastic Containers.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Listed. Mays Landing Historic District. 08/20/1990. Noncontributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 3-span encased steel stringer bridge has pipe railings, a concrete substructure, and paneled arch concrete fascias with decorative keystones. In 1940 it was built as a WPA project. It is not within the period of significance of the Mays Landing Historic District (1837-1935). Steel stringers are a common bridge type, and the bridge is not historically or technologically distinguished.

INFORMATION

PHOTO: 413:43-44 (06/92) REVISED BY (DATE): QUAD: Mays Landing

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 01HML58 **CO** ATLANTIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED RIVER AVENUE OVER SOUTH RIVER **FACILITY** RIVER AVENUE

TOWNSHIP HAMILTON TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Wood

 # SPANS 2 **LENGTH** 32 ft **WIDTH** 32 ft

CONSTRUCTION DT 1939 **ALTERATION DT** 1977 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT A. H. NELSON, COUNTY ENGINEER **BUILDER** COUNTY WPA CREW

SETTING / CONTEXT The two-lane bridge spans a small creek in the Pine Barrens. The surrounding area is sparsely developed with wooded lots and a scattering of late-19th and 20th-century homes.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 2-span timber stringer bridge has timber pile substructure and timber deck. In 1977 the bridge was substantially reconstructed. Beam guide rails have been added. The bridge is a common type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 408:23-24 (04/92) REVISED BY (DATE): QUAD: Dorothy

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 01M0001 **CO** ATLANTIC **OWNER** COUNTY **MILEPOINT** 24.12

NAME & FEATURE INTERSECTED EGG HARBOR-GREEN BANK ROAD OVER MULLICA RIVER **FACILITY** EGG HARBOR-GREEN BANK ROAD (CR 563)

TOWNSHIP MULLICA TOWNSHIP

TYPE SINGLE LEAF BASCULE **DESIGN** STRAUSS OVERHEAD **MATERIAL** Steel

 # SPANS 17 **LENGTH** 234 ft **WIDTH** 20 ft

CONSTRUCTION DT 1926 **ALTERATION DT** 1950s **SOURCE** COUNTY RECORDS

DESIGNER/PATENT A. H. NELSON/STRAUSS BASCULE **BUILDER** RANCOCAS CONSTRUCTION CO

SETTING / CONTEXT The bridge carries two lanes of traffic over the Mullica River between Atlantic and Burlington Counties. The southern bank of the river is undeveloped wetlands. The northern bank is the village of Green Bank (c.1780-1930). The village is not well preserved, and it does not have the integrity to be a National Register district.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible. Mullica River Chestnut Neck NJ Register Listed 10/01/1976. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-leaf Strauss overhead bascule bridge has 16 timber stringer approach spans and bulkheaded causeway. Original plans for the bridge reveal that it retains its overall integrity of design, although some minor alterations have been made to the railings, operating mechanism, locking mechanism, and substructure (c.1950). The bridge opens to navigation and is tended by an operator. It is significant both for its engineering and for its contribution to the historic character of Green Bank. The village is too altered to be a potential historic district.

INFOR MATION

PHOTO: 410:21-24 (04/92 JPH (5/96)) REVISED BY (DATE): QUAD: Green Bank

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 01M0002 **CO** ATLANTIC **OWNER** COUNTY **MILEPOINT** 24.11

NAME & FEATURE INTERSECTED EGG HARBOR ROAD OVER BACK CHANNEL OF MULLICA RIVER **FACILITY** EGG HARBOR-GREEN BANK ROAD (CR 563)

TOWNSHIP MULLICA TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Wood

 # SPANS 2 **LENGTH** 23 ft **WIDTH** 29 ft

CONSTRUCTION DT 1926 **ALTERATION DT** **SOURCE** COUNTY RECORDS

DESIGNER/PATENT A. H. NELSON **BUILDER** RANCOCAS CONSTRUCTION CO

SETTING / CONTEXT The bridge carries two lanes of traffic over a back channel of the Mullica River on the southern causeway leading to the Green Bank Strauss overhead bascule bridge. The southern bank of the river is undeveloped wetlands. The northern bank is the village of Green Bank (c.1780-1930). The village is not well preserved, and it does not have the integrity to be a National Register district.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible. Mullica River Chestnut Neck NJ Register Listed 10/01/1976. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 2-span timber stringer bridge has a timber pile substructure and wood railings. Although repair records have not been located, the bridge has been rebuilt. It is a common bridge type, and is not historically or technologically distinguished. It does not make a significant contribution to the historic integrity of the Green Bank Strauss bascule bridge (01M0001).

INFOR MATION

PHOTO: 412:13-14 (04/92 JPH (5/96)) REVISED BY (DATE): QUAD: Green Bank

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 01M0017 **CO** ATLANTIC **OWNER** COUNTY **MILEPOINT** 10.51

NAME & FEATURE INTERSECTED ELWOOD-PLEASANT MILLS ROAD OVER HAMMONTON CREEK **FACILITY** ELWOOD PLEASANT MILLS ROAD (CR 623)

TOWNSHIP MULLICA TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 28 ft **WIDTH** 30 ft

CONSTRUCTION DT 1936 **ALTERATION DT** **SOURCE** COUNTY RECORDS

DESIGNER/PATENT A. H. NELSON, COUNTY ENGINEER **BUILDER** COUNTY WPA CREW

SETTING / CONTEXT The two-lane bridge spans the concrete spillway from Nescochague Lake at the village of Pleasant Mills. Next to the bridge is a 19th-century mill building converted to a residential structure, and the Elijah Clark Mansion (c.1762) as indicated by a historic marker. Pleasant Mills is a 19th-century industrial site across the Mullica River from the state's Batsto Historic Village, another early industrial site. Pleasant Mills appears to have historic district potential.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Agreed Potential Historic District. Noncontributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 1936 encased steel stringer bridge has a concrete substructure and balustrades. The bridge is a representative example of a common 1930s bridge type and does not fall within the period of significance of the potential Pleasant Mills historic district (c.1760-1900). The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 410:10-12 (04/92) REVISED BY (DATE): QUAD: Atsion

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 01M0019 **CO** ATLANTIC **OWNER** COUNTY **MILEPOINT** 7.94

NAME & FEATURE INTERSECTED CR 542 OVER PLEASANT MILLS CANAL **FACILITY** CR 542 (HAMMONTON-PLEASANT MILLS ROAD)

TOWNSHIP MULLICA TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 31 ft **WIDTH** 31.5 ft

CONSTRUCTION DT 1925 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT A. H. NELSON, COUNTY ENGINEER **BUILDER** GEORGE HANSELMAN

SETTING / CONTEXT The bridge carries two-lanes of traffic over a canal at Pleasant Mills, a former industrial site with 19th-century mill that has been converted to a residential structure. The bridge is located in the Pine Barrens across the Mullica River from the state's Batsto Historic Village, an industrial site and iron foundry active in the 18th- and 19th-centuries. Near the bridge is a cemetery and wood-frame church dated c.1808. Pleasant Mills appears to have historic district potential.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Agreed Potential Historic District. Noncontributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single span encased steel stringer bridge has pipe railings and a concrete substructure with stepped wing walls. It is similar to at least 8 other encased steel stringer bridges built in the county from 1914 to 1931. Beam guide rails have been added. Although the bridge lies within a potential historic district, the bridge is outside of the district's late-18th and 19th-century period of significance. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 410:6-7 (04/25) REVISED BY (DATE): QUAD: Atsion

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 01M0022 **CO** ATLANTIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED JACKSON ROAD OVER HAMMONTON CREEK **FACILITY** JACKSON ROAD

TOWNSHIP MULLICA TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Wood

 # SPANS 2 **LENGTH** 26 ft **WIDTH** 24 ft

CONSTRUCTION DT 1936 **ALTERATION DT** 1970-80s **SOURCE** COUNTY RECORDS

DESIGNER/PATENT A. H. NELSON, COUNTY ENGINEER **BUILDER** COUNTY WPA FORCES

SETTING / CONTEXT The bridge carries two lanes of traffic over a small creek near the village of Pleasant Mills. The surrounding area is rural with wooded lots, fields, and scattered 19th- and 20th-century residences.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Agreed Potential Historic District. Noncontributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 2-span timber stringer bridge has timber pile substructure and timber deck. Although no repair records have been located, many bridge members have been replaced and the bridge has been materially reconstructed (c.1970-80s). Beam guide rails have been added. The bridge is a common type and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 410:4-5 (04/92) REVISED BY (DATE): QUAD: Atsion

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 01M0030 **CO** ATLANTIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED ATSION-PLEASANT MILLS ROAD OVER NESCOCHAGUE CREEK **FACILITY** ATSION-PLEASANT MILLS ROAD

TOWNSHIP MULLICA TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Wood

 # SPANS 4 **LENGTH** 43 ft **WIDTH** 23 ft

CONSTRUCTION DT 1943 **ALTERATION DT** 1970ca **SOURCE** COUNTY RECORDS

DESIGNER/PATENT A. H. NELSON, COUNTY ENGINEER **BUILDER** COUNTY BRIDGE MAINTENANCE

SETTING / CONTEXT The 2-lane bridge carries an unimproved road over a creek at the border of Wharton State Forest. The bridge is located at the village of Pleasant Mills on the Mullica River opposite the state's Batsto Historic Village, a 18th and 19th-century industrial site. Next to the bridge is a cemetery and an 1808 wood-frame United Methodist Church. Pleasant Mills appears to have historic district potential.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 4-span timber stringer bridge has timber pile substructure, timber deck and wood railings. Although no repair records could be located, the bridge has probably been substantially rebuilt (c.1970) at least once. Although located in a potential historic district, the 1943 bridge does not match the village's late 18th and 19th century period of significance. It is a common bridge type, and is not historically or technologically significant.

INFOR MATION

PHOTO: 410:8-9 (04/92) REVISED BY (DATE): QUAD: Atsion

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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November 12, 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 01M0038 **CO** ATLANTIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED SIXTH STREET OVER HAMMONTON CREEK **FACILITY** SIXTH STREET

TOWNSHIP MULLICA TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Wood

 # SPANS 2 **LENGTH** 22 ft **WIDTH** 24 ft

CONSTRUCTION DT 1940 **ALTERATION DT** 1990ca **SOURCE** COUNTY RECORDS

DESIGNER/PATENT A. H. NELSON, COUNTY ENGINEER **BUILDER** COUNTY WPA FORCES

SETTING / CONTEXT The bridge carries two-lanes of traffic over a small creek in the Pine Barrens. Sixth Street is a dirt road near the village of Nesco. The surrounding area is sparsely developed with some 19th- and 20th century residences and some farmers' fields.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 2-span timber stringer bridge has timber pile substructure, timber deck and railing. The bridge has been substantially reconstructed with new material, and shows signs of recent replacement of railing, deck, and stringers (c.1990). It is a common bridge type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 409:32a-33a (04/92) REVISED BY (DATE): QUAD: Atsion

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 01M0039 **CO** ATLANTIC **OWNER** COUNTY **MILEPOINT** 4.55

NAME & FEATURE INTERSECTED COLUMBIA ROAD OVER HAMMONTON CREEK **FACILITY** COLUMBIA ROAD (CR 658)

TOWNSHIP MULLICA TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 22 ft **WIDTH** 29 ft

CONSTRUCTION DT 1931 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT A. H. NELSON, COUNTY ENGINEER **BUILDER** GEORGE HANSELMAN

SETTING / CONTEXT The bridge carries two-lanes of traffic over a small creek in the Pine Barrens. The bridge is located just before a sharp turn in the road. The surrounding area is sparsely developed with a scattering of 20th-century residences.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span encased steel stringer bridge has pipe railings and a concrete substructure. Beam guide rails have been added. It is a common bridge type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 410:2-3 (04/92) REVISED BY (DATE): QUAD: Atsion

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 01PR007 **CO** ATLANTIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED SMITHVILLE-PORT REPUBLIC ROAD OVER NACOTE CREEK **FACILITY** SMITHVILLE-PORT REPUBLIC ROAD (CR 610)

TOWNSHIP PORT REPUBLIC CITY

TYPE SWING SPAN **DESIGN** CENTER BEARING **MATERIAL** Steel

 # SPANS 24 **LENGTH** 399 ft **WIDTH** 19 ft

CONSTRUCTION DT 1904 **ALTERATION DT** 1952, 1985 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT J. J. ALBERTSON **BUILDER** NEW JERSEY BRIDGE COMPANY

SETTING / CONTEXT The bridge carries two lanes of traffic over a broad reach of Nacote Creek in a coastal area of Atlantic County. The town of Port Republic City lies on the northern bank of Nacote Creek. The bridge and road form one of the boundaries of the Port Republic Historic District (c.1760-1946), which includes residential and commercial structures on both sides of the creek. The town's areas of historic significance include earlier water power sites and maritime commerce.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible. Listed. Port Republic Historic District. 05/16/1991. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge consists of a 7-panel Warren pony truss center-bearing swing span and 23 timber stringer approach spans. The truss is a rare example of a bridge fabricated by the New Jersey Bridge Co. of Manasquan, New Jersey, and although the approaches and substructure have been rebuilt, the truss itself retains its integrity. It is the only surviving example of a highway swing span in Atlantic County, and contributes to the historic character of the Port Republic Historic District (1760-1946).

INFOR MATION

Bibliography:
Atlantic County. Division of Engineering. Bridge Plans and Records. 1904-1990.
Manasquan, New Jersey. Compiled by the Townfolk for the Diamond Jubilee under the Sponsorship of the Manasquan Chamber of Commerce. 1962.
McMahon, William. Historic South Jersey Towns. Atlantic City Press, 1964.
New Jersey Department of Transportation. Bridge Plans and Files. 1952-1991
Office of New Jersey Heritage. Port Republic Historic District Nomination. 1991.

Physical Description: The Smithville-Port Republic Road bridge is a 24 span bridge. The main span is a center-bearing Warren truss swing bridge. The approach spans, 11 to the north and 12 to the south, are timber stringers on timber piles. The manually-operated bridge may be opened to navigation with 8 hours notice to the county.

The movable span is a 7-panel riveted Warren with verticals pony truss composed of rolled steel members. The upper chords are built-up box beams with riveted cover plates, and the lower chords, diagonals, and verticals are angles with battens. The floor beams are built-up beams and the stringers I-beams. The bridge has a wood deck with asphalt surface. The bridge is opened to navigation manually by a capstan which engages the rack and pinion that moves the span. The swing span is center-bearing with a box-shaped system of girders with four balance wheels over the center pier. The swing span's end bearings rest on stone piers capped by concrete risers. The center pivot pier is an approximately 20' diameter concrete filled metal shell. A beam guide rail has been added to the truss.

The approach spans are timber stringers resting on cross braced timber pile bents. The approach spans have beam guide rails. No significant repairs have been made to the superstructure of the swing span, however, it is in an increasingly deteriorated condition with rusting evident and with visible twisting of the vertical and diagonal members in the second panel in from the southwest and northeast corners of the truss. In 1952 the substructure of the main span was raised by concrete additions to provide greater navigational clearance. In 1985 the deck and some of the stringers were replaced due to damage from a heavy truck. The timber stringer approach spans have been rebuilt numerous times in the bridge's history. County records indicate that they were reconstructed in 1924, 1948, 1952, and 1976.

Historical and Technological Significance: The manually operable center-bearing Warren with verticals pony truss swing span bridge was built in 1904 and fabricated by the New Jersey Bridge Company of Manasquan, New Jersey. It is located within the Port Republic Historic District (1760-1946) but was not rated in the National Register nomination. It should be evaluated as a contributing structure representative of the town's historic orientation toward the water and the important role maritime commerce played in the economic development of the town. The district is eligible under Criterion A of the National Register. In addition to being within the historic district, the bridge is the only known surviving swing span highway bridge in Atlantic County, and is one of less than six documented bridges by the New Jersey Bridge Company, an in-state fabricator. The swing span truss has not been significantly altered although the approach spans and substructure have been repaired and reconstructed over the years. No original plans for the bridge have been located at the county engineer's office.

The New Jersey Bridge Company was founded at Manasquan in 1890, and it was active until 1907 when financial difficulties caused the company to close. Messrs. Wyckoop and Baly, formerly of the Canton Bridge Works of Ohio, established the bridge fabrication shops adjacent to the railroad tracks in Manasquan. They marketed their bridges nationally, and it is known that they produced spans for Grand Rapids, Michigan (1903 North Park Bridge, a Pratt thru truss) and Portland, Maine (1906-07 Vaughn Bridge, a large rivet-connected swing span). In New Jersey at least two other movable New Jersey Bridge Company bridges are known to survive: the 1905 New Bridge thru truss swing span over Alloways Creek in Salem County (1701399), and the 1903 riveted Warren pony truss swing span over Rancocas Creek in Burlington County (03C4004). Swing spans were a popular late 19th century movable bridge technology but lost favor in the early 20th century to bascule bridges that offered faster opening and closing times and improved channel clearances.

In 1989 the bridge was dedicated to Alton M. Bowen, a locally prominent citizen of Port Republic who served as Mayor and City Council President for over sixty years. A commemorative plaque mounted on a large boulder is situated at the bridge's southern approach.

Boundary Description and Justification: The bridge is within the defined boundaries of the Port Republic Historic District as delineated in the USGS Quad Map accompanying the district nomination. The bridge superstructure, substructure, and right-of-way over the river are contributing resources to the historic district and within the district's period of significance (1760-1946).

PHOTO: 411:20-25 (04/92) REVISED BY (DATE): QUAD: New Gretna

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 01V0001 **CO** ATLANTIC **OWNER** COUNTY **MILEPOINT** 3.2

NAME & FEATURE INTERSECTED DORSET AVENUE (CR 629) OVER INSIDE THOROFARE **FACILITY** DORSET AVENUE (CR 629)

TOWNSHIP VENTNOR CITY

TYPE DOUBLE LEAF BASCULE **DESIGN** STRAUSS UNDERNEATH **MATERIAL** Steel

 # SPANS 3 **LENGTH** 220 ft **WIDTH** 36 ft

CONSTRUCTION DT 1929 **ALTERATION DT** 1976, 1995 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT A. H. NELSON/STRAUSS BASCULE **BUILDER** EASTERN ENGINEERING CO.

SETTING / CONTEXT The bridge carries two lanes of traffic and two sidewalks over the Inside Thorofare boat channel between Chelsea Heights and Ventnor Heights in Ventnor City. The surrounding neighborhood contains many well-preserved examples of late-19th and early-20th century domestic architecture, originally developed as summer beach homes for the upper class.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 03/12/01

SUMMARY The 1929 bridge has a double-leaf Strauss trunnion bascule main span and two haunched deck plate girder approach spans. The substructure is stone, and at each corner of the movable span are concrete houses originally designed as the operators' house, a storage room, and 2 comfort stations. The Dorset Avenue bridge is an example of an increasingly rare movable bridge technology patented by the Strauss Bascule Bridge Company, and is eligible for listing in the National Register of Historic Places under Criterion C. Additionally, the bridge contributes to the historic character of the surrounding neighborhood.

INFOR MATION

PHOTO: 132:11,13-16 (04/92) REVISED BY (DATE): QUAD: Atlantic City

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 01W0027 **CO** ATLANTIC **OWNER** COUNTY **MILEPOINT** 5.85

NAME & FEATURE INTERSECTED ELEVENTH AVENUE (CR 669) OVER SOUTH RIVER **FACILITY** ELEVENTH AVENE (CR 669)

TOWNSHIP WEYMOUTH TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Wood

 # SPANS 2 **LENGTH** 32 ft **WIDTH** 30 ft

CONSTRUCTION DT 1937 **ALTERATION DT** 1944 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT A. H. NELSON, COUNTY ENGINEER **BUILDER** COUNTY BRIDGE MAINTENANCE

SETTING / CONTEXT The bridge carries 2-lanes of traffic over a small creek in a marshy area north of the 19th- and 20th-century village of Belcoville. The area near the bridge is undeveloped.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 2-span timber stringer bridge has a timber pile substructure and timber deck. Beam guide rails have been added. In 1944 the 1937 bridge was reconstructed. Since 1944 the bridge has been repaired several times. It is a common bridge type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 408:35-36 (04/92) REVISED BY (DATE): QUAD: Mays Landing

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US
November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 020001A **CO** BERGEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BROOKSIDE AVENUE OVER RAMSEY BROOK **FACILITY** BROOKSIDE AVENUE

TOWNSHIP ALLENDALE BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 32 ft **WIDTH** 30 ft

CONSTRUCTION DT 1945 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT R. MCCLAVE, COUNTY ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane collector road and sidewalks over a small stream in a residential neighborhood. The surrounding homes are an eclectic mix ranging from the late-19th century through the 1950s.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased stringer bridge supported on concrete abutments has haunched fascia beams giving the appearance of an arch span. The bridge carries 2 sidewalks bounded by concrete balustrades that are of standard design for bridges built in the county in the 1920s to 1940s. One of over 65 pre-1946 stringer bridges in the county, the bridge is neither technologically nor historically distinguished.

INFOR MATION

PHOTO: 205:41-42 (02/92) REVISED BY (DATE): QUAD: Ramsey

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 020001B **CO** BERGEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BROOKSIDE AVENUE OVER HO-HO-KUS BROOK **FACILITY** BROOKSIDE AVENUE

TOWNSHIP ALLENDALE BOROUGH

TYPE STRINGER **DESIGN** JACK ARCH (BRICK) **MATERIAL** Steel

 # SPANS 1 **LENGTH** 30 ft **WIDTH** 30 ft

CONSTRUCTION DT 1900ca **ALTERATION DT** 1930 **SOURCE** STYLE/INSCRIPTION

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane collector road over a small stream in a residential area. The homes in the area range from the late 19th century through the 1950s. Remnants of an old stone dam are located approximately 50' upstream from the bridge. No buildings related to the dam remain.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The circa 1900 stringer and brick jack arch bridge supported on ashlar abutments was widened in 1930 on both sides with stringers with concrete parapets on concrete abutment extensions. Modern beam guide rails have been placed along the sidewalks. One of over 6 remaining brick jack arch spans in the county built during the first decade of this century, this example is more altered than the others and is thus not distinguished. A well-preserved example is 020058C.

INFOR MATION

PHOTO: 205:43,44,1-3 (02/92) REVISED BY (DATE): QUAD: Ramsey

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 020001C **CO** BERGEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WEST CRESCENT AVENUE OVER RAMSEY BROOK **FACILITY** WEST CRESENT AVENUE

TOWNSHIP ALLENDALE BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 25 ft **WIDTH** 30 ft

CONSTRUCTION DT 1913 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT R. EARLE JR., COUNTY ENGINEER **BUILDER** CHAS A LONG

SETTING / CONTEXT The bridge carries a 2-lane collector road and sidewalks over a small stream in a residential area of single-family homes dating from the early 1900s to the 1950s. A school and parks are located in close proximity to the bridge.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The stringer bridge is supported on concrete abutments. The stringers are encased with exposed bottom flanges. Custom stone parapets and concrete sidewalks are carried on either side of the roadway. A utility pipe spans the stream along one fascia. This is the most common pre-World War II bridge type in the state, and it is one of over 65 stringer bridges in the county. The bridge is neither technologically nor historically distinguished.

INFOR MATION

PHOTO: 205:38-40 (02/92) REVISED BY (DATE): QUAD: Ramsey

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 020001D **CO** BERGEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WEST CRESCENT AVENUE OVER HO-HO-KUS BROOK **FACILITY** WEST CRESCENT AVENUE

TOWNSHIP ALLENDALE BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 32 ft **WIDTH** 30 ft

CONSTRUCTION DT 1927 **ALTERATION DT** 1953 **SOURCE** PLANS/PLAQUE

DESIGNER/PATENT R. MCCLAVE, COUNTY ENGINEER **BUILDER** A. H. ALFAST

SETTING / CONTEXT The bridge carries a 2-lane collector road and sidewalks over a small stream in a wooded sparsely developed 20th-century residential area.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased stringer bridge rests on concrete abutments. The concrete balustrades are a standard design found on bridges built in the county in the 1920s-1940s. One of over 65 pre-World War II stringer bridges in the county, the bridge is neither technologically nor historically distinguished.

INFOR MATION

PHOTO: 205:4-5, 219:36 (02/92) REVISED BY (DATE): QUAD: Ramsey

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 020003A **CO** BERGEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED NORTH PROSPECT AVENUE OVER HIRSCHFIELD BROOK **FACILITY** NORTH PROSPECT AVENUE

TOWNSHIP BERGENFIELD BOROUGH

TYPE STRINGER **DESIGN** JACK ARCH (BRICK) **MATERIAL** Steel

 # SPANS 1 **LENGTH** 25 ft **WIDTH** 30 ft

CONSTRUCTION DT 1900ca **ALTERATION DT** 1953, 1963 **SOURCE** STYLE

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane collector roadway and sidewalks over a small stream in a predominantly post-World War II residential area. The setting is not distinguished.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The brick jack arch stringer bridge supported on ashlar abutments was widened to both sides in 1953 with a concrete substructure supporting reinforced concrete T beams and concrete parapets. In 1963 the T Beams at one side were replaced with a reinforced concrete slab. A concrete toe wall was constructed at the south abutment. This altered bridge is one of over six stringers with brick jack arches in the county, and is not distinguished historically or technologically.

INFOR MATION

PHOTO: 206:27-29 (02/92) REVISED BY (DATE): QUAD: Hackensack

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 020004A **CO** BERGEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED COURT STREET OVER HACKENSACK RIVER **FACILITY** COURT STREET (CR 12)

TOWNSHIP HACKENSACK CITY

TYPE SWING SPAN **DESIGN** CENTER BEARING **MATERIAL** Steel

 # SPANS 3 **LENGTH** 317 ft **WIDTH** 27.5 ft

CONSTRUCTION DT 1908 **ALTERATION DT** 1950, 1974 **SOURCE** PLANS/PLAQUE

DESIGNER/PATENT R. EARLE, COUNTY ENGINEER **BUILDER** F. R. LONG & COMPANY

SETTING / CONTEXT The bridge carries a 2-lane urban connector over a major river between downtown Hackensack and Bogota. A concrete batching plant and the Bergen County Court House are in close proximity to the bridge. The S.S. Ling Submarine is moored just upstream of the bridge. This bridge is the upstream-most movable span still in operation on the Hackensack River.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The center-bearing swing-span Warren thru truss bridge with two steel deck girder approach spans is supported on a concrete substructure. Alterations such as reinforcement of the lower chords in 1974 and repairs to floorbeams and stringers have not compromised the integrity of design. The bridge is one of the only remaining operable through truss swing spans in NJ. It was built by a prominent local contractor, and is a technologically significant example of a rare surviving bridge type.

INFOR MATION

Bibliography:
Bergen County Engineers Office. (Plans).
Bergen County Division of Cultural and Historic Affairs. Folio 408.

Physical Description: Constructed in 1907, the 317' long center-bearing through truss swing-span bridge supported on a concrete substructure has steel deck girder approach spans. The truss has riveted connections, and the diagonals and top and bottom chord members are composed of back-to-back channels with lacing. The verticals are 4 angles with lacing. The operating mechanism of the swing-span has undergone several maintenance repairs and remains operational. The operators house, set on the upstream corner of the Hackensack side of the river, does not appear to date to the original construction, however no documentation of the house was found. The original decorative metal railings are intact at the approach spans but chain-link-fences were placed along the sidewalks on the swing-span in 1974. The timber fenders at the swing-span piers have been reconstructed several times. In 1950 the original concrete jack arch deck was replaced with a reinforced slab and the stringers were encased. In 1974 the truss lower chord was reinforced for its full length, plates were added at the bottom flanges of the end floor beams, and new stringer seat angle connections were added at the floor beams.

Historical and Technological Significance: The riveted through truss bridge is one of several swing-span crossings of the Hackensack River, an important navigable waterway instrumental in the growth and industrial development of Bergen County. Constructed in 1907, the span replaced an earlier swing-span bridge. The builder, F.R. Long Company, was a New York firm that was a prolific bridge contractor in Bergen County, and it incorporated in New Jersey in 1899 moving its major operations to Hackensack at a site adjacent to the bridge. Although the span has undergone some alterations, it is a well-preserved and operational example of the swing-span trusses over the Hackensack River built by a prominent contractor in Bergen County. 02000I1 spanning the Passaic River in Rutherford Borough is also a well-preserved example of an operational swing-span through truss in the county.

PHOTO: 212:38-40 (02/92) REVISED BY (DATE): QUAD: Hackensack

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 020004B **CO** BERGEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED SALEM STREET OVER HACKENSACK RIVER **FACILITY** SALEM STREET

TOWNSHIP BOGOTA BOROUGH

TYPE SWING SPAN **DESIGN** **MATERIAL** Steel

 # SPANS 4 **LENGTH** 322 ft **WIDTH** 21.8 ft

CONSTRUCTION DT 1900 **ALTERATION DT** 1984 **SOURCE** PLANS

DESIGNER/PATENT UNKNOWN **BUILDER** F. R. LONG AND COMPANY

SETTING / CONTEXT The bridge carries a 2-lane urban connector road and a sidewalk over a major river between downtown Hackensack and Bogota. Wooded undeveloped land borders the river in the vicinity of the bridge. A railroad bridge and the Court Street swing span truss bridge (020004A) span the river downstream.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The swing span Pratt thru truss bridge supported on stone piers with new stringer approach spans supported on concrete substructure was originally a trolley bridge with 2 sets of tracks built for the Bergen County Traction Co. The span was altered to carry highway traffic in 1940. Significant alterations in 1984 rendered the swing span inoperable by removal of the mechanical systems. Bridges 020004A and 02000I1 are more complete examples of the swing span type.

INFOR MATION

PHOTO: 212:28-32 (02/92) REVISED BY (DATE): QUAD: Hackensack

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 020004C **CO** BERGEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MAIN STREET OVER WEST SHORE RR & LEONIA AVENUE **FACILITY** MAIN STREET

TOWNSHIP BOGOTA BOROUGH

TYPE THRU GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 14 **LENGTH** 438 ft **WIDTH** 40 ft

CONSTRUCTION DT 1939 **ALTERATION DT** 1980ca **SOURCE** PLANS

DESIGNER/PATENT NEW YORK CENTRAL RAILROAD **BUILDER** AMERICAN BRIDGE COMPANY

SETTING / CONTEXT The bridge carries a 2-lane collector road and sidewalks over a railroad and a 2-lane collector road in a densely populated mixed commercial and residential area. In 1939 the railroad was operated by the West Shore Division of the New York Central Railroad, and the bridge was built as part of a routine grade elimination project. The setting is undistinguished.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 14-span viaduct supported on a concrete substructure is composed of a thru girder with encased floor beams span over the railroad and steel stringer span over the street. The approach spans are T beams. The deck, sidewalks, and concrete parapets are ca. 1980 replacements. The bridge is composed of common structural types and has been substantially altered. It is not historically or technologically distinguished.

INFOR MATION

PHOTO: 207:7-9 (02/92) REVISED BY (DATE): QUAD: Hackensack

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 020007A **CO** BERGEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED OLD HOOK ROAD OVER HACKENSACK RIVER **FACILITY** OLD HOOK ROAD

TOWNSHIP CLOSTER BOROUGH

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 2 **LENGTH** 67 ft **WIDTH** 26 ft

CONSTRUCTION DT 1935 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT R. MCCLAVE, COUNTY ENGINEER **BUILDER** TIDEWATER STONE & SUPPLY

SETTING / CONTEXT The bridge carries a 2-lane collector road over a major river. The bridge is adjacent to the Oradell Reservoir. The surrounding wooded land is owned by the Hackensack Water Company.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The stringer bridge supported on concrete substructure has concrete balustrades of standard design for bridges built in the county in the 1920s to 1940s. One of over 65 pre-World War II stringer bridges in the county, it is not technologically or historically distinguished.

INFOR MATION

PHOTO: 212:43-44 (02/92) REVISED BY (DATE): QUAD: Yonkers

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 020007C **CO** BERGEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED DEMAREST AVENUE OVER TENAKILL BROOK **FACILITY** DEMAREST AVENUE

TOWNSHIP CLOSTER BOROUGH

TYPE STRINGER **DESIGN** JACK ARCH (CONCRETE) **MATERIAL** Steel

 # SPANS 1 **LENGTH** 24 ft **WIDTH** 30 ft

CONSTRUCTION DT 1912 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT R. EARLE JR., COUNTY ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane collector road and sidewalks over a small stream in a residential area. The homes are of post-World War II construction to one side of the bridge and circa 1920's to 1950's construction on the other side.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 11/29/90

SUMMARY The concrete jack arch stringer bridge is supported on concrete abutments. The original metal pipe railing is still in place. The bridge appears to be unaltered, but it is a short span example of a not uncommon early-20th century bridge type. The bridge has been evaluated as not eligible because it is historically and technologically undistinguished.

INFOR MATION

PHOTO: 212:4-6 (02/92) REVISED BY (DATE): QUAD: Yonkers

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 020007D **CO** BERGEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED HIGH STREET OVER TENAKILL BROOK **FACILITY** HIGH STREET

TOWNSHIP CLOSTER BOROUGH

TYPE STRINGER **DESIGN** JACK ARCH (BRICK) **MATERIAL** Steel

 # SPANS 1 **LENGTH** 25 ft **WIDTH** 30 ft

CONSTRUCTION DT 1894 **ALTERATION DT** 1911 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT J.W. STAGG **BUILDER** DAVID IRELAND

SETTING / CONTEXT The bridge carries a 2-lane collector road and sidewalks over a small stream in a residential area of single-family homes built in the 1920s.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 8/3/90

SUMMARY In 1894 the bridge was built as a single-span stringer with brick jack arches and ashlar abutments. In 1911 the south side was widened by steel stringers with concrete parapet resting on concrete abutment extensions. The north side was widened with a concrete slab addition at an unknown date. The stringer bridge with jack arches is a highly altered example of a type that was common in the county from 1890 to 1910 (i.e. 020058C), and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 212:1-3 (02/92) REVISED BY (DATE): QUAD: Yonkers

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 020009A **CO** BERGEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED HARDENBURGH AVENUE OVER TENAKILL BROOK **FACILITY** HARDENBURGH AVENUE

TOWNSHIP DEMAREST BOROUGH

TYPE BRICK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Brick

 # SPANS 1 **LENGTH** 32 ft **WIDTH** 33.8 ft

CONSTRUCTION DT 1909 **ALTERATION DT** 1911 **SOURCE** PLANS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane collector road with a turn lane and sidewalks over a small stream set in Demarest Park. A concrete spillway located just upstream from the bridge forms a duck pond. The Demarest train station constructed in 1872 is adjacent to the park, and the town of Demarest lies just beyond the station.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The brick deck arch bridge supported on ashlar abutments was widened to both sides in 1911 to accommodate sidewalks. Stringers and brick jack arches support the sidewalks flanked by stone parapets topped with the original 1909 coping stone. The railing is no longer in place. Virtually unaltered since 1911, the span combines two turn-of-the-century bridge types. A distinguished example of an uncommon bridge type, it is historically and technologically significant.

INFOR MATION

Bibliography:
Bergen County Engineers Office. microfiche 9B 9 160. Bridge Card 26-2.

Physical Description: The 32' span brick deck arch bridge supported on ashlar abutments was constructed in 1909 and was widened with steel stringers and brick jack arches on ashlar abutments in 1911. Three jack arch bays with 3/4" tie rods were added to each side of the bridge to accommodate sidewalks. The original coping stone was reused with Cast Iron Newel post and railing similar in design to Chester B. Albree's "Florence" pattern as specified on the widening plans. A stone parapet topped with presumably the original coping stone has since replaced the railing. With the exception of the railing, the bridge spanning the Tenakill Brook in Demarest Park appears to be unaltered since the 1911 widening.

Historical and Technological Significance: The brick deck arch bridge is a well-preserved example of an uncommon bridge type located in a park setting adjacent to the 1872 Demarest Train Station, which was included in Bergen County Demarest Historic Sites Survey. Although the original bridge has been altered, the brick jack arch widening is a good example of a prolific turn-of-the-century county type that was eventually replaced by the reinforced concrete deck. The span, constructed in 1909, is significant because it is well-preserved, and it is the only example of a brick deck arch bridge in the county.

PHOTO: 206:30-32 (02/92) REVISED BY (DATE): QUAD: Yonkers

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US
November 12, 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 02000I1 **CO** BERGEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED UNION AVENUE OVER PASSAIC RIVER **FACILITY** UNION AVENUE

TOWNSHIP RUTHERFORD BOROUGH

TYPE SWING SPAN **DESIGN** CENTER BEARING **MATERIAL** Steel

 # SPANS 4 **LENGTH** 285 ft **WIDTH** 19.3 ft

CONSTRUCTION DT 1896 **ALTERATION DT** 1924, 1977 **SOURCE** PLAQUE

DESIGNER/PATENT UNKNOWN **BUILDER** DEAN & WESTBROOK, NY

SETTING / CONTEXT The bridge carries a 2-lane collector road and sidewalks over a major river. Route 21 is located immediately west of the bridge and a residential area with post-World War II apartment houses borders the river to the east. At the east approach is also a one-story hip-roofed operators' house. The operators' house and existing traffic barriers should be considered within the eligible boundaries of the bridge.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 12/07/89, Letter 6/30/95.

SUMMARY The Pratt thru truss swing span supported on ashlar and concrete substructure has double intersecting Warren deck truss approach spans. In 1924 the bridge operation was motorized. Cables were added at an unknown date to strengthen several truss diagonals. In 1977 an approach span collapsed and emergency repairs were made. An early and increasingly rare example of a thru truss swing bridge built by nationally recognized NYC engineers Dean and Westbrook, the span is evaluated as eligible.

INFOR MATION

PHOTO: 209:25-38 (02/92) REVISED BY (DATE): QUAD: Weehawken

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 02000I5 **CO** BERGEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PASSAIC AVENUE OVER PASSAIC RIVER **FACILITY** PASSAIC AVENUE

TOWNSHIP GARFIELD CITY

TYPE THRU GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 3 **LENGTH** 233 ft **WIDTH** 27.5 ft

CONSTRUCTION DT 1898 **ALTERATION DT** 1989 **SOURCE** PLAQUE

DESIGNER/PATENT WISE & WATSON, PASSAIC **BUILDER** F. R. LONG & COMPANY

SETTING / CONTEXT The bridge carries a 2-lane city street and sidewalks over a major river in a densely populated mixed commercial and early 20th century urban residential area. The Bergen-Passaic County line passes through the bridge. Located between 2 turn-of-the century urban centers, a bridge has spanned the Passaic River at this crossing since 1868.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 3-span thru girder bridge is supported on ashlar abutments and piers. Alterations include welded plates added to the girder webs and concrete caps placed on the substructure units. The floorbeams and hanger supports were replaced 1989. The well-preserved span is significant because it is a long example of its type and is the earliest documented thru girder bridge in Bergen County.

INFOR MATION

Bibliography:
Bergen County Engineers Office. History of Passaic and Its Environs, by William W. Scott, Lewis Historical Publishing Company, Inc., New York 1922.
Bergen County Division of Cultural and Historic Affairs. Bergen County Historic Sites Survey, City of Garfield, 1980-1981.

Physical Description: The 233' long 3-span through girder with floor beams bridge supported on ashlar abutments and piers was built in 1898 replacing a bridge over the Passaic River known as the "Iron Bridge". The bridge is composed of built up riveted plate girders and built up floor beams. In 1989 a major rehabilitation of the span included replacing the deck, stringers and repairs to the floor beams. An earlier rehabilitation included the addition of welded plates to the web of the girders at deck level. Concrete caps were added to the masonry substructure. The alterations do not mar the integrity of the original design.

Historical and Technological Significance: The 1898 through girder bridge is an early and long example of the type. Spanning the Passaic River between the cities of Garfield and Passaic, the first bridge at this crossing was constructed in 1868 following the 1866 construction of Passaic Street from Lodi through Garfield to the Passaic River. The builder, F.R. Long Company, was a New York firm that was a prolific bridge contractor in Bergen County, and it incorporated in New Jersey in 1899 moving its major operations to Hackensack. The engineers, Wise and Watson Company of Passaic, were important local bridge builders in the 19th century. An historically important crossing in the development of the cities of Garfield and Passaic and survivor of the flood of 1903, the bridge is technologically significant in that it is a long span and the earliest documented example of the multi-span girder bridge in Bergen County.

PHOTO: 207:20-22 (02/92) REVISED BY (DATE): QUAD: Weehawken

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 02000I6 **CO** BERGEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MONROE STREET OVER PASSAIC RIVER **FACILITY** MONROE STREET

TOWNSHIP GARFIELD CITY

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 3 **LENGTH** 306 ft **WIDTH** 30.2 ft

CONSTRUCTION DT 1908 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT COLIN WISE, PASSAIC COUNTY ENG **BUILDER** C. W. DEAN COMPANY, NY

SETTING / CONTEXT The bridge carries a 2-lane collector road and sidewalks over a major river in a mixed commercial/industrial and urban residential area. The river forms the boundary between Bergen and Passaic counties. Post-World War II apartment buildings are located at the Passaic County side of the bridge. At the Garfield side is a factory constructed in 1892 by the Fritze Bros., a German chemical company, that appears to have been renovated in the 1970s.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 3-span deck arch bridge supported on a concrete and stone substructure has decorative balustrades with vase-shaped balusters. The span has lost its visual integrity through deterioration and gunite repairs, and it is neither technologically innovative nor historically distinguished. Large sections of the balustrades are missing or damaged, and the fascia and intrados are spalled. A spall at the downstream end of one pier exposes stones covered with mesh reinforcement and gunite.

INFOR MATION

Bibliography:
Bergen County Engineers Office (Plans)
Bergen County Historic Sites Survey, City of Garfield, 1980-81.

Physical Description: The 3-span 306' long bridge supported on a concrete substructure is composed of 3 equal elliptical reinforced concrete arch spans each with a ' clear span and a ' rise. The span supports a 30.2' width 2-lane road and 2 sidewalks bounded by concrete balustrades with vase-shaped balusters. Several balusters have been repaired or replaced. In 1947 guide rail was added along the curbline, and in 1948 new concrete curbs were placed. The substructure was rehabilitated in 1949. Gunite was placed at the abutments, wire mesh reinforcement covered with gunite was added to repair the face of the piers, and the north end of the piers were repaired with steel angles and anchor bolts.

Historical and Technological Significance: The elliptical arch bridge is a well-preserved and long example of its type. A plaque on the bridge indicates it was built by CW Dean Company, a NY firm, in 1908. F.R. Long Company Engineers and Contractors prepared the plans for the bridge dated Aug. 1907. Another set of plans for a 3-span arch bridge dated May 1907 was prepared by Schwiers & Sutton Co. of NY but was not used for construction. F.R. Long Company, was a NY firm that was a prolific bridge builder in Bergen County, and it incorporated in NJ in 1899 moving its major operations to Hackensack, where the founder, Frank R. Long had a residence. The bridge spans the Passaic River, an important navigable NJ waterway, between 2 urban centers, Passaic and Garfield. On the Garfield side of the bridge stands the circa 1890s factory buildings of Fritzch Brothers, a German chemical company, that was one of the first modern manufacturing concerns to have a factory in Garfield. In 1903 the Heyden Chemical Company took over the plant and remained in operation until the company was seized by the U.S. Government in 1918. The bridge is significant as one of several crossings over the Passaic River that were important in the development of a major industrial and commercial area. The only pre-WW II multi-span concrete deck arch bridge in the county, the well-documented span is distinguished as an early and architectonic example of a multi-span deck arch bridge.

PHOTO: 207:16-19 (02/92) REVISED BY (DATE): QUAD: Weehawken

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 02000I8 **CO** BERGEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MORLOT AVENUE (33RD STREET) OVER PASSAIC RIVER **FACILITY** MORLOT AVENUE

TOWNSHIP FAIR LAWN BOROUGH

TYPE THRU GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 3 **LENGTH** 263 ft **WIDTH** 27.5 ft

CONSTRUCTION DT 1904 **ALTERATION DT** 1976 **SOURCE** PLANS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a heavily travelled 2-lane collector road and a sidewalk over a major river. The Bergen-Passaic County line passes through the bridge along the center of the river. The Bergen County side of the bridge is residential with single--family post-World War II homes. The Passaic County side is predominantly industrial. The setting is not distinguished.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 3-span thru girder bridge is supported on stone abutments and concrete piers. The curved roadway at the approach combined with deep girders create very poor sight distance. In 1976 one end of the girder webs were cut on a slope to improve the sight distance. Welded floorbeams were added between the existing floorbeams. One of over 23 pre-World War II thru girder spans in the county, the span is relatively early, but is not historically or technologically distinguished.

INFOR MATION

PHOTO: 207:10-12 (02/92) REVISED BY (DATE): QUAD: Paterson

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 020012A **CO** BERGEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MONTROSS AVENUE OVER CARLTON HILL SPUR (M.P. 9.21) **FACILITY** MONTROSS AVENUE

TOWNSHIP RUTHERFORD BOROUGH

TYPE THRU GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 2 **LENGTH** 99 ft **WIDTH** 28 ft

CONSTRUCTION DT 1910 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT R. EARLE JR., COUNTY ENGINEER **BUILDER** SNARE & TRIEST CO., NY

SETTING / CONTEXT The bridge carries a 2-lane collector road and sidewalks over a railroad in a mixed residential and light industrial area. The surrounding buildings and homes were built from the early 1900s through the 1920s. The bridge spans the railroad right-of way developed by the Paterson and Hudson River Railroad in the mid-19th century. At the time of the bridge's construction in 1910, the line was owned by the Erie Railroad.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 4/30/91

SUMMARY The 2-span thru girder bridge is supported on concrete abutments and a steel pier bent. There is evidence of a previous stone abutment at the north abutment. Although the original railings are intact, the girders have welded repairs. A large utility pipe is carried on the girder top flange. One of over 23 thru girder bridges in the county, the span is not technologically or historically distinguished.

INFOR MATION

PHOTO: 209:33-34 (02/92) REVISED BY (DATE): QUAD: Weehawken

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 020017A **CO** BERGEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED RED MILL ROAD OVER SADDLE RIVER **FACILITY** RED MILL ROAD

TOWNSHIP FAIR LAWN BOROUGH

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 78 ft **WIDTH** 30 ft

CONSTRUCTION DT 1927 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT R. MCCLAVE, COUNTY ENGINEER **BUILDER** DANSEN CONSTRUCTION CO.

SETTING / CONTEXT The bridge carries a 2-lane collector road and sidewalks over a shallow river adjacent to Route 4 in a post-WWII residential neighborhood. The bridge is located next to the site of the extant Red Mill. According to a historic marker, the grist mill, built in 1745, was the site of raids and encounters during the Revolution. Aaron Burr was entertained here Christmas Eve in 1776. Washington and his men often passed here. Lafayette stopped here on his return visit to America in 1825.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The concrete deck arch bridge has concrete balustrades and substructure. Exedrae are provided at the bridge corners. Much of the intrados has been patched and the balustrades have been repaired. Although the bridge is located at an historic site, it post-dates the mill and the activities that distinguished this area. Neither an early or innovative example of its type, the span is not technologically nor historically distinguished.

INFOR MATION

PHOTO: 215:44,1-4 (02/92) REVISED BY (DATE): QUAD: Hackensack

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 020020A **CO** BERGEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED COLONIAL ROAD OVER TRIBUTARY OF POND BROOK **FACILITY** COLONIAL ROAD

TOWNSHIP FRANKLIN LAKES BOROUGH

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 40 ft **WIDTH** 39.7 ft

CONSTRUCTION DT 1902 **ALTERATION DT** 1930 **SOURCE** PLANS

DESIGNER/PATENT UNKNOWN **BUILDER** BOGERT CARLOUGH COMPANY

SETTING / CONTEXT The bridge carries a 2-lane collector road and sidewalks over a small stream in a wooded sparsely developed neighborhood of post-World War II single-family homes.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 4/30/91, Letter 6/30/95.

SUMMARY The concrete arch bridge was constructed in 1902 using the Monier reinforcement system. The span was widened on both sides in 1930 with concrete T beams on concrete abutment extensions. The sidewalks and balustrades were also added at that time. An example of a concrete arch bridge with a documented patented reinforcement system, the bridge was evaluated as historically and technologically significant. It is 1 of 3 probable Monier-type arch bridges in Bergen County (020020B, 020033D).

INFOR MATION

PHOTO: 209:13-15 (02/92) REVISED BY (DATE): QUAD: Ramsey

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 020020B **CO** BERGEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PULIS AVENUE OVER HO-HO-KUS BROOK **FACILITY** PULIS AVENUE

TOWNSHIP FRANKLIN LAKES BOROUGH

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 21 ft **WIDTH** 40 ft

CONSTRUCTION DT 1903 **ALTERATION DT** 1960 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** S. CARLOUGH

SETTING / CONTEXT The bridge carries a 2-lane collector road and sidewalks over a small stream in a post-World War II wooded residential neighborhood and next to the former location of Pulis's Mill. No buildings related to the mill are extant.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The concrete arch bridge with concrete substructure was widened to both sides in 1960 with concrete slabs. Sidewalks with modern parapets and railings were also added. No plans to identify the steel reinforcement were located, but date, style, and design suggests that it employs the patented Monier reinforcing system represented in bridge numbers 020020A & 020033D. The span has lost its integrity, and 020020A, although similarly altered, has already been chosen as an eligible example.

INFOR MATION

PHOTO: 209:16-18 (02/92) REVISED BY (DATE): QUAD: Ramsey

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 020023B **CO** BERGEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MAIN STREET OVER COLES BROOK **FACILITY** MAIN STREET

TOWNSHIP HACKENSACK CITY

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 2 **LENGTH** 43 ft **WIDTH** 40 ft

CONSTRUCTION DT 1910ca **ALTERATION DT** 1927 **SOURCE** NJDOT/COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane collector road and sidewalks over a small stream in a mixed commercial and residential area. Route 4 is accessible from the north approach. The surrounding neighborhood consists of apartment buildings built in the 1950s to 1960s. The setting is not distinguished.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The stringer bridge supported on a concrete substructure was built as a single span. In 1927 the span was widened with a flared superstructure and a concrete pier was added under the new longer stringers. Standard design balustrades were also added. Although plans were not located, county inspection records indicate the span was in place by 1916 and early maps indicate a crossing in 1902. One of over 65 stringer bridges in the county, the bridge is an undistinguished example of a common type.

INFOR MATION

PHOTO: 215:25-26,28 (02/92) REVISED BY (DATE): QUAD: Hackensack

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 020023C **CO** BERGEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED SUMMIT AVENUE OVER NY, SUSQUEHANNA & WESTERN RR **FACILITY** SUMMIT AVENUE

TOWNSHIP HACKENSACK CITY

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 88 ft **WIDTH** 40 ft

CONSTRUCTION DT 1911 **ALTERATION DT** 1949 **SOURCE** PLANS

DESIGNER/PATENT R. EARLE JR., COUNTY ENGINEER **BUILDER** W.G. BROADHURST

SETTING / CONTEXT The bridge carries a 2-lane collector road and sidewalks over a railroad in a residential area. Residences are mixed single-family homes and apartment buildings built between 1910 and 1950. The bridge spans the New York, Susquehanna and Western Railroad, which developed the right-of-way in the early 1870s. In 1898 the line was acquired by the Erie Railroad.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The earth-filled concrete deck arch is keyed into a stone ledge. The balustrades were replaced in 1949, and the intrados was patched in 1953. It is similar in style to 0254160 which also spans the railroad in the same vicinity. The 1911 bridge is not associated with the historic period of development of the railway, and was built on designs approved by the county engineer. It is a common bridge type and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 212:41-42 (02/92) REVISED BY (DATE): QUAD: Hackensack

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 020023E **CO** BERGEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED GRAND AVENUE OVER COLES BROOK **FACILITY** GRAND AVENUE

TOWNSHIP HACKENSACK CITY

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 2 **LENGTH** 33 ft **WIDTH** 45 ft

CONSTRUCTION DT 1916 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT H. W. DURHAM, COUNTY ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane collector roadway and sidewalks over a small stream in a mixed commercial and residential area. NJ 4, which is accessible from one side of the bridge, is lined with commercial businesses. Residences include apartment buildings built between the 1950s and 1960s and a single family home built between 1910 and 1920. The setting is not distinguished.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 2-span continuous slab bridge is supported on a concrete substructure. The original metal pipe railing is intact, and the bridge does not appear to have been altered. An undistinguished example of a not uncommon bridge type, the span is not technologically noteworthy or historically significant.

INFOR MATION

PHOTO: 215:27,29 (02/92) REVISED BY (DATE): QUAD: Hackensack

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 020024A **CO** BERGEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED HARRIOT AVENUE OVER HACKENSACK RIVER **FACILITY** HARRIOT AVENUE

TOWNSHIP HARRINGTON PARK BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 55 ft **WIDTH** 23.1 ft

CONSTRUCTION DT 1921 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT R. MCCLAVE, COUNTY ENGINEER **BUILDER** L. H. CARD

SETTING / CONTEXT The bridge carries a two-lane collector road over a river surrounded by wooded property owned by a water company. The bridge is adjacent to the site of the pre-1765 Old Bogert Grist Mill, abandoned in 1922 and demolished in 1932. The only above-ground remnant of the mill appears to be a dam-spillway upstream from the bridge. The existing bridge has no significant historical association with the mill site.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The continuous 2-span stringer bridge is supported by ashlar stone masonry abutments and a concrete pier. The haunched concrete fascias are not an uncommon method of making a steel stringer bridge appear as an arch bridge. The stone abutments probably predate the existing superstructure, but county records do not indicate the age or type of preexisting bridges. The stringer bridge is an example of a common type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 211:14-16 (02/92) REVISED BY (DATE): QUAD: Yonkers

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 020027C **CO** BERGEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PATTERSON STREET OVER PASCACK BROOK **FACILITY** PATTERSON STREET

TOWNSHIP HILLSDALE BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 50 ft **WIDTH** 30 ft

CONSTRUCTION DT 1926 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a two lane collector road and sidewalks over a shallow stream. It is bounded on one side by a wooded residential neighborhood of post-World War II homes. The other side is light commercial and locally oriented businesses also of post-World War II construction. The setting is not distinguished.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The concrete encased steel stringer bridge is supported on a concrete substructure. The abutments from a previous span were widened and capped. The bridge sidewalks are bounded by concrete balustrades. The bridge is neither technologically innovative nor historically distinguished. It is a representative example of a common pre-World War II bridge type in the state.

INFOR MATION

PHOTO: 211:7-8 (02/92) REVISED BY (DATE): QUAD: Park Ridge

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 020027D **CO** BERGEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BROADWAY AVENUE OVER PASCACK BROOK **FACILITY** BROADWAY AVENUE

TOWNSHIP HILLSDALE BOROUGH

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 52 ft **WIDTH** 40 ft

CONSTRUCTION DT 1910 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT R. D. EARLE JR., COUNTY ENG. **BUILDER** C. W. BANCE, J.W. EDWARDS

SETTING / CONTEXT The bridge carries a three lane road and sidewalks over a small stream in a mid- to late-20th century commercial area that ranges from small businesses to a major mall.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The deck arch bridge supported on a concrete substructure has original metal pipe railings and paneled spandrel walls. The bridge, although well-preserved, is an example of a popular early-20th century bridge type, and has no historically or technologically distinguishing features.

INFOR MATION

PHOTO: 211:5-6 (02/92) REVISED BY (DATE): QUAD: Park Ridge

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 020028A **CO** BERGEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WARREN AVENUE OVER HO-HO-KUS BROOK **FACILITY** WARREN AVENUE

TOWNSHIP HO-HO-KUS BOROUGH

TYPE THRU TRUSS **DESIGN** PRATT **MATERIAL** Steel

 # SPANS 1 **LENGTH** 141 ft **WIDTH** 26.3 ft

CONSTRUCTION DT 1895ca **ALTERATION DT** 1908ca **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** ERIE RAILROAD

SETTING / CONTEXT The bridge carries a 2-lane collector road and sidewalks over a stream flowing through a picturesque ravine with wooded banks at the outskirts of the town center. The bridge is adjacent to the Undercliff railroad station which was established in 1908 by the Erie Railroad. According to one local history, the bridge was originally located in Narrowsburg, New York, and moved to Ho-Ho-Kus by the railroad as part of a plan to improve access to the station.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The Pratt truss bridge with pinned connections is supported on concrete abutments. The deck, sidewalks and railing have been replaced, but the truss is unaltered. Stylistically the bridge dates from c.1895, and was probably erected by the Erie Railroad as a rail carrying facility. It was re-erected as a highway bridge at the present site c.1908. It is the oldest of three surviving thru truss highway bridges in the county (020004B, 0204152), and is a significant example of the bridge type.

INFOR MATION

Bibliography:
County Engineers Office. Microfiche, Bridge Card 40-7.
1902 Map of Bergen County NJ, E. Robinson & Co.
Atlas of Bergen County, G.W. Bromley & Co., Vol. II, 1913. Plate 31.
Bergen County Division of Cultural and Historic Resources. Bergen County Historic Sites Survey, Township of Ho-Ho-Kus, 1981.

Physical Description: The 141'-span pin-connected Pratt through truss bridge is supported on concrete abutments cut into a ledge over a high ravine. The truss upper chord and end diagonals are built-up riveted back-to-back channels with a top cover plate and bottom lattice and verticals are back-to-back riveted channels with lattice. The end verticals and diagonals are pairs of rectangular-section bars and the lower chord members are pairs of rectangular-section eye-bars. Repairs were made to the floorbeam connections at the truss verticals at an unknown date as indicated by the bolted connections, however, the truss is unaltered. A concrete sidewalk lined by a metal fence is set to the fascia side of either truss. The earliest documentation of the bridge is plans dated 1921 for a deck replacement. Plans dated 1954 indicate the original timber sidewalks were replaced with concrete sidewalks and the sidewalk stringers were encased. In 1948 portions of the front of the abutments were rebuilt, and in 1963 and 1969 the abutments were repaired and waterproofing was added.

Historical and Technological Significance: Although the precise date of construction is not documented, early maps indicate that the span was erected sometime between 1902 and 1913, which is consistent with the style of the bridge. The bridge is the first crossing of the Hohokus Brook at this location and was built to access the adjacent Undercliff Train Station of the Erie Railroad, moved to its present location in 1908. The well-preserved span is the most complete example of its type in Bergen County . The bridge is historically significant because of its association with the railroad station and technologically significant because it is a virtually unaltered county example of a Pratt through truss span.

PHOTO: 205:14-22 (02/92) REVISED BY (DATE): QUAD: Hackensack

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 020028B **CO** BERGEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED HOLLYWOOD AVENUE OVER SADDLE RIVER **FACILITY** HOLLYWOOD AVENUE

TOWNSHIP HO-HO-KUS BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 50 ft **WIDTH** 30 ft

CONSTRUCTION DT 1940 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT R. MCCLAVE, COUNTY ENGINEER **BUILDER** TAVENIERE & JOHNSON

SETTING / CONTEXT The bridge carries a 2-lane collector road and sidewalks over a small stream in a sparsely populated residential area with a park nearby. The residences are single-family homes built between the 1900s and 1960s.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The stringer bridge supported on concrete abutments has haunched encasement at the fascia beams giving the appearance of an arched span. The fascias and wingwalls were constructed with decorative form work. The balustrades are standard design. Although nicely detailed, the span is an example of a common bridge type and is neither historically nor technologically distinguished.

INFOR MATION

PHOTO: 206:10-11 (02/92) REVISED BY (DATE): QUAD: Park Ridge

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 020028C **CO** BERGEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BOGERT ROAD OVER SADDLE RIVER **FACILITY** BOGERT ROAD

TOWNSHIP HO-HO-KUS BOROUGH

TYPE MULTI GIRDER **DESIGN** JACK ARCH (CONCRETE) **MATERIAL** Steel

 # SPANS 1 **LENGTH** 30 ft **WIDTH** 18.8 ft

CONSTRUCTION DT 1902 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT EDWIN WEST JR. **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane local road over a small stream in a sparsely populated neighborhood of single-family homes built in the 1960s. The setting is not distinguished.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 7/9/90

SUMMARY The multi girder bridge supported on a concrete substructure has shallow rolled crossbeams supporting concrete jack arches that span perpendicular to the girders. In 1967 a new concrete facing was added to the wingwalls and abutment corners and an end bay of the deck was replaced. The original ornamental metal railing is intact on one side of the bridge. The bridge is an altered example of a common type and is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 206:7-9 (02/92) REVISED BY (DATE): QUAD: Hackensack

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 020028D **CO** BERGEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MAPLE AVENUE OVER HO-HO-KUS BROOK **FACILITY** MAPLE AVENUE

TOWNSHIP HO-HO-KUS BOROUGH

TYPE STEEL ARCH **DESIGN** ELLIPTICAL **MATERIAL** Steel

 # SPANS 1 **LENGTH** 45 ft **WIDTH** 41.5 ft

CONSTRUCTION DT 1904 **ALTERATION DT** 1926 **SOURCE** INSCRIPTION

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane collector road and sidewalks over a small stream in the center of town adjacent to the intersection of Maple Avenue with Franklin Turnpike. The Hohokus Inn (c.1790) is adjacent the bridge at the intersection.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 1904 steel arch bridge with concrete intrados has brick spandrel walls an rusticated stone voussoirs. In 1926 the bridge was widened 18' on the upstream side with a concrete arch, and original metal railings were replaced with concrete balustrades. The bridge is 1 of 3 Melan arch bridges (020033E, 1899; 020051A, 1904) in Bergen Co., and is identical in date, style, and design to 020051A, which is a more complete example of the historically and technologically significant bridge type.

INFOR MATION

PHOTO: 205:23-24 (02/92) REVISED BY (DATE): QUAD: Hackensack

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 020031A **CO** BERGEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED ESSEX STREET OVER SADDLE RIVER **FACILITY** ESSEX STREET

TOWNSHIP ROCHELLE PARK TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 91 ft **WIDTH** 29 ft

CONSTRUCTION DT 1924 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER** BROADHURST CONSTR. CO.

SETTING / CONTEXT The bridge carries a 2-lane heavily travelled collector road and sidewalks over a shallow river and under an I-80 overpass. The span is set in an undistinguished commercial area developed between the 1950s and the present.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 2-span stringer bridge supported on a concrete substructure has balustrades of standard design. The stringer bridge is a common pre-World War II bridge type and this is one of over 65 stringer bridges in the county. The bridge is neither historically nor technologically distinguished.

INFOR MATION

PHOTO: 207:34-37 (02/92) REVISED BY (DATE): QUAD: Hackensack

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 020031B **CO** BERGEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PASSAIC AVENUE OVER SADDLE RIVER **FACILITY** PASSAIC AVENUE

TOWNSHIP LODI BOROUGH

TYPE THRU GIRDER **DESIGN** PARTIALLY ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 63 ft **WIDTH** 31.5 ft

CONSTRUCTION DT 1903 **ALTERATION DT** 1939, 1971 **SOURCE** PLANS/PLAQUE

DESIGNER/PATENT UNKNOWN **BUILDER** AMERICAN BRIDGE COMPANY

SETTING / CONTEXT The bridge carries a 2-lane collector road and sidewalks over a shallow stream in an undistinguished mixed commercial and residential area. The buildings date from 1900 to 1980 and include several modern civic buildings.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The thru girder with floorbeams bridge is supported on stone abutments. The concrete encasement was partially removed from the floorbeams when the metal deck was installed in 1971. In 1939 and 1971, the girders were repaired with welded plates at deck level and stiffener locations. The original metal railing remains at one side of the span, guide rails have been added. One of over 23 thru girder bridges in the county, the altered span has lost its visual integrity and it is not distinguished.

INFOR MATION

PHOTO: 207:27-28 (02/92) REVISED BY (DATE): QUAD: Weehawken

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 020031C **CO** BERGEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED TERRACE AVENUE OVER SADDLE RIVER **FACILITY** TERRACE AVENUE

TOWNSHIP LODI BOROUGH

TYPE THRU GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 52 ft **WIDTH** 20 ft

CONSTRUCTION DT 1910 **ALTERATION DT** **SOURCE** PLANS/NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane collector road and sidewalks over a small stream. A cemetery is situated to one side of the bridge and residences built around the 1920s are set on the other side of the bridge. The setting is not distinguished.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The thru girder bridge is set on stone abutments from a previous span. The abutments have concrete caps and extensions to accommodate this superstructure. The original pipe railings at the stringer-supported sidewalks are intact. An example of a common bridge type, and one of over 23 pre-World War II thru girder bridges in the county, the bridge is not historically or technologically noteworthy.

INFOR MATION

PHOTO: 207:23-26 (02/92) REVISED BY (DATE): QUAD: Weehawken

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 020031D **CO** BERGEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED ARNOT STREET OVER SADDLE RIVER **FACILITY** ARNOT STREET

TOWNSHIP LODI BOROUGH

TYPE DECK GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 2 **LENGTH** 66 ft **WIDTH** 24.6 ft

CONSTRUCTION DT 1905 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane collector road and sidewalks over a shallow river in a mixed commercial and residential area. The area includes an abandoned factory built in the 1930s to 1940s, a mall built in the 1950s, apartments built in the 1970s, and a municipal building built between 1970 and 1980. The setting is not distinguished.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 11/29/90

SUMMARY The 2-span deck girder bridge is supported on stone abutments and a concrete pier. The original metal railing is intact. One of over 28 pre-World War II girder bridges in the county, it is not historically distinguished or technologically innovative.

INFOR MATION

PHOTO: 207:29-31 (02/92) REVISED BY (DATE): QUAD: Hackensack

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 020031E **CO** BERGEN **OWNER** COUNTY **MILEPOINT** 0.0
NAME & FEATURE INTERSECTED BORIG PLACE OVER SADDLE RIVER **FACILITY** BORIG PLACE
TOWNSHIP LODI BOROUGH
TYPE PONY TRUSS **DESIGN** WARREN (ENCASED) **MATERIAL** Steel
 # SPANS 1 **LENGTH** 68 ft **WIDTH** 27.6 ft

CONSTRUCTION DT 1919 **ALTERATION DT** **SOURCE** PLAQUE
DESIGNER/PATENT R. MCCLAVE, COUNTY ENGINEER **BUILDER** A. H. ALFAST

SETTING / CONTEXT The bridge carries a 2-lane collector road and sidewalks over a shallow stream in a mixed commercial and residential area developed between the 1920s and the 1960s. The setting is not distinguished.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No
CONSULT STATUS Individually Eligible.
CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY Although the span appears to have 2 paneled concrete parapets flanking each sidewalk, plans indicate the span is actually an encased Warren pony truss bridge supported on concrete abutments with cantilevered sidewalks bordered by paneled concrete parapets. The truss members are riveted I-sections and floorbeams are encased rolled sections. The truss encasement is paneled to match the parapets. A well-preserved example of a very uncommon bridge type, the span is technologically significant.

INFOR MATION

Bibliography:
Bergen County Engineers Office.(Plans).
"What County Engineer Did During 1918.", The Evening Record, Jan. 3, 1919.

Physical Description: The single span truss bridge supported on a concrete substructure is unusual because the Warren pony trusses are completely encased in concrete. Stringers and floor beams are also encased. Cantilevered sidewalks are bordered by paneled concrete parapets, and the encased trusses look like the parapets, being of the same height and detailed with matching panels. Plans indicate the truss is composed of riveted back to back channels forming I-sections. The floor beams are rolled sections and are connected to the trusses by riveted connections between the floor beam lower flange and the top flange of the lower chord.

Historical and Technological Significance: The encased Warren pony truss bridge was constructed in 1919 by A.H. Alfast, a local contractor, and was designed by the county. A shop drawing indicates the steel was provided by the Passaic Structural Steel Company, based in Paterson, NJ. There is no evidence suggesting the county engineering department, or any other county in the state, designed and constructed another bridge of this type, and it is the only known encased truss bridge in the state. The span is technologically distinguished because it is a very well-preserved example of what appears to be a unique design.

PHOTO: 207:32-33 (02/92) REVISED BY (DATE): QUAD: Hackensack

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 020033A **CO** BERGEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BEAR SWAMP ROAD OVER RAMAPO RIVER **FACILITY** BEAR SWAMP ROAD

TOWNSHIP MAHWAH TOWNSHIP

TYPE PONY TRUSS **DESIGN** LENTICULAR **MATERIAL** Wrought Iron

 # SPANS 1 **LENGTH** 84 ft **WIDTH** 13.8 ft

CONSTRUCTION DT 1888 **ALTERATION DT** 1923, 1983 **SOURCE** PLAQUE

DESIGNER/PATENT BERLIN IRON BRIDGE CO. **BUILDER** BERLIN IRON BRIDGE CO.

SETTING / CONTEXT The bridge carries a single-lane, 2-way road over a river in a wooded setting. Farmland is to the north of the bridge. A historical marker notes that the bridge is named the Cleveland Bridge for the New Jersey-born president of the United States, Grover Cleveland.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 1888 lenticular pony truss bridge supported on stone abutments was built by the Berlin Iron Bridge Company of East Berlin, Connecticut. The company's distinctive patented trusses were among the most popular highway bridge designs of the late 19th century. The bridge retains its integrity of design and was restored in 1983 with reinforcement of the top chords and verticals. A rare surviving example of its type, the bridge is both historically distinguished and technologically noteworthy.

INFOR MATION

Bibliography:
Bergen County Engineers Office. Bridge Card 3-17.
Bergen County Division of Cultural and Historic Affairs. Folio 25.

Physical Description: The lenticular wrought iron pony truss bridge with pinned connections is supported on sandstone ashlar abutments. The variable distance between top and bottom chord members of this 1888 truss forms a parabolic or lenticular truss shape. Top chord members are riveted built up channels with top cover plates and bottom lattice. Vertical members are 2 pairs of angles separated by lattice. The lower chord is composed of 2 rectangular section eye bars and diagonals are circular section bars. The riveted built up floor beams are tapered from a maximum depth at the center of the bridge and appear unaltered. Truss members have undergone some repairs in 1923 and 1983, but the structure retains its original 1888 construction appearance. Plates were welded to the top chord and vertical members, and the stringers and wood deck have been replaced.

Historical and Technological Significance: The iron lenticular pony truss bridge built in 1888 is a well-preserved example of an uncommon patented truss design built by a prominent bridge company during the peak of its operation at the end of the 19th century. The Berlin Iron Bridge Company of East Berlin, Connecticut, had been known as the Metallic Shingle Company prior to 1873 when its name was changed to the Corrugated Metal Company due to a change in products. Again in 1883 the name was changed to the Berlin Iron Bridge Company developing into a dominant structural steel fabricator credited for country-wide promotion of the lenticular bridge by the end of the century, a design that was patented by the company in 1878. In 1900 the company was acquired by The American Bridge Company, as were many bridge manufacturing interests at this time, and discontinued operation after 4 years. Noted by a Mahwah Historic Sites Committee marker as the Cleveland Bridge named for the former president of the United States, it replaced an 1840s wooden bridge that served the timber industry in the Ramapo Mountains and is one of 2 Ramapo River Bridges that survived the 1903 flood. This span is significant as one of the few extant iron bridges in the state with an unusual patented truss design as well as uncommon tapered floor beams.

PHOTO: 208:9-14 (02/92) REVISED BY (DATE): QUAD: Ramsey

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 020033B **CO** BERGEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED FRANKLIN TURNPIKE (CR 507) OVER MAHWAH CREEK **FACILITY** FRANKLIN TURNPIKE (CR 507)

TOWNSHIP MAHWAH TOWNSHIP

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 75 ft **WIDTH** 31 ft

CONSTRUCTION DT 1911 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane collector road and sidewalks over a small stream surrounded by commercial buildings constructed in the 1970s. The setting is not distinguished.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The elliptical deck arch bridge supported on a concrete substructure has paneled spandrels and concrete parapets bordering each sidewalk. There appear to be no alterations however the bridge is in poor condition. It is an example of a common early-20th century bridge type, and is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 208:3-4 (02/92) REVISED BY (DATE): QUAD: Ramsey

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 020033C **CO** BERGEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED RAMAPO VALLEY ROAD OVER MAHWAH CREEK **FACILITY** RAMAPO VALLEY ROAD

TOWNSHIP MAHWAH TOWNSHIP

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 43 ft **WIDTH** 39.8 ft

CONSTRUCTION DT 1920 **ALTERATION DT** 1931 **SOURCE** NJDOT/PLANS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane collector road and sidewalks over a small stream in a mixed industrial and residential area with structures dating to the 1920s. High voltage wires pass over the bridge in this undistinguished setting.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 1920 concrete arch bridge supported on concrete substructure was widened on each side with concrete encased stringers in 1931. Solid concrete parapets were also added. The bridge is an altered example of a common early-20th century bridge type and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 208:44,1-2 (02/92) REVISED BY (DATE): QUAD: Ramsey

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 020033D **CO** BERGEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED EAST RAMAPO AVENUE OVER MOSONICUS BROOK **FACILITY** EAST RAMAPO AVENUE

TOWNSHIP MAHWAH TOWNSHIP

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 39 ft **WIDTH** 30 ft

CONSTRUCTION DT 1902 **ALTERATION DT** 1915 **SOURCE** NJDOT

DESIGNER/PATENT WILLIAM W. PULIS **BUILDER** F. R. LONG & COMPANY

SETTING / CONTEXT The bridge carries a 2-lane collector road and sidewalks over a small stream. The bridge borders Constitution Park. The Mahwah train station is about 500 feet down the road. The homes in the immediate area were built in the early 1900s.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 1902 elliptical concrete deck arch bridge with stone voussoirs and buff brick spandrel walls was widened to both sides in 1915 with a concrete deck arch with plain spandrel walls. Plans indicate the 1902 span is reinforced with 2 layers of expanded mesh, and employs the Monier reinforcing system. It is 1 of 3 bridges (020020A,20B) of similar date and design in Bergen Co. All 3 spans are similarly altered, and 020020A has already been chosen as the eligible representative example.

INFOR MATION

PHOTO: 207:41-43, 220: (02/92) REVISED BY (DATE): QUAD: Ramsey

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 020033E **CO** BERGEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WYCKOFF AVENUE OVER HO-HO-KUS BROOK **FACILITY** WYCKOFF AVENUE

TOWNSHIP WYCKOFF TOWNSHIP

TYPE STEEL ARCH **DESIGN** ELLIPTICAL **MATERIAL** Steel

 # SPANS 1 **LENGTH** 23 ft **WIDTH** 40 ft

CONSTRUCTION DT 1899 **ALTERATION DT** 1958 **SOURCE** PLANS

DESIGNER/PATENT KEEPERS & THACHER, ENGINEERS **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane collector road and sidewalks over a small stream in a wooded area. At one corner a new office complex is being constructed.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 1899 steel arch bridge employs a historically significant design patented by engineers Keepers and Thacher. Original plans indicate the bridge has flat steel bar ribs embedded in concrete. In 1958 the bridge was widened on both sides with concrete slab and parapet additions. Although visually altered, the arch portion of the bridge retains its integrity of design, and is 1 of only 2 Melan arch bridges in New Jersey attributable to Keepers and Thacher (1600017).

INFORMATION

Bibliography:
Bergen County Engineers Office. microfiche 70 B 9.
Bergen County Division of Cultural and Historic Affairs. Folio's 458 & 459. (Plans).
"Memoir of Edwin Thacher.", Transactions of the ASCE. Great American Bridges and Dams, by Donald C. Jackson. The preservation Press, Washington D.C., 1988.

Physical Description: The elliptical reinforced concrete arch bridge is supported on a concrete substructure. The plan indicates a 20' span at the spring line with a 2'-6" rise. The concrete arch is 18" thick at the abutments tapering to 6" thick at the crown and is reinforced with 8 pairs of flat bar ribs spaced at 3'-2 ½" on center and measuring 2" x 3/8". Concrete facings of the voussoirs and the spandrel walls were marked to represent masonry with the use of triangular strips 2" wide x 1" deep. In 1958 the bridge was widened to each side with a reinforced concrete slab supported on a concrete substructure.

Historical and Technological Significance: The reinforced elliptical arch bridge was constructed in 1899 by Keepers and Thacher Engineers, with an office in Paterson, NJ. The arch reinforcement is a patented design. Keepers and Thacher was a partnership between Mr. Edwin Thacher, Mr. W. H. Keepers and Mr. Wynkoop established in 1894 in Detroit, Michigan. Mr. Wynkoop dropped out of the partnership in 1895 and the partnership of Keepers and Thacher continued until it was dissolved on October 5, 1899. The firm constructed the concrete steel arch bridge over the Kansas River at Topeka, Kansas, at that time the largest bridge of its kind in the United States, and the Broadway St. Bridge over the Passaic River at Paterson, NJ.

Edwin Thacher was a prominent civil engineer having obtained patents for the "Thacher Cylindrical Slide-Rule"; "Thacher Steel Bridge Truss"; "System of Concrete Steel Arches" and "Thacher Combination Bridge Truss" among others. He held the positions of Chief Engineer for the Decatur Bridge and Construction Company of Decatur, Alabama, and the Keystone Bridge Company of Pittsburgh, Pennsylvania before opening his own Consulting Engineering Office in Louisville, Kentucky where he was responsible for the design of many truss spans including the 1891 Walnut Street Bridge crossing the Tennessee River in Chattanooga, and the 1892 Costilla Crossing Bridge across the Rio Grande in Colorado, an example of the Thacher truss patented in 1884 and designed to reduce the effect of temperature stresses on the truss members. In 1901 Thacher and William Mueser opened the Concrete Steel Engineering Company, headquartered in the Park Row Building in New York City. Thacher continued his work with this company until his retirement in 1912.

Although the span is short and has been widened, the arch bridge is noteworthy because it is an early example of the type with an uncommon reinforcement system and was constructed by a noted engineer.

PHOTO: 210:12-14 (02/92) REVISED BY (DATE): QUAD: Ramsey

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 020033G **CO** BERGEN **OWNER** COUNTY **MILEPOINT** 0.0
NAME & FEATURE INTERSECTED GLEN GRAY ROAD OVER RAMAPO RIVER **FACILITY** GLEN GRAY ROAD
TOWNSHIP MAHWAH TOWNSHIP
TYPE THRU TRUSS **DESIGN** PRATT **MATERIAL** Steel
 # SPANS 1 **LENGTH** 92 ft **WIDTH** 16.5 ft

CONSTRUCTION DT 1904 **ALTERATION DT** Demolished: 1996 **SOURCE** COUNTY RECORDS
DESIGNER/PATENT DEAN, SCHWIERS & SUTTON **BUILDER** DEAN, SCHWIERS & SUTTON

SETTING / CONTEXT The bridge carries 1-lane of a 2-lane local street over a shallow river set in a wooded area. A 1960s development of single-family homes lines the street to one side of the bridge.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No
CONSULT STATUS Bridge was Individually Eligible.
CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The Pratt thru truss with counters bridge set on ashlar abutments has pinned connections. In 1968 the timber deck was replaced with a steel grid deck supported by channel beams and in 1985 one panel of the lower chord was supplemented with cables but alterations have not compromised the trusses integrity of design. The truss was built by prominent bridge engineers, and is a technologically significant example of a historically important and increasingly rare bridge type.

INFOR MATION

Bibliography:
Bergen County Engineers Office.
Bergen County Office of Cultural and Historic Affairs, Folio 307

Physical Description: The Pratt through truss with counters bridge supported on ashlar abutments with a span of 92' carries a 16' single-lane road. The pin connected truss has eye-bar lower chord and diagonal members, back-to-back channel section with top cover plate top chord and end inclined members, back-to-back channel with batten plates vertical members, and square section counters. The bridge carries the original metal railings. In 1954 the timber deck and wooden curbs were replaced. In 1968 the stringers were replaced, the back walls were rebuilt, a metal grate deck was placed, and the timber curbs were replaced with a metal channel section beam at the deck edge. In 1985 a crack was found in the south truss lower chord member at the west end panel. Cables with turnbuckles were placed as a repair measure, and the cracked lower chord member was removed. No original plans were located for the span, but the Bond between the county and the contractors was located.

Historical and Technological Significance: The Pratt through truss bridge was constructed in 1904 by Dean, Schwiers & Sutton Company of New York, a prominent bridge builder, to replace a span that was destroyed by the flood of 1903. Although the truss lower chord has repairs added at one panel, the remainder of the truss has not been modified. A long and early example of an uncommon bridge type, the span is distinguished.

PHOTO: 208:15-18 (02/92) REVISED BY (DATE): QUAD: Ramsey

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US
November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 020035A **CO** BERGEN **OWNER** COUNTY **MILEPOINT** 0.0
NAME & FEATURE INTERSECTED LAKE AVENUE OVER GOFFLE BROOK **FACILITY** LAKE AVENUE
TOWNSHIP MIDLAND PARK BOROUGH
TYPE STEEL ARCH **DESIGN** JACK ARCH (BRICK) **MATERIAL** Steel
 # SPANS 1 **LENGTH** 36 ft **WIDTH** 30.3 ft

CONSTRUCTION DT 1897 **ALTERATION DT** 1931, 1997 **SOURCE** PLANS
DESIGNER/PATENT UNKNOWN **BUILDER** F. R. LONG & COMPANY

SETTING / CONTEXT The bridge carries a 2-lane collector road and sidewalks over a small stream located in a commercial district. A lumber supply yard is adjacent to the bridge.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No
CONSULT STATUS Individually Eligible.
CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The arch bridge set on stone abutments is composed of steel arch ribs supporting brick jack arches. In 1931 the bridge was widened to each side with concrete encased steel stringers set on concrete abutments. Concrete parapets and sidewalks were also added. The ribbed arch with brick jack arches bridge combines two technologically-significant turn-of-the-century bridge construction techniques, and is the only known highway bridge example of its type in New Jersey.

INFOR MATION

Bibliography:
Bergen County Division of Cultural and Historic Affairs. Folio 100. (Plans).

Physical Description: The single span steel arch bridge with brick jack arches is supported on sandstone ashlar abutments. The original plans indicate that the span consists of 8 inch deep rolled arched I beams with a 4'-6" rise at the crown and a 32'-0" span at the spring line and provided a 20'-0" roadway. The jack arches are a single layer of 4" brick topped with 4" min. plain concrete and span between the arched beams spaced at 4'-1" with 5 lines of 1" tie rods. The specifications required that the brick arch topped with concrete was to be covered with a coating of hot coal tar before placing the macadam to make the arch waterproof. According to county records, the northwest rubble masonry wingwall was rebuilt in 1924. To provide sidewalks, the span was widened to both sides with encased steel stringers on concrete abutments in 1931 as noted on the concrete balustrades. The original decorative metal railing set in blue stone coping 20" wide by 6" thick was removed when the bridge was widened.

Historical and Technological Significance: The 1897 bridge is an unusual design combining two bridge technologies; the brick jack arch and the rolled steel beam arch. The brick jack arch deck was a common design preference in Bergen County between the 1880s and about 1910. The builder, F. R. Long Engineers and Contractors, was a New York City firm that was a prolific bridge contractor in Bergen County, and it incorporated in New Jersey in 1899 moving its major operations to Hackensack. The span is technologically significant because it is an early well-preserved and well-documented example of a unique combination of bridge designs and is the only documented steel beam arch bridge in the county.

PHOTO: 210:19-22 (02/92) REVISED BY (DATE): QUAD: Paterson

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 020035B **CO** BERGEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED GOFFLE ROAD OVER GOFFLE BROOK **FACILITY** GOFFLE ROAD

TOWNSHIP MIDLAND PARK BOROUGH

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 38 ft **WIDTH** 30.3 ft

CONSTRUCTION DT 1910ca **ALTERATION DT** 1917 **SOURCE** STYLE/PLANS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane collector road and sidewalks over a small stream in a mixed commercial and residential area. The Lozier House built prior to the Revolution stands at one corner of the bridge. An 1826 mill is just to the north. The commercial buildings, including a mall, appear to have been built in the 1970s. Although historic buildings are located in this area, it is not a historic district.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The elliptical deck arch bridge is supported on a concrete substructure. Original plans have not been located, but the bridge style appears to date to c.1910. In 1917 cantilevered sidewalks with concrete parapets supported by encased girders on independent concrete columns were added to both sides. The bridge is an example of a common bridge type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 210:17-18 (02/92) REVISED BY (DATE): QUAD: Paterson

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 020035D **CO** BERGEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED SICOMAC AVENUE OVER GOFFLE BROOK **FACILITY** SICOMAC AVENUE

TOWNSHIP MIDLAND PARK BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 34 ft **WIDTH** 30 ft

CONSTRUCTION DT 1931 **ALTERATION DT** **SOURCE** PLANS/PLAQUE

DESIGNER/PATENT R. MCCLAVE, COUNTY ENGINEER **BUILDER** JOSEPH FABIO

SETTING / CONTEXT The bridge carries a 2-lane collector road and sidewalks over a small stream in a mid-20th century mixed residential and light industrial area. There is a railroad grade crossing adjacent to the bridge on the approach. The setting is not distinguished.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The stringer bridge is supported on concrete abutments. The encasement is spalling and a utility pipe has been attached to one fascia. The bridge has balustrades over the span and parapets over the wingwalls. Conduits remain at each end post where lamp standards were mounted. This is one of over 65 pre-1946 stringer bridges in the county. It is the most common pre-World War II bridge type in the state, and it is not distinguished.

INFOR MATION

PHOTO: 210:15-16 (02/92) REVISED BY (DATE): QUAD: Paterson

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 020036C **CO** BERGEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MIDDLETOWN ROAD OVER CHERRY BROOK **FACILITY** MIDDLETOWN ROAD

TOWNSHIP MONTVALE BOROUGH

TYPE STRINGER **DESIGN** JACK ARCH (CONCRETE) **MATERIAL** Steel

 # SPANS 1 **LENGTH** 24 ft **WIDTH** 37 ft

CONSTRUCTION DT 1906 **ALTERATION DT** 1924 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** DOVER BOILER WORKS

SETTING / CONTEXT The bridge carries a 2-lane collector road over a small stream in an undistinguished, wooded, post-World War II residential neighborhood.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The low rise stringer bridge on a concrete substructure has concrete jack arches. Four stringers and concrete jack arch bays were added to the east side of the bridge in 1924 when the roadway was widened and realigned. The original coping stones and railings were reused. The coping stones remain intact, however, the railing has been replaced with beam guide rail. A short span of a not uncommon type, the bridge is not historically or technologically noteworthy.

INFOR MATION

PHOTO: 211:9-10 (02/92) REVISED BY (DATE): QUAD: Park Ridge

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 020038C **CO** BERGEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MADISON AVENUE OVER HACKENSACK RIVER **FACILITY** MADISON AVENUE

TOWNSHIP NEW MILFORD BOROUGH

TYPE MULTI GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 47 ft **WIDTH** 24 ft

CONSTRUCTION DT 1902 **ALTERATION DT** Demolished **SOURCE** PLANS/PLAQUE

DESIGNER/PATENT E. VAN BUSKIRK **BUILDER** F. R. LONG & COMPANY

SETTING / CONTEXT The bridge carries a 2-lane road with sidewalks and 2 large water mains dated 1915 and 1918 over the Hackensack River. The bridge is adjacent the New Milford Pumping Station (1882-1906), the Hackensack Water Company's historic plant with surviving 1911 engines. The bridge serves to connect the pump station with the area to the south which once was the location of workers' homes. The pump station is on an island that has been surveyed as a potential historic district.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Bridge was Not Individually Eligible. Hackensack Water Company New Milford Plant Historic District, Eligible. Contributed.

CONSULT DOCUMENTS SHPO Finding 11/29/90, Letter 03/12/01.

SUMMARY The multi girder bridge is supported on concrete abutments and has decorative metal railings. Plans indicate that in 1902 the bridge was built as a thru girder with floor beams and concrete jack arches, but that sometime prior to 1948 the thru girders were replaced with multi deck girders with floor beams and concrete deck. Despite alterations the bridge retains its historic character and has been identified as a contributing structure to the potential historic district.

INFOR MATION

PHOTO: 206:24-26 (02/92 JPH (5/96)) REVISED BY (DATE): QUAD: Hackensack

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 020038G **CO** BERGEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED RIVER ROAD OVER HIRSCHFELD BROOK **FACILITY** RIVER ROAD

TOWNSHIP NEW MILFORD BOROUGH

TYPE STRINGER **DESIGN** JACK ARCH (BRICK) **MATERIAL** Steel

 # SPANS 1 **LENGTH** 25 ft **WIDTH** 30 ft

CONSTRUCTION DT 1906 **ALTERATION DT** 1930s **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane local road and sidewalks over a small stream in a suburban neighborhood. The residences are predominantly single-family houses built in the 1960s. At one corner of the bridge stands a condominium complex built in the 1980s.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The steel stringer bridge with brick jack arches is supported on stone abutments. The bridge was widened to both sides with steel stringers with a concrete slab on concrete abutment extensions. The widening most likely took place in the 1930s as evidenced by the style of the concrete balustrades/parapets. A utility pipe added to the underside of the bridge damaged the brick jack arch. An altered example of a bridge type that is well represented in the county, the bridge is not distinguished.

INFOR MATION

PHOTO: 206:12-14 (02/92) REVISED BY (DATE): QUAD: Hackensack

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 020040A **CO** BERGEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED LIVINGSTON STREET OVER SPARKILL CREEK **FACILITY** LIVINGSTON STREET

TOWNSHIP NORTHVALE BOROUGH

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 29 ft **WIDTH** 40.3 ft

CONSTRUCTION DT 1932 **ALTERATION DT** **SOURCE** PLANS/PLAQUE

DESIGNER/PATENT R. MCCLAVE, COUNTY ENGINEER **BUILDER** TAVENIERE & JOHNSON

SETTING / CONTEXT The bridge carries a 2-lane collector road and sidewalks over a small stream surrounded by commercial establishments built predominantly in the 1950s. The bridge is located just south of the New York State border and carries traffic on Livingston St. in NJ on to NY 303. Access to Livingston Street on the NY side is blocked by beam guide rail.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The slab bridge is supported on stone abutments from a previous span with concrete abutment extensions. The 1932 slab bridge reinforced with tied stringers replaced a 1906 stringer with brick jack arch bridge. The span is a short example of a common bridge type, and is neither technologically nor historically distinguished.

INFOR MATION

PHOTO: 211:19-20 (02/92) REVISED BY (DATE): QUAD: Nyack

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 020042A **CO** BERGEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED DOTY ROAD OVER RAMAPO RIVER **FACILITY** DOTY ROAD

TOWNSHIP OAKLAND BOROUGH

TYPE PONY TRUSS **DESIGN** PRATT **MATERIAL** Wrought Iron

 # SPANS 1 **LENGTH** 80 ft **WIDTH** 11.3 ft

CONSTRUCTION DT 1891 **ALTERATION DT** 1984 **SOURCE** PLAQUE/COMPANY REC.

DESIGNER/PATENT PHOENIX BRIDGE COMPANY **BUILDER** DEAN & WESTBROOK, NY

SETTING / CONTEXT The bridge carries 2-way traffic on a single lane over a major river between an abandoned picnic grove and a post-World War II residential neighborhood.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 12/07/89, Letter 6/30/95.

SUMMARY The 5-panel wrought-iron Pratt pony truss bridge has Phoenix column upper chord sections and is supported on stone abutments refaced with concrete. A Bailey bridge, placed in 1984, spans over the bridge to carry traffic, but is not an irreversible alteration. The bridge is 1 of fewer than 6 known surviving Phoenix column trusses in NJ built by Dean and Westbrook, highway bridge agents for the Phoenix Bridge Co. It is a technologically significant example of late-19th century construction.

INFOR MATION

PHOTO: 208:19-21,209:1 (02/92) REVISED BY (DATE): QUAD: Wanaque

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 020044A **CO** BERGEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED ORADELL AVENUE OVER HACKENSACK RIVER **FACILITY** ORADELL AVENUE

TOWNSHIP ORADELL BOROUGH

TYPE THRU GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 101 ft **WIDTH** 28.8 ft

CONSTRUCTION DT 1904 **ALTERATION DT** 1970 **SOURCE** PLAQUE

DESIGNER/PATENT P.E. VAN BUSKIRK **BUILDER** F. R. LONG & CO.

SETTING / CONTEXT The bridge carries a 2-lane collector road with sidewalks over a major river on Hackensack Water Company property. The bridge separates an early 1900s residential area from the commercial town center. The Oradell railroad station is located at the town side of the bridge. The bridge is not located in a historic district.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The thru girder with floorbeams bridge supported on stone abutments has welded repairs to the girder stiffeners. The floorbeams, stringers, deck sidewalks and sidewalk railings were replaced in 1970. The bridge was built by a locally prominent contractor whose work is well represented in the county. The span has been altered and has lost its integrity, it is not historically or technologically distinguished.

INFOR MATION

PHOTO: 206:22-23 (02/92) REVISED BY (DATE): QUAD: Hackensack

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 020044B **CO** BERGEN **OWNER** COUNTY **MILEPOINT** 0.0
NAME & FEATURE INTERSECTED ELM STREET OVER HACKENSACK RIVER **FACILITY** ELM STREET
TOWNSHIP ORADELL BOROUGH
TYPE PONY TRUSS **DESIGN** PRATT **MATERIAL** Wrought Iron
 # SPANS 1 **LENGTH** 76 ft **WIDTH** 21.2 ft

CONSTRUCTION DT 1892 **ALTERATION DT** 1964, 1983 **SOURCE** PLAQUE
DESIGNER/PATENT PHOENIX BRIDGE COMPANY **BUILDER** J. W. STAGG

SETTING / CONTEXT The bridge carries a 2-lane collector road and a sidewalk over the Hackensack River. The bridge is within the boundaries of a potential historic district identified by a SHPO finding. The district draws its significance from the well-preserved New Milford Pumping Station (1882-1906) located on an island south of the bridge which serves to connect the island with a 1960s residential area to the north. The bridge is listed as a potential contributing structure to the district.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No
CONSULT STATUS Individually Eligible. Agreed Potential Historic District. Contributing.
CONSULT DOCUMENTS SHPO Finding 11/29/90, Letter 6/30/95.

SUMMARY The pin-connected wrought-iron Pratt pony truss bridge has upper chord and inclined end posts composed of patented Phoenix columns with cast-iron finials. In 1983 the trusses were relieved of live load by the addition of girders, but truss integrity was preserved. The bridge, already rated as contributing to a potential historic district, is individually eligible as a significant example of a late-19th century truss type. It is 1 of only 4 known Phoenix Column pony trusses in New Jersey.

INFOR MATION

Bibliography:
Bergen County Engineers Office. Bridge Card 25-5.
Bergen County Division of Cultural and Historic Affairs. Bergen County Historic Sites Survey, Town of Ho-ho-Kus, 1980-1981.
"The Rise And Fall of the Phoenix Column" by Alan Burnham, A.I.A, Architectural Record, April 1959.

Physical Description: The 76' long pin-connected Pratt pony truss bridge supported on ashlar abutments is composed of wrought iron Phoenix Column section upper chord and end inclined members. The lower chords and diagonals are pairs of eye-bars, and verticals are 2 pairs of angles separated by lacing. The 1892 trusses have finials on the top chords at each end. The original pipe railings are no longer in place, but the rail castings connected to the trusses are intact. In 1964 the stringers were replaced and topped with a metal deck. A cantilevered concrete sidewalk bordered by a chain-link-fence was added at the upstream side. In 1983 the trusses were relieved of live load by placing a girder bolted to the floor beams along the fascia-side of each truss. The trusses do not appear to have been significantly altered. The original plans for the bridge were not located, however, plans for the 1964 and 1983 alterations are available at the County Engineers Office.

Historical and Technological Significance: The Pratt pony truss bridge built in 1892 is technologically significant because it is a well-preserved example of a span built with patented Phoenix sections or columns. It is the more complete of 2 known Phoenix Column wrought iron truss spans in Bergen County. The Phoenix Column section was invented in 1862 by Samuel J. Reeves, the son of the founder of the Phoenix Iron Company of Phoenixville, Pennsylvania. It was an improvement over the widely used cast iron castings used as compression members in early metal truss bridges. Composed of four wrought channel-like sections joined at the flange by rivets, the Phoenix section proved as instrumental in the proliferation of metal truss bridges in the 1870s as any design detail of its day. By the early 1890s it was surpassed by the built-up box member of wrought iron or steel. The span is significant because it is a well-preserved example of this important although short-lived transitional technology.

PHOTO: 206:15-21 (02/92) REVISED BY (DATE): QUAD: Hackensack

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 020046A **CO** BERGEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED LINWOOD AVENUE OVER SADDLE RIVER **FACILITY** LINWOOD AVENUE

TOWNSHIP PARAMUS BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 73 ft **WIDTH** 30 ft

CONSTRUCTION DT 1945 **ALTERATION DT** 1974 **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane collector road and sidewalks over a shallow river in a residential area. The homes date mostly to the 1960s although an early 1900s house on a wooded lot stands at one approach.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 1945 2-span stringer bridge with concrete balustrades has encased fascia stringers to give the appearance of arched spans. In 1974 new unencased rolled steel stringers were placed between existing encased stringers and the deck reconstructed. An altered example of a common bridge type, the span is one of over 65 stringer bridges in the county. It is not historically or technologically distinguished.

INFOR MATION

PHOTO: 210:23-24 (02/92) REVISED BY (DATE): QUAD: Hackensack

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 020046B **CO** BERGEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CENTURY ROAD OVER SPROUT BROOK **FACILITY** CENTURY ROAD

TOWNSHIP PARAMUS BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 39 ft **WIDTH** 36.7 ft

CONSTRUCTION DT 1944 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a busy 2-lane collector road with shoulders over a small stream. The Garden State Parkway passes over the road just east of the bridge and NJ 17 lies just beyond the Parkway. Office buildings constructed in the 1970s and 1980s line the approach roadway to the other side of the bridge. A NJ Department of Motor Vehicles Inspection Station is set at one corner of the bridge. The setting is not distinguished.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 1944 stringer bridge set on concrete abutments has utility conduits supported along both fascias. The balustrades are a standard design for bridges built in the county in the 1920s to 1940s. A short span of a common bridge type, the bridge is neither technologically nor historically distinguished.

INFOR MATION

PHOTO: 215:33-34 (02/92) REVISED BY (DATE): QUAD: Hackensack

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 020048A **CO** BERGEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED LAKE STREET OVER RAMSEY BROOK **FACILITY** LAKE STREET

TOWNSHIP RAMSEY BOROUGH

TYPE STRINGER **DESIGN** JACK ARCH (BRICK) **MATERIAL** Steel

 # SPANS 1 **LENGTH** 24 ft **WIDTH** 38.5 ft

CONSTRUCTION DT 1900ca **ALTERATION DT** 1967 **SOURCE** STYLE

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane collector road over a small stream in a post-World War II residential area bounded by NJ 17 just east of the bridge. The setting is not distinguished.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The stringer and brick jack arch bridge is supported on stone abutments. In 1967 deteriorated bays at both sides were replaced with reinforced concrete deck and T beams. The original decorative metal railing has been replaced with modern 3-high railing. The altered short-span bridge is 1 of over 6 pre-1910 stringer and brick jack arch bridges in Bergen County, and better preserved examples exist to represent the once common turn-of-the-century bridge type (020058C).

INFOR MATION

PHOTO: 210:10-11 (02/92) REVISED BY (DATE): QUAD: Ramsey

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 020051A **CO** BERGEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED EAST RIDGEWOOD AVENUE OVER HO-HO-KUS BROOK **FACILITY** EAST RIDGEWOOD AVENUE

TOWNSHIP RIDGEWOOD VILLAGE

TYPE STEEL ARCH **DESIGN** ELLIPTICAL **MATERIAL** Steel

 # SPANS 1 **LENGTH** 66 ft **WIDTH** 30 ft

CONSTRUCTION DT 1904ca **ALTERATION DT** **SOURCE** STYLE COMPARISON

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane main street and sidewalks over a small stream just outside the town center and adjacent to Ridgewood High School (c.1916-1919).

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 03/12/01

SUMMARY The steel arch bridge has concrete intrados, brick spandrel walls, stone voussoirs, and decorative metal railings with brick posts along most of its length. Although no plans were located, deterioration of the intrados exposes steel ribs of a Melan arch, and the bridge is identical in style and design to 020028D which dates to 1904. The steel-ribbed arch bridge is a well-preserved and richly-detailed example of a rare technologically and historically significant bridge type. The bridge is individually eligible for listing in the National Register of Historic Places under Criterion C.

INFOR MATION

Bibliography:
Bergen County Engineers Office.
Bergen County Office of Cultural and Historic Affairs.

Physical Description: The elliptical reinforced concrete deck arch bridge spans 58.4 feet at the spring line with a 9 foot rise, and carries a 30 foot road with 2 sidewalks. The spandrel walls are faced with buff brick and the voussoirs are of cut stone. Decorative metal railings are carried by the bridge and they span between pylons faced with buff brick to match the spandrel walls. Metal 3-rail pipe railings are carried on the approaches. About 30 feet of railing on the south side of the span is missing and was replaced with guide rail. Portions of the brick spandrel walls have been repaired. Spalls at the underside expose the bottom flanges of the melan type reinforcing system. No plans for the span were located.

Historical and Technological Significance: The elliptical deck arch bridge has unusual detailing that is not commonly found in New Jersey. The spandrel walls are of buff brick and the voussoirs are of cut stone. The railing pylons are of buff brick designed to match the spandrels. Two other extant deck arch spans in the county were constructed with similar detailing, 020028D and 020033D. They were built within the first 4 years of this century, dating this span to that period. These other spans have been widened and do not retain their design integrity. The melan arch bridge was first introduced in this country in the late 1800s, and the bridge is one of the earliest examples of the type in the county. The span is significant because it has uncommon detailing, and it is an early, long and well-preserved example of the melan concrete deck arch bridge.

PHOTO: 206:1-4, 220:27 (02/92) REVISED BY (DATE): QUAD: Hackensack

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 020051B **CO** BERGEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MEADOWBROOK AVENUE OVER HO-HO-KUS BROOK **FACILITY** MEADOWBROOK AVENUE

TOWNSHIP RIDGEWOOD VILLAGE

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 44 ft **WIDTH** 30 ft

CONSTRUCTION DT 1922 **ALTERATION DT** 1974 **SOURCE** PLANS

DESIGNER/PATENT R. MCCLAVE, COUNTY ENGINEER **BUILDER** DANSEN CONSTRUCTION CO.

SETTING / CONTEXT The bridge carries a 2-lane local road and sidewalks over a small stream in a post-World War II neighborhood. The setting is not distinguished.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased stringer bridge supported on concrete abutments has deeply haunched encasement at the fascia stringers creating the appearance of an arch span. In 1974 the deck was replaced, and four steel stringers were added between the interior stringers to strengthen the span. The concrete balustrades are a standard design. One of over 65 pre-World War II stringer bridges, it has been altered and is neither technologically nor historically distinguished.

INFOR MATION

PHOTO: 206:43-44 (02/92) REVISED BY (DATE): QUAD: Hackensack

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US
November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 020051D **CO** BERGEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED EAST GLEN AVENUE OVER HO-HO-KUS BROOK **FACILITY** EAST GLEN AVENUE

TOWNSHIP RIDGEWOOD VILLAGE

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 47 ft **WIDTH** 34.7 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT R. MCCLAVE, COUNTY ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane collector road and sidewalks over a small stream in a predominantly residential area. A Bergen County Historical Society Marker located near the bridge indicates that Glen Avenues an historic route that has at one time was an Indian trail, important colonial road, and turnpike. Former names of the route include Franklin Turnpike, Harrison Avenue, and Libby Lane.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The stringer bridge with plain concrete parapets is supported on a concrete substructure that is flared to accommodate the nearby intersection. The 1930 bridge post-dates the colonial times that distinguish the historic Glen Avenue route. It is one of over 65 pre-1946 stringer bridges in Bergen County, and is not technologically noteworthy.

INFOR MATION

PHOTO: 205:25-27 (02/92) REVISED BY (DATE): QUAD: Hackensack

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 020053C **CO** BERGEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED RIVER VALE ROAD OVER HOLDRUM BROOK **FACILITY** RIVER VALE ROAD

TOWNSHIP RIVER VALE TOWNSHIP

TYPE STRINGER **DESIGN** JACK ARCH (BRICK) **MATERIAL** Steel

 # SPANS 1 **LENGTH** 26 ft **WIDTH** 32 ft

CONSTRUCTION DT 1900ca **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane collector road over a small stream in a wooded area of a suburban community. The area immediately around the bridge has not been developed.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 11/29/90

SUMMARY The steel stringer and brick jack arch bridge is supported on ashlar abutments. The original railings have been replaced with beam guide rails and one bay of the jack arch has been replaced with a steel plate that rests on the stringer bottom flanges. The altered bridge is 1 of more than 6 turn-of-the-century stringer and brick jack arch bridges in Bergen County. A better representative example of the bridge type is Upper Cross Road over Saddle River (020058C).

INFOR MATION

PHOTO: 211:11-13 (02/92) REVISED BY (DATE): QUAD: Park Ridge

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 020053D **CO** BERGEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WESTWOOD AVENUE OVER PASCACK BROOK **FACILITY** WESTWOOD AVENUE

TOWNSHIP WESTWOOD BOROUGH

TYPE THRU GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 67 ft **WIDTH** 24 ft

CONSTRUCTION DT 1921 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT R. MCCLAVE, COUNTY ENGINEER **BUILDER** DANSEN CONSTRUCTION CO.

SETTING / CONTEXT The bridge carries a 2-lane collector road and one sidewalk over a wide shallow stream in an undistinguished mid-20th century wooded residential neighborhood of detached houses.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The thru girder with floor beams bridge is supported on a concrete substructure with portions of ashlar masonry from an earlier span. The cantilevered sidewalk is enclosed with modern beam guide rails. One of over 23 thru girder spans in the county, the bridge is a representative example of a common pre-World War II type, and it is not historically or technologically distinguished.

INFOR MATION

PHOTO: 211:1-2 (02/92) REVISED BY (DATE): QUAD: Hackensack

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 020054B **CO** BERGEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PASSAIC STREET OVER SPROUT BROOK **FACILITY** PASSAIC STREET

TOWNSHIP ROCHELLE PARK TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 34 ft **WIDTH** 36 ft

CONSTRUCTION DT 1940 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT R. MCCLAVE, COUNTY ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a busy 2-lane collector road and sidewalks over a small stream in a post-World War II commercial district. Several office buildings in the area were constructed in the 1980s. The setting is not distinguished.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 1940 stringer bridge is supported on concrete abutments. The balustrades are a standard design for bridges built in the county in the 1920s to 1940s. One of over 65 pre-World War II stringer bridges extant in the county, it is neither technologically nor historically distinguished.

INFOR MATION

PHOTO: 215:5-6 (02/92) REVISED BY (DATE): QUAD: Hackensack

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 020055A **CO** BERGEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PARIS AVENUE OVER SPARKILL BROOK **FACILITY** PARIS AVENUE

TOWNSHIP ROCKLEIGH BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 25 ft **WIDTH** 27.3 ft

CONSTRUCTION DT 1942 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT R. MCCLAVE, COUNTY ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a two lane collector road over a small stream and is surrounded by a golf course and country club.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 1942 steel stringer bridge is supported on concrete abutments. The original railings have been replaced with beam guide rails. The bridge is an example of a common pre-World War II bridge type and is neither historically nor technologically distinguished.

INFOR MATION

PHOTO: 211:17-18 (02/92) REVISED BY (DATE): QUAD: Nyack

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 020058A **CO** BERGEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED LOWER CROSS ROAD OVER SADDLE RIVER **FACILITY** LOWER CROSS ROAD

TOWNSHIP SADDLE RIVER BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 55 ft **WIDTH** 31.1 ft

CONSTRUCTION DT 1926 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane residential street and sidewalks over a shallow stream in a neighborhood of large homes dating from 1900s to the present. The setting is not distinguished. The bridge is dedicated as the John Donohue Memorial Bridge after a local Vietnam War veteran.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 03/12/01

SUMMARY The encased stringer bridge supported on concrete abutments has balustrades of standard design for bridges built in the county from the 1920s to the 1940s. This is one of over 65 pre-World War II stringer bridges in the county and it is neither technologically nor historically significant.

INFOR MATION

PHOTO: 210:43-44 (02/92) REVISED BY (DATE): QUAD: Park Ridge

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 020058C **CO** BERGEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED UPPER CROSS ROAD OVER SADDLE RIVER **FACILITY** UPPER CROSS ROAD

TOWNSHIP SADDLE RIVER BOROUGH

TYPE STRINGER **DESIGN** JACK ARCH (BRICK) **MATERIAL** Steel

 # SPANS 1 **LENGTH** 36 ft **WIDTH** 21 ft

CONSTRUCTION DT 1900ca **ALTERATION DT** Demolished: 1998 **SOURCE** STYLE

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane collector road over a minor watercourse in a residential area developed in the 1960s.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Bridge was Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The stringer and brick jack arch bridge supported on ashlar abutments has concrete repairs to one abutment. The original repaired railing is in place on one side of the bridge, and a beam guide rail flanks the other side. One of the few extant brick jack arch spans in the county that has no major alterations, it is historically and technologically significant as a well-preserved example of a common turn-of-the-century county bridge type.

INFOR MATION

Bibliography:
Bergen County Engineers Office. Bridge Card 59-10.
Bergen County Division of Cultural and Historic Affairs.

Physical Description: The single span stringer and brick jack arch bridge is supported on ashlar abutments. The bridge spans 36' and measures 21' out-to-out. The original decorative metal railing is at one side of the bridge only. Beam guide rail was placed at the other side. The north side of the west abutment was repaired with concrete. The remainder of the span appears unaltered. No plans were located.

Historical and Technological Significance: The stringer and brick jack arch bridge is an example of a bridge type that was commonly built in Bergen County from the early 1890s to around 1910. After 1910, concrete jack arch and then reinforced concrete slab replaced brick jack arch as the preferred deck type for new bridge construction. Although the span is not well-documented, early maps of the area indicate a span crossed this location in 1902, and the bridge card at the county engineers office indicates the span was in good condition in 1916. The span is a significant example of its type in the county because it is the longest stringer and brick jack arch span in the county, and it is the only example that does not have alterations to the brick jack arch superstructure.

PHOTO: 210:3-5 (02/92) REVISED BY (DATE): QUAD: Park Ridge

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 020063C **CO** BERGEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED OLD STONE CHURCH ROAD OVER WEST BR SADDLE RIVER **FACILITY** OLD STONE CHURCH ROAD

TOWNSHIP UPPER SADDLE RIVER BOROUGH

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 22 ft **WIDTH** 17 ft

CONSTRUCTION DT 1920 **ALTERATION DT** 1981 **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane collector road over a small stream in a residential area. The area was developed over many years with homes built from the early 1900s through the 1960s. The setting is not distinguished.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The slab bridge supported on stone abutments covered with mortar has a steel stringer at each fascia. In 1981 the original stringer superstructure was replaced but the fascia stringers remained in place. Concrete toe walls were placed in front of each abutment. Original railings have been replaced with beam guide rails. Because the bridge has been recently and significantly altered, it is neither historically nor technologically distinguished.

INFOR MATION

PHOTO: 210:8-9 (02/92) REVISED BY (DATE): QUAD: Park Ridge

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 020063E **CO** BERGEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WEST SADDLE RIVER ROAD OVER PLEASANT BROOK **FACILITY** WEST SADDLE RIVER ROAD

TOWNSHIP UPPER SADDLE RIVER BOROUGH

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 23 ft **WIDTH** 30 ft

CONSTRUCTION DT 1945 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT R. MCCLAVE, COUNTY ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane collector road over a small stream in a post-World War II neighborhood. A church stands to one side of the bridge. The setting is not distinguished.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 1945 slab bridge supported on concrete substructure has concrete balustrades of standard design. A utility pipe was added along one fascia. A short span of a common bridge type, the bridge is neither technologically noteworthy or historically distinguished.

INFOR MATION

PHOTO: 210:1-2 (02/92) REVISED BY (DATE): QUAD: Park Ridge

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 020064A **CO** BERGEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WYCKOFF AVENUE (CR 502) OVER HO-HO-KUS BROOK **FACILITY** WYCKOFF AVENUE (CR 502)

TOWNSHIP WALDWICK BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 73 ft **WIDTH** 30 ft

CONSTRUCTION DT 1945 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT R. MCCLAVE, COUNTY ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane collector road and sidewalks over a shallow stream in a residential area. The neighborhood consists of predominantly post-World War II single-family homes. The setting is not distinguished.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 2-span encased stringer bridge supported on concrete substructure has haunched fascia beams giving the appearance of lightly arched spans. One of over 65 stringer bridges in the county, the span is an example of a common bridge type and is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 205:6-7 (02/92) REVISED BY (DATE): QUAD: Ramsey

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 020064C **CO** BERGEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PROSPECT STREET OVER HO-HO-KUS BROOK **FACILITY** PROSPECT STREET

TOWNSHIP WALDWICK BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 37 ft **WIDTH** 30.3 ft

CONSTRUCTION DT 1928 **ALTERATION DT** 1991 **SOURCE** PLANS

DESIGNER/PATENT R. MCCLAVE, COUNTY ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane collector road over a shallow stream. The surrounding area is mixed residential and commercial. Residences are predominantly single-family homes built between 1920 and 1950. An apartment complex next to the bridge was built around 1980. The setting is not distinguished.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 1928 encased steel stringer bridge with concrete balustrades and substructure no longer carries traffic loads. In 1991 a steel panel bridge was placed over the steel stringer bridge due to structural deficiencies. One of over 65 pre-World War II stringers in Bergen County, the bridge is a common design and is neither historically nor technologically distinguished.

INFOR MATION

PHOTO: 205:8-10 (02/92) REVISED BY (DATE): QUAD: Ramsey

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 020067C **CO** BERGEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED LAFAYETTE AVENUE OVER MUSQUAPSINK BROOK **FACILITY** LAFAYETTE AVENUE

TOWNSHIP WASHINGTON TOWNSHIP

TYPE STRINGER **DESIGN** PARTIALLY ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 22 ft **WIDTH** 20 ft

CONSTRUCTION DT 1910ca **ALTERATION DT** 1955ca **SOURCE** STYLE

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane residential street over a small stream in a neighborhood of single-family detached houses built between 1920 and 1950. A ball field is set at one corner of the bridge.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY According to county records, the steel stringer bridge was built c.1910 and underwent major repairs c.1955 when the deck was removed, the stringers encased in concrete, and new concrete parapets with metal railings added. The bridge is an altered example of a common bridge type and is not technologically innovative or historically distinguished.

INFOR MATION

PHOTO: 210:25-26 (02/92) REVISED BY (DATE): QUAD: Hackensack

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 020067E **CO** BERGEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED THIRD AVENUE OVER MUSQUAPSINK BROOK **FACILITY** THIRD AVENUE

TOWNSHIP WESTWOOD BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 36 ft **WIDTH** 36 ft

CONSTRUCTION DT 1936 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT R. MCCLAVE, COUNTY ENGINEER **BUILDER** WPA CREW

SETTING / CONTEXT The bridge carries a 2-lane collector road and sidewalks over a small stream in a residential area. The local neighborhood includes a ball field, a park and a school. The residences are post-World War II single-family homes.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased stringer bridge supported on concrete abutments has haunched encasement at the fascia stringers. The balustrades are a standard design. The Depression-Era bridge, like many others in the state, was built by Works Progress Administration relief crews and funds. The stringer bridge is a representative example of a common type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 210:27, 219:35 (02/92) REVISED BY (DATE): QUAD: Hackensack

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0201150 **CO** BERGEN **OWNER** NJDOT **MILEPOINT** 60.74

NAME & FEATURE INTERSECTED US 1&9 OVER NEW YORK, SUSQUEHANNA & WESTERN RR **FACILITY** US 1&9

TOWNSHIP FAIRVIEW BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 100 ft **WIDTH** 50 ft

CONSTRUCTION DT 1942 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries a 4-lane barrier-divided highway over an abandoned railroad adjacent to the Fairview Cemetery in a post-World War II industrial area. The railroad right-of-way was originally developed in the 1880s by the New York, Susquehanna and Western Railroad, a division of the Erie Railroad.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The three-span encased steel stringer bridge is supported on concrete substructure and has concrete parapets. It was built in 1942 as a grade elimination project by the NJ State Highway Department. It is a common overpass bridge type and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 217:39-41 (02/92) REVISED BY (DATE): QUAD: Weehawken

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0202150 **CO** BERGEN **OWNER** NJDOT **MILEPOINT** 63.19

NAME & FEATURE INTERSECTED US 1, 9 & 46 OVER EAST HOMESTEAD AVENUE **FACILITY** US 1, 9 & 46

TOWNSHIP PALISADES PARK BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 54 ft **WIDTH** 60 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries a 5-lane barrier-divided highway over a one-way street in a post-1946 residential neighborhood. The route, originally designated NJ 1,4, and 6, was built in 1930-31 in conjunction with the construction of the George Washington Bridge approach. The highway does not constitute a historic corridor because it has lost its integrity of setting with numerous modern intrusions, and has no technologically innovative features.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Rt 46 Historic District. Eligible. Contributing.

CONSULT DOCUMENTS SHPO Finding 11/22/91, Letter 6/30/95, Opinion 02/21/97.

SUMMARY The 1-span encased steel stringer bridge has scored concrete abutments, concrete balustrades, and paneled fascia. The obelisk concrete light posts are a standard feature of overpass bridges on US 1/9/46 (0202150-56). The NJ State Hwy. Dept. often chose one architectonic style for each highway route, and the overpass is a typical and unexceptional solution to traffic in a congested area. The steel stringer bridge is a common type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 217:3-4 (02/92) REVISED BY (DATE): QUAD: Central Park

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0202151 **CO** BERGEN **OWNER** NJDOT **MILEPOINT** 63.3

NAME & FEATURE INTERSECTED US 1, 9 & 46 OVER EAST BRINCKERHOFF AVENUE **FACILITY** US 1, 9 & 46

TOWNSHIP PALISADES PARK BOROUGH

TYPE THRU GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 83 ft **WIDTH** 60 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The 5-lane bridge with modern median barrier spans a 2-lane city street in a residential area (c.1920-70). The highway route, originally designated NJ 1, 4, and 6, was built in 1930-31 in conjunction with the construction of the George Washington Bridge approach. The highway does not constitute a historic corridor because has lost its integrity of setting with numerous modern intrusions, and has no technologically innovative features.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Rt 46 Historic District. Eligible. Contributing.

CONSULT DOCUMENTS SHPO Finding 11/22/91, Letter 6/30/95, Opinion 02/21/97.

SUMMARY The 1-span encased thru girder with floorbeams bridge has scored concrete abutments and cantilevered sidewalks with metal railings. Obelisk concrete light posts, which remain only on the east side, are a standard feature of US 1/9/46 bridges (0202150-6). The NJ State Hwy. Dept. often chose one architectonic style for each highway route, and the overpass is a typical and unexceptional solution to traffic in a congested area. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 217:5-6 (02/92) REVISED BY (DATE): QUAD: Central Park

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0202152 **CO** BERGEN **OWNER** NJDOT **MILEPOINT** 63.4

NAME & FEATURE INTERSECTED US 1, 9 & 46 OVER CENTRAL BOULEVARD **FACILITY** US 1, 9 & 46

TOWNSHIP PALISADES PARK BOROUGH

TYPE THRU GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 83 ft **WIDTH** 60 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The 5-lane bridge with modern median barriers spans a 2-lane city street in a residential city neighborhood (c.1950-70). The highway, originally designated NJ 1, 4, and 6, was built in 1930-31 in conjunction with the construction of the George Washington Bridge approach. The highway does not constitute a historic corridor because it has lost its integrity of setting with numerous modern intrusions, and has no technologically innovative features.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Rt 46 Historic District. Eligible. Contributing.

CONSULT DOCUMENTS SHPO Finding 11/22/91, Letter 6/30/95, Opinion 02/21/97.

SUMMARY The 1-span thru girder with floorbeams bridge has scored concrete abutments and cantilevered sidewalks with metal railings. The obelisk lamp posts, which remain at 3 corners, are a standard feature of US 1/9/46 bridges (0202150-6). The NJ State Hwy. Dept. often chose one architectonic style for each highway route, and the overpass is a typical and unexceptional solution to traffic in a congested area. The girder bridge is a common type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 217:7-8 (02/92) REVISED BY (DATE): QUAD: Central Park

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0202153 **CO** BERGEN **OWNER** NJDOT **MILEPOINT** 63.55

NAME & FEATURE INTERSECTED US 1, 9 & 46 OVER EAST PALISADES AVENUE **FACILITY** US 1, 9 & 46

TOWNSHIP PALISADES PARK BOROUGH

TYPE THRU GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 83 ft **WIDTH** 60 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The 5-lane bridge with modern median barriers spans a 2-lane city street in a residential neighborhood (c.1920-70). The route, originally designated NJ 1, 4, and 6, was built in 1930-31 in conjunction with the construction of the George Washington Bridge approach. The highway does not constitute a historic corridor because it has lost its integrity of setting due to numerous modern intrusions, and has no technologically innovative features.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Rt 46 Historic District. Eligible. Contributing.

CONSULT DOCUMENTS SHPO Finding 11/22/91, Letter 6/30/95, Opinion 02/21/97.

SUMMARY The 1-span thru girder with floorbeams bridge has scored concrete abutments and cantilevered sidewalks with metal railings. The obelisk concrete light posts are a standard feature of US 1/9/46 bridges (0202150-6). The NJ State Highway Department often chose one architectonic style for each highway route, and the overpass is a typical and unexceptional solution to traffic in a congested area. The thru girder is a common type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 217:9-10 (02/92) REVISED BY (DATE): QUAD: Central Park

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0202154 **CO** BERGEN **OWNER** NJDOT **MILEPOINT** 63.73

NAME & FEATURE INTERSECTED US 1, 9 & 46 OVER EAST EDSALL BOULEVARD **FACILITY** US 1, 9 & 46

TOWNSHIP PALISADES PARK BOROUGH

TYPE THRU GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 81 ft **WIDTH** 60 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The 5-lane bridge with modern median barriers spans a 2-lane city street in a residential neighborhood (c.1950-70). The highway, originally designated NJ 1, 4, and 6, was built in 1930-31 in conjunction with the construction of the George Washington Bridge approaches. The route does not constitute a historic corridor because it has lost its integrity of setting due to numerous modern intrusions, and has no technologically innovative features.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Rt 46 Historic District. Eligible. Contributing.

CONSULT DOCUMENTS SHPO Finding 11/22/91, Letter 6/30/95, Opinion 02/21/97.

SUMMARY The 1-span encased thru girder with floorbeams bridge has scored concrete abutments and cantilevered sidewalks with metal railings. The obelisk concrete light posts are a standard feature of US 1/9/46 bridges (0202150-6). The NJ State Hwy. Dept. often chose one architectonic style for each highway route, and the overpass is a typical and unexceptional solution to traffic in a congested area. The thru girder bridge is a common type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 217:11-12 (02/92) REVISED BY (DATE): QUAD: Central Park

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0202155 **CO** BERGEN **OWNER** NJDOT **MILEPOINT** 63.75

NAME & FEATURE INTERSECTED US 1, 9 & 46 OVER OAKDENE AVENUE **FACILITY** US 1, 9 & 46

TOWNSHIP PALISADES PARK BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 54 ft **WIDTH** 60 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The 5-lane bridge with modern median barriers spans a 2-lane city street adjacent a residential area and small commercial district (c.1950-90). The highway, originally designated NJ 1, 4, & 6, was built in 1930-31 in conjunction with the construction of the George Washington Bridge approach. The highway does not constitute a historic corridor because it has lost its integrity of setting, and has no technologically innovative features.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Rt 46 Historic District. Eligible. Contributing.

CONSULT DOCUMENTS SHPO Finding 11/22/91, Letter 6/30/95, Opinion 02/21/97.

SUMMARY The 1-span bridge has concrete balustrades, paneled fascia, and scored concrete abutments. Obelisk concrete lamp posts, which remain at 3 corners, are a standard feature of US 1/9/46 bridges (0202150-6). The NJ State Highway Department often chose one architectonic style for each highway route, and the overpass is a typical and unexceptional solution to traffic in a congested area. The steel stringer bridge is a common type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 217:13-14 (02/92) REVISED BY (DATE): QUAD: Central Park

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0202156 **CO** BERGEN **OWNER** NJDOT **MILEPOINT** 63.97

NAME & FEATURE INTERSECTED US 1, 9 & 46 OVER NJ 63 SOUTHBOUND **FACILITY** US 1, 9 & 46

TOWNSHIP FORT LEE BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 60 ft **WIDTH** 58.1 ft

CONSTRUCTION DT 1931 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The 4-lane barrier-divided bridge spans the 2 southbound lanes of NJ 63 in a post-1946 commercial strip area. The highway, originally designated NJ 1, 4 & 6, was built in 1930-31 in conjunction with the construction of the George Washington Bridge approaches. The highway does not constitute a historical corridor because it has lost its integrity of setting with numerous modern intrusions and has few technologically innovative features.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Rt 46 Historic District. Eligible. Contributing.

CONSULT DOCUMENTS SHPO Finding 11/22/91, Letter 6/30/95, Opinion 02/21/97.

SUMMARY The 1-span encased steel stringer bridge has concrete balustrades, paneled fascia and paneled pilasters along the concrete abutment faces. Obelisk concrete light posts are a standard feature of US 1/9/46 bridges (0202150-6). The NJ State Hwy. Dept. often chose one architectonic style for each highway route, and the overpass is a typical and unexceptional solution to traffic in a congested area. The 1931 steel stringer is a common type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 217:15-16 (02/92) REVISED BY (DATE): QUAD: Central Park

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0202158 **CO** BERGEN **OWNER** NJDOT **MILEPOINT** 64.51

NAME & FEATURE INTERSECTED US 1, 9 & 46 OVER MAIN STREET (CR 12) **FACILITY** US 1, 9 & 46

TOWNSHIP FORT LEE BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 63 ft **WIDTH** 58 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The 4-lane barrier divided bridge spans a 2-lane road in a mixed-use commercial/residential area (c.1900-1960). The highway, originally designated NJ 1, 4 & 6, was built in 1930-31 in conjunction with the construction of the George Washington Bridge approach. The highway does not constitute a historic corridor because it has lost its integrity of setting with numerous modern intrusions and has no technologically innovative features.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Rt 46 Historic District. Eligible. Contributing.

CONSULT DOCUMENTS SHPO Finding 11/22/91, Letter 6/30/95, Opinion 02/21/97.

SUMMARY The 1-span encased steel stringer bridge has concrete balustrades and concrete abutments with scoring and paneled pilasters. The 1930 bridge is a representative example of a typical NJ State Highway Department overpass design for grade separated crossings in congested traffic areas. The steel stringer bridge is a common type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 218:20-21 (02/92) REVISED BY (DATE): QUAD: Central Park

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0202159 **CO** BERGEN **OWNER** NJDOT **MILEPOINT** 64.61

NAME & FEATURE INTERSECTED US 1, 9 & 46 OVER JONES ROAD **FACILITY** US 1, 9 & 46

TOWNSHIP FORT LEE BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 64 ft **WIDTH** 58.1 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The 4-lane barrier-divided bridge spans a 2-lane residential street lined with single-family homes (c.1920-1940). The highway, originally designated NJ 1, 4 & 6, was built in 1930-31 in conjunction with the construction of the George Washington Bridge approaches. The route does not constitute a historic corridor because it has lost its integrity of setting due to numerous modern intrusions and has no technologically innovative features.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Rt 46 Historic District. Eligible. Contributing.

CONSULT DOCUMENTS SHPO Finding 11/22/91, Letter 6/30/95, Opinion 02/21/97.

SUMMARY The 1-span encased steel stringer bridge with concrete balustrades is constructed on a skew with some stringers framing into a longitudinal fascia beam. The concrete abutments have scoring and paneled pilasters. The bridge is an example of a typical NJ State Highway Department overpass design for grade-separated crossings in congested traffic areas. The steel stringer bridge is a common type, and it is not historically or technologically distinguished.

INFOR MATION

PHOTO: 218:22-23 (02/92) REVISED BY (DATE): QUAD: Central Park

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0202160 **CO** BERGEN **OWNER** NJDOT **MILEPOINT** 64.73

NAME & FEATURE INTERSECTED US 46 EB OVER NJ 4 & I-95 RAMPS B & L **FACILITY** US 46 EASTBOUND

TOWNSHIP FORT LEE BOROUGH

TYPE MULTI GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 9 **LENGTH** 476 ft **WIDTH** 60 ft

CONSTRUCTION DT 1930 **ALTERATION DT** Demolished **SOURCE** NJDOT

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER** GEORGE M. BREWSTER & SONS

SETTING / CONTEXT The bridge carries 2 lanes of US 46 eastbound over 2 tiers of roadway including NJ 4 eastbound (0206187) and the I-95 ramps feeding into the approach to the George Washington Bridge. The original route designation of the bridge was NJ 1 and NJ 6 over NJ 4 and a county road, and was built in coordination with the Port Authority of New York's George Washington Bridge over the Hudson River project. The surrounding area is densely developed suburban residential and commercial.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Bridge was Individually Eligible. Rt 46 Historic District. Eligible. Contributed.

CONSULT DOCUMENTS SHPO Finding 07/24/90 11/22/91, Letter 6/30/95, Opinion 02/21/97.

SUMMARY The 9-span bridge is an encased multi girder with concrete balustrades, abutments, and pier bents with encased steel pier caps. It is the top span of a technologically innovative three-tier traffic intersection in which all grade crossings have been eliminated in order to provide for the uninterrupted flow of traffic to the George Washington Bridge. The 1930 bridge is a technologically and historically significant example of NJ State Highway Department traffic engineering and design.

INFOR MATION

Bibliography:
NJDOT.
Transactions of the American Society of Civil Engineers, vol. 97, 1933. Paper No. 1825, "George Washington Bridge: Approaches and Highway Connections" by J.C. Evans, Esq.

Physical Description: The 9-span 476' long encased multi-girder bridge supported on a concrete substructure was built on a horizontal curve. The 60' out-to-out width bridge carries 2 eastbound lanes of a highway and variable width grass and concrete sidewalks flanked by standard design concrete balustrades. Bridge 0206187 spans underneath the bridge.

Historical and Technological Significance: The encased multi-girder bridge was constructed by the New Jersey State Highway Department Bridge Division in 1930 to carry the eastbound lanes of US 1&9 & 46 over span 0206187 which carried the eastbound lanes of NJ 4 over a local access road to the city of Fort Lee. In the 1960's, US 95 was constructed and the Lower Level Expansion of the George Washington Bridge was completed. At that time the lower level access road became an eastbound ramp of US 95. The bridge is part of a three-level grade crossing constructed to connect state highways with the New Jersey approach to the George Washington Bridge. This three-level road intersection was constructed in coordination with the Port of New York Authority George Washington Bridge project. Although the bridge is a common type, the span is significant because it is part of an innovative three-tier structure associated with the George Washington Bridge approach construction.

PHOTO: 218:24-26 (02/92) REVISED BY (DATE): QUAD: Central Park

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0204150 **CO** BERGEN **OWNER** NJDOT **MILEPOINT** 6.85

NAME & FEATURE INTERSECTED NJ 3 OVER BERRY'S CREEK **FACILITY** NJ 3

TOWNSHIP EAST RUTHERFORD BOROUGH

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 14 **LENGTH** 1014 ft **WIDTH** 77 ft

CONSTRUCTION DT 1945 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The viaduct carries a 6-lane barrier-divided highway over a large river in the NJ Meadowlands. The NJ 17 interchange is to the west of the bridge and the Meadowlands sports complex is to the east.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 1945 14-span stringer bridge is supported on concrete abutments and open concrete pile bents. The railing is concrete with concrete posts. The 2 easternmost spans have alterations to the superstructure. The bridge is the longest of over 65 pre-World War II stringer bridges in the county, and is a late and technologically undistinguished example of a common bridge type.

INFOR MATION

PHOTO: 209:19-22 (02/92) REVISED BY (DATE): QUAD: Weehawken

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0204152 **CO** BERGEN **OWNER** NJDOT **MILEPOINT** 8.47

NAME & FEATURE INTERSECTED NJ 3 EB OVER HACKENSACK RIVER & GRACE STREET **FACILITY** NJ 3 EASTBOUND

TOWNSHIP EAST RUTHERFORD BOROUGH

TYPE THRU TRUSS **DESIGN** PRATT **MATERIAL** Steel

 # SPANS 14 **LENGTH** 1552 ft **WIDTH** 53 ft

CONSTRUCTION DT 1934 **ALTERATION DT** 1963 **SOURCE** PLANS

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries a 4-lane one-directional highway over a major river in the Meadowlands between Rutherford and Secaucus. Post-World War II commercial and light industrial buildings are set to the east of the bridge and the Meadowlands sports complex is to the west.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The viaduct is composed of a rivet-connected Pratt thru truss main span and 13 deck plate girder approach spans all supported on concrete piers. The entire superstructure was raised by concrete extensions to the piers in 1963. The truss span was constructed at that time to replace a double leaf bascule span. The bridge is altered and is not technologically or historically distinguished.

INFOR MATION

PHOTO: 209:23,25-28 (02/92) REVISED BY (DATE): QUAD: Weehawken

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0205150 **CO** BERGEN **OWNER** NJDOT **MILEPOINT** 0.15

NAME & FEATURE INTERSECTED NJ 4 OVER PASSAIC RIVER, NJ 20, CR 507 **FACILITY** NJ 4

TOWNSHIP ELMWOOD PARK BOROUGH

TYPE OPEN SPANDREL ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 7 **LENGTH** 560 ft **WIDTH** 50 ft

CONSTRUCTION DT 1931 **ALTERATION DT** 1988 **SOURCE** PLANS/INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries a 4-lane barrier-divided arterial road with sidewalks over a major river, a 4-lane divided arterial road and a 2-lane collector road. The setting is predominantly post-World War II commercial. Apartment buildings in the area date to the 1960s.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 3-span reinforced concrete open spandrel arch bridge has 4 steel stringer approach spans. In 1988 the bridge deck, sidewalks and parapets were replaced but original obelisk concrete lamp posts were retained. The bridge is 1 of over 10 multi-span open spandrel arches designed by the State in the 1920s and early 1930s. Superstructure alterations have substantially reduced the bridge's integrity, and more distinguished examples of the bridge type exist within NJ (1203150, 1607163).

INFOR MATION

PHOTO: 209:41-43 (02/92) REVISED BY (DATE): QUAD: Paterson

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0206151 **CO** BERGEN **OWNER** NJDOT **MILEPOINT** 2.39

NAME & FEATURE INTERSECTED NJ 4 OVER SADDLE RIVER **FACILITY** NJ 4

TOWNSHIP FAIR LAWN BOROUGH

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 70 ft **WIDTH** 108.2 ft

CONSTRUCTION DT 1931 **ALTERATION DT** 1956 **SOURCE** PLANS

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries NJ 4, an 8-lane barrier-divided highway with sidewalks over a small river in a commercial area developed in the 1950s to 1960s that includes a golf course. The NJ 4 junction with NJ 208 and Saddle River Road is at the west approach of the bridge.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The well-proportioned concrete deck arch bridge supported on a concrete substructure was widened in kind to the north in 1956. The concrete balustrades at both sides of the bridge are of standard design. Guide rail was added in front of the balustrades. An altered and relatively late example of a concrete deck arch bridge, the span is one of over 14 extant in the county built prior to 1946 and is not historically nor technologically noteworthy.

INFOR MATION

PHOTO: 215:42-43 (02/92) REVISED BY (DATE): QUAD: Hackensack

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0206153 **CO** BERGEN **OWNER** NJDOT **MILEPOINT** 3.14

NAME & FEATURE INTERSECTED NJ 4 & MARGINAL ROAD OVER SPROUT BROOK **FACILITY** NJ 4 & MARGINAL ROAD

TOWNSHIP PARAMUS BOROUGH

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 2 **LENGTH** 53 ft **WIDTH** 128 ft

CONSTRUCTION DT 1931 **ALTERATION DT** 1956 **SOURCE** INSCRIPTION/PLANS

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries a 6-lane divided highway over a small brook situated between 2 major post-World War II shopping malls. The setting is not distinguished.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 2-span slab bridge set on a concrete substructure was widened to each side in kind in 1956 as indicated on the concrete parapet also dating from 1956. An altered example of a common type, the bridge is neither technologically nor historically distinguished.

INFOR MATION

PHOTO: 215:7, 219:40 (02/92) REVISED BY (DATE): QUAD: Hackensack

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US
November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0206154 **CO** BERGEN **OWNER** NJDOT **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED FARVIEW AVENUE OVER NJ 4 **FACILITY** FARVIEW AVENUE

TOWNSHIP PARAMUS BOROUGH

TYPE DECK GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 102 ft **WIDTH** 30 ft

CONSTRUCTION DT 1931 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries a 2-lane collector road and sidewalks over a 6-lane divided highway. Farview Avenue passes through a 1920s to 1950s residential area to either side of the bridge. The area under the bridge along Route 4 is post-World War II commercial. The setting is not distinguished.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 3-span continuous encased deck girder and floorbeam bridge with concrete balustrades is supported on scored concrete abutments and pier columns. The sidewalks are cantilevered. An example of a typically well-detailed State Highway Department design of a common bridge type, the span is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 215:39-40 (02/92) REVISED BY (DATE): QUAD: Hackensack

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0206159 **CO** BERGEN **OWNER** NJDOT **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED FOREST AVENUE (CR 13) OVER NJ 4 **FACILITY** FOREST AVENUE (CR 13)

TOWNSHIP PARAMUS BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 139 ft **WIDTH** 50 ft

CONSTRUCTION DT 1937 **ALTERATION DT** 1957 **SOURCE** PLANS

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries a 4-lane divided street and sidewalks over a 6-lane divided highway in a congested retail/commercial district. The bridge is between major shopping centers built in the 1960s and 1970s on NJ 4.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased stringer bridge is supported on concrete abutments and open concrete piers. The bridge was lengthened by one span and widened to both sides in 1957. The original abutment was unearthed and made into a pier. The sidewalks are bounded by chain-link-fence atop solid concrete parapets. The bridge is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 215:30-32 (02/92) REVISED BY (DATE): QUAD: Hackensack

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0206163 **CO** BERGEN **OWNER** NJDOT **MILEPOINT** 5.43

NAME & FEATURE INTERSECTED NJ 4 OVER KINDERKAMACK ROAD, CONRAIL, COLES BROOK **FACILITY** NJ 4

TOWNSHIP HACKENSACK CITY

TYPE MULTI GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 243 ft **WIDTH** 70 ft

CONSTRUCTION DT 1931 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries NJ 4, a 6-lane highway with sidewalks over Conrail, a county route and a small stream in a busy post-World War II commercial area.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 07/09/90, Letter 6/30/95.

SUMMARY The 3-span bridge has a multi-girder main span and encased stringer end spans set on a concrete substructure. The deck of the end spans has been replaced. The cantilevered sidewalks are bounded by concrete balustrades of standard design and guide rails. The span is an example of a common bridge type and is neither technologically nor historically distinguished.

INFOR MATION

PHOTO: 215:24, 219:34 (02/92) REVISED BY (DATE): QUAD: Hackensack

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0206165 **CO** BERGEN **OWNER** NJDOT **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED HACKENSACK AVENUE OVER NJ 4 **FACILITY** HACKENSACK AVENUE

TOWNSHIP HACKENSACK CITY

TYPE DECK GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 142 ft **WIDTH** 40 ft

CONSTRUCTION DT 1931 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries a congested 4-lane collector road with sidewalks over a 6-lane highway at the edge of a busy NJ shopping corridor. A major mall stands to one side of the bridge. The setting is not distinguished.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed 2-span encased girder and floorbeam bridge supported on concrete abutments and open concrete bents has curved scored wingwalls. A chain-link-fence was added in front of the standard design concrete balustrades. Anchor bolts for lamp posts remain at balustrade end pylons. The bridge is a common type and is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 219:32-33 (02/92) REVISED BY (DATE): QUAD: Hackensack

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0206166 **CO** BERGEN **OWNER** NJDOT **MILEPOINT** 5.82

NAME & FEATURE INTERSECTED NJ 4 OVER HACKENSACK RIVER & ROAD **FACILITY** NJ 4

TOWNSHIP HACKENSACK CITY

TYPE MULTI GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 8 **LENGTH** 546 ft **WIDTH** 72.5 ft

CONSTRUCTION DT 1931 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries NJ 4, a 6-lane barrier-divided highway with sidewalks over a major river and a road in the NJ 4 greenbelt area. A major mall is located to one side of the bridge and Fairleigh Dickinson University to the other. The remainder of the buildings in the area are commercial.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 8-span encased multi-girder bridge is supported on concrete abutments and column pier bents. The sidewalks are bounded by standard design concrete balustrades and guide rails. A long example of a well-detailed state-designed common bridge type, the span is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 214:42-43 (02/92) REVISED BY (DATE): QUAD: Hackensack

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0206167 **CO** BERGEN **OWNER** NJDOT **MILEPOINT** 6.25

NAME & FEATURE INTERSECTED NJ 4 OVER RIVER ROAD **FACILITY** NJ 4

TOWNSHIP TEANECK TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 56 ft **WIDTH** 70 ft

CONSTRUCTION DT 1931 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries a 6-lane barrier-divided highway with sidewalks over a 2-lane collector road adjacent to the Fairleigh Dickinson University campus. A neighborhood of 1950s homes is set to one side of the bridge while the Hackensack River is to the other. The setting is not distinguished.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased stringer bridge set on concrete abutments has standard design concrete balustrades and guide rails. An example of a common pre-World War II bridge type in the state, the span is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 214:40-41 (02/92) REVISED BY (DATE): QUAD: Hackensack

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0206168 **CO** BERGEN **OWNER** NJDOT **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED GARRISON AVENUE OVER NJ 4 **FACILITY** GARRISON AVENUE

TOWNSHIP TEANECK TOWNSHIP

TYPE THRU GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 104 ft **WIDTH** 36 ft

CONSTRUCTION DT 1931 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries a 2-lane residential road and sidewalks set in a neighborhood developed in the 1920s to 1930s. The bridge spans over NJ 4, a 6-lane divided highway. NJ 4 is bordered by wooded undeveloped land through a suburban community.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 3 span continuous encased thru girder bridge is supported on concrete abutments and pier columns. The original metal railing with concrete posts is intact. The abutments are scored and the pier columns are paneled typifying the well-detailed State Highway Dept. designs of the pre-WWII era. Although well preserved, this span is one of over 23 thru girder bridges in the county and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 214:38-39 (02/92) REVISED BY (DATE): QUAD: Hackensack

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0206169 **CO** BERGEN **OWNER** NJDOT **MILEPOINT** 7.0

NAME & FEATURE INTERSECTED NJ 4 OVER PALISADE AVENUE, WINDSOR ROAD & CONRAIL **FACILITY** NJ 4

TOWNSHIP TEANECK TOWNSHIP

TYPE MULTI GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 8 **LENGTH** 495 ft **WIDTH** 67 ft

CONSTRUCTION DT 1931 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries NJ 4, a 5-lane highway with sidewalks, over 2 separate 2-lane collector roads and Conrail tracks, formerly the West Shore RR. NJ 4 was constructed with an undeveloped wooded edge acting as a natural buffer for the bordering mid-20th century residential neighborhoods.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 8-span encased multi-girder viaduct supported on concrete abutments and piers has concrete balustrades of standard design. The sidewalks are cantilevered. Although a long example of its type, the multi-girder span is an example of a commonly used technology and is not distinguished.

INFOR MATION

PHOTO: 214:35-37 (02/92) REVISED BY (DATE): QUAD: Hackensack

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0206171 **CO** BERGEN **OWNER** NJDOT **MILEPOINT** 7.15

NAME & FEATURE INTERSECTED NJ 4 OVER QUEEN ANNE ROAD **FACILITY** NJ 4

TOWNSHIP TEANECK TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 56 ft **WIDTH** 65 ft

CONSTRUCTION DT 1931 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries a 4-lane barrier-divided highway with sidewalks over a 2-lane collector road with sidewalks. The area includes a neighborhood of homes built between the 1920s and 1950, a ball park and a high school, and is separated from the highway by a natural border of wooded land.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The well-preserved encased stringer bridge supported on concrete abutments has concrete balustrades of standard design. Wingwalls and the pilasters at each abutment corner are panelled. The span is one of the many extant examples of the well-detailed State Highway Department overpasses of the pre-WWII era. A common bridge type and one of over 65 stringer bridges in the county, the span is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 214:29-30 (02/92) REVISED BY (DATE): QUAD: Hackensack

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0206172 **CO** BERGEN **OWNER** NJDOT **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MARGARET STREET OVER NJ 4 **FACILITY** MARGARET STREET

TOWNSHIP TEANECK TOWNSHIP

TYPE THRU GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 91 ft **WIDTH** 30 ft

CONSTRUCTION DT 1931 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries a residential street over Route 4, a 4-lane divided highway with shoulders. A border of wooded land separates the highway from an established suburban community. Margaret Street ends at Teaneck High School just south of the bridge and leads to a 1930s to 1940s neighborhood of single-family homes to the north.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The well-preserved encased thru girder bridge is supported on scored concrete abutments. The original metal railings with concrete posts are intact, but chain-link-fence was placed in front of the railing. The span is an example of a well-detailed State Highway Department overpass of the pre-WWII era. A common bridge type, the span is one of over 23 thru girder bridges in the county and is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 214:31-32 (02/92) REVISED BY (DATE): QUAD: Hackensack

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0206173 **CO** BERGEN **OWNER** NJDOT **MILEPOINT** 7.62

NAME & FEATURE INTERSECTED NJ 4 OVER TEANECK ROAD **FACILITY** NJ 4

TOWNSHIP TEANECK TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 56 ft **WIDTH** 104 ft

CONSTRUCTION DT 1931 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries a 6-lane barrier-divided highway with sidewalks over a 2-lane collector road with sidewalks. A natural border of wooded land along the highway acts as a buffer for the surrounding neighborhood. The area is mixed 1950s residential and 1940s to 1980s commercial.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The well-preserved encased stringer bridge set on concrete abutments has curved concrete wingwalls and standard design concrete balustrades. Decorative panelled concrete pilasters are located at the abutment corners. The span is an example of a well-detailed State Highway Department overpass of the pre-World War II era. The bridge is a common type, and it is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 214:33-34 (02/92) REVISED BY (DATE): QUAD: Hackensack

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0206174 **CO** BERGEN **OWNER** NJDOT **MILEPOINT** 8.1

NAME & FEATURE INTERSECTED NJ 4 OVER WEBSTER AVENUE **FACILITY** NJ 4

TOWNSHIP TEANECK TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 47 ft **WIDTH** 70 ft

CONSTRUCTION DT 1931 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER** MCCLINTIC-MARSHALL CORP.

SETTING / CONTEXT The bridge carries a 6-lane barrier-divided highway with sidewalks over a 2-lane collector road with sidewalks situated in the NJ 4 greenbelt providing a buffer between the highway and the surrounding mid-20th century residential community.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The well-preserved encased stringer bridge supported on concrete abutments has balustrades of standard design. Decorative panelled concrete pilasters stand at each abutment corner. One of many similar examples of a well-detailed pre-WWII State Highway Department overpass, and one of over 65 stringer bridges in the county built prior to 1946, the span is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 214:27-28 (02/92) REVISED BY (DATE): QUAD: Yonkers

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0206175 **CO** BERGEN **OWNER** NJDOT **MILEPOINT** 8.26

NAME & FEATURE INTERSECTED NJ 4 OVER LAFAYETTE AVENUE EXTENSION, PROPOSED EXTENSION **FACILITY** NJ 4

TOWNSHIP TEANECK TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 58 ft **WIDTH** 83 ft

CONSTRUCTION DT 1931 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries a 4-lane barrier-divided highway and sidewalks over vacant land set aside in 1931 for a proposed extension to Lafayette Avenue which was never built. The overpass is located at the beginning of the greenbelt area along NJ 4 that provides a natural buffer between the highway and the surrounding community. A golf course is located to the south of the bridge, and to the north light industrial buildings (c.1940-70).

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The well-preserved encased stringer bridge supported on concrete abutments with panelled pilasters has a balustrade of standard design. The span is an example of the nicely detailed overpasses designed by the State Highway Department in the pre-WWII era. One of over 65 stringer bridges in the county built prior to 1946, the span is a common bridge type that is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 214:25-26 (02/92) REVISED BY (DATE): QUAD: Yonkers

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0206177 **CO** BERGEN **OWNER** NJDOT **MILEPOINT** 8.85

NAME & FEATURE INTERSECTED NJ 4 OVER SOUTH DEAN STREET, NORDHOFF PLACE & CONRAIL **FACILITY** NJ 4

TOWNSHIP ENGLEWOOD CITY

TYPE MULTI GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 6 **LENGTH** 363 ft **WIDTH** 67.6 ft

CONSTRUCTION DT 1931 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries NJ 4, a 6-lane barrier-divided highway with sidewalks over a Conrail track and 2 separate 2-lane collector roads. The structures in the area are predominantly undistinguished post-World War II light industrial and office buildings.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 6-span encased multi-girder bridge supported on concrete abutments and piers has cantilevered sidewalks and concrete balustrades of standard design. A multi-span example of a common 1930s State Highway Department design, the bridge is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 214:22-24 (02/92) REVISED BY (DATE): QUAD: Yonkers

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0206179 **CO** BERGEN **OWNER** NJDOT **MILEPOINT** 9.06

NAME & FEATURE INTERSECTED NJ 4 OVER GRAND AVENUE (CR 501) **FACILITY** NJ 4

TOWNSHIP ENGLEWOOD CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 74 ft **WIDTH** 73 ft

CONSTRUCTION DT 1931 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries a 6-lane barrier-divided highway and sidewalks over a 2-lane county route with sidewalks in a commercial area dating from the 1960s to the present.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 2-span encased stringer bridge supported on concrete abutments and an open concrete pier has panelled pilasters and balustrades of standard design. A representative example of a common NJ State Highway Department overpass bridge type, the bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 214:20-21 (02/92) REVISED BY (DATE): QUAD: Yonkers

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0206180 **CO** BERGEN **OWNER** NJDOT **MILEPOINT** 9.32

NAME & FEATURE INTERSECTED NJ 4 OVER BROAD AVENUE **FACILITY** NJ 4

TOWNSHIP ENGLEWOOD CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 74 ft **WIDTH** 70 ft

CONSTRUCTION DT 1931 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries a 6-lane barrier-divided highway and sidewalks over a 2-lane collector road with sidewalks in a 1920s residential area.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 2-span encased stringer bridge supported on concrete abutments and an open concrete pier is one of over 6 similar well-detailed State Highway Department bridges along NJ 4. The concrete balustrades are of standard design. An example of a common 1930s NJ State Highway Department overpass type, the bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 214:18-19 (02/92) REVISED BY (DATE): QUAD: Yonkers

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0206181 **CO** BERGEN **OWNER** NJDOT **MILEPOINT** 9.55

NAME & FEATURE INTERSECTED NJ 4 OVER FLAT ROCK BROOK **FACILITY** NJ 4

TOWNSHIP ENGLEWOOD CITY

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 23 ft **WIDTH** 70 ft

CONSTRUCTION DT 1931 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries a 4-lane highway with shoulders over a small stream. The surrounding area is undeveloped and wooded. The setting is not distinguished.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The slab bridge supported on concrete abutments has a stepped underside to accommodate 2 utility pipes while maintaining under clearance. The concrete balustrades are standard design. The bridge is a representative example of a common NJ State Highway Department bridge design, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 213:23, 219:31 (02/92) REVISED BY (DATE): QUAD: Central Park

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0206182 **CO** BERGEN **OWNER** NJDOT **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED JONES ROAD OVER NJ 4 **FACILITY** JONES ROAD

TOWNSHIP ENGLEWOOD CITY

TYPE THRU GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 154 ft **WIDTH** 30 ft

CONSTRUCTION DT 1931 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries a 2-lane collector road with sidewalks over a 4-lane divided highway with shoulders. The bridge is surrounded by wooded land. Jones Road leads to a post-World War II residential area just beyond the bridge.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed 3-span continuous encased thru girder bridge is supported by concrete abutments and pier columns with cap beams. The original metal railing with concrete posts is intact and carried by the cantilevered sidewalks. Concrete balustrades are on the abutment approaches. The bridge is an example of a well-detailed NJ State Highway Department design of a common type, but is not historically or technologically distinguished.

INFOR MATION

PHOTO: 213:20-22 (02/92) REVISED BY (DATE): QUAD: Central Park

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0206187 **CO** BERGEN **OWNER** NJDOT **MILEPOINT** 10.7

NAME & FEATURE INTERSECTED NJ 4 EB OVER I-95 RAMP L **FACILITY** NJ 4 EASTBOUND

TOWNSHIP FORT LEE BOROUGH

TYPE THRU GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 81 ft **WIDTH** 36 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER** GEORGE M. BREWSTER & SONS

SETTING / CONTEXT The bridge carries 2 eastbound lanes of NJ 4 over a ramp of I-95 and under a bridge carrying 2 eastbound lanes of US 46 (0202160). The original route designation of the bridge was NJ 4 eastbound over a county road and under NJ 1 and 6. It was built in coordination with the Port Authority of New York's George Washington Bridge over the Hudson River project. The surrounding area is densely developed suburban commercial and residential.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Individually Eligible. Rt 46 Historic District. Eligible. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95, Opinion 02/21/97.

SUMMARY The heavily-skewed, single-span bridge is an encased thru girder with scored concrete abutments and cantilevered sidewalks with metal railings. It is the middle span of a technologically innovative 3-tier traffic intersection in which all grade crossings have been eliminated in order to provide for the uninterrupted flow of traffic to the GW Bridge. The 1930 bridge is part of a structure which is a technologically and historically significant example of NJ State Highway Department engineering.

INFOR MATION

Bibliography:

NJDOT.

Transactions of the American Society of Civil Engineers, vol. 97, 1933. Paper No. 1825, "George Washington Bridge: Approaches and Highway Connections" by J.C. Evans, Esq.

Physical Description: The skewed encased thru girder bridge spans 81' and carries a 36' wide eastbound highway. Cantilevered sidewalks are flanked by metal railings with concrete posts. Railing posts are paneled with bush-hammered finish. The concrete abutments have horizontal linear scoring. Bridge 0202160 spans over the bridge. The bridge appears to have no alterations.

Historical and Technological Significance: The encased thru girder span was constructed by the New Jersey State Highway Department Bridge Division in 1930 to carry the eastbound lanes of NJ 4 over a local access road to the city of Fort Lee. In the 1960s, US 95 was constructed and the Lower Level Expansion of the George Washington Bridge was completed. At that time the road under the bridge became an eastbound ramp for US 95. The bridge is part of a three-level grade crossing constructed to connect state highways with the New Jersey approach to the George Washington Bridge. Bridge 0202160 spans above the bridge and carries the eastbound lanes of US 1 & 9 & 46. This three-level road intersection was constructed in coordination with the Port of New York Authority George Washington Bridge project. Although the bridge is a common type, the span is significant because it is part of an innovative three-tier structure associated with the George Washington Bridge approach construction.

PHOTO: 218:27,29 (02/92) REVISED BY (DATE): QUAD: Central Park

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0206189 **CO** BERGEN **OWNER** NJDOT **MILEPOINT** 5.45

NAME & FEATURE INTERSECTED KINDERKAMACK ROAD OVER COLES BROOK **FACILITY** KINDERMACK ROAD

TOWNSHIP HACKENSACK CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 38 ft **WIDTH** 52 ft

CONSTRUCTION DT 1930ca **ALTERATION DT** **SOURCE** STYLE

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane collector road over a small stream. The bridge is parallel to a Conrail track, originally the Erie RR, to the east and adjacent to 0206163 (NJ 4) overhead to the south. Post-World War II commercial and office buildings line Kinderkamack Road contiguous to the bridge. The setting is not distinguished.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased stringer bridge supported on concrete abutments has concrete balustrades of standard design. An example of a common bridge type in the state, the span is one of over 65 stringer bridges in the county built prior to 1946 and is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 215:22-23 (02/92) REVISED BY (DATE): QUAD: Hackensack

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US
November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0207150 **CO** BERGEN **OWNER** NJDOT **MILEPOINT** 0.46

NAME & FEATURE INTERSECTED NJ 5 OVER DELIA BOULEVARD **FACILITY** NJ 5

TOWNSHIP PALISADES PARK BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 59 ft **WIDTH** 30 ft

CONSTRUCTION DT 1924 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries a 3-lane highway and a sidewalk over a 2-lane collector road and sidewalks. The area along Delia Boulevard is mixed 1920s through post-World War II residential and commercial. NJ 5 was designated NJ 10 until 1927, and it was one the original 15 state routes legislated in 1917.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 3-span encased stringer bridge supported on concrete abutments and open concrete piers is missing much of its encasement. The concrete parapets are paneled, and the substructure is scored. The span is an example of a common type in the state. One of over 65 stringer bridges in the county built prior to 1946, the bridge is neither technologically nor historically distinguished.

INFOR MATION

PHOTO: 211:28-29 (02/92) REVISED BY (DATE): QUAD: Central Park

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0207151 **CO** BERGEN **OWNER** NJDOT **MILEPOINT** 0.6

NAME & FEATURE INTERSECTED NJ 5 OVER PUBLIC SERVICE RAILROAD RIGHT-OF-WAY **FACILITY** NJ 5

TOWNSHIP PALISADES PARK BOROUGH

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 3 **LENGTH** 123 ft **WIDTH** 30 ft

CONSTRUCTION DT 1923 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries a 3-lane highway and a sidewalk over the Public Service Railroad right-of-way, an abandoned trolly line that originated at the ferry to 125th Street in Manhattan and ran parallel to NJ 5 and then crossed under it at the bridge site. The land around the bridge is wooded. Apartments built in the 1970s and a school are among the few buildings in the immediate area. NJ 5 was formerly NJ 10 and was one of the original 15 state highways legislated in 1917.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Potential trolley line Historic District, May contribute.

CONSULT DOCUMENTS SHPO Letter 03/12/01

SUMMARY 0207151

National Register Consultation Status: Not Individually Eligible; May be a contributing element of a potential trolley line historic district

The 3-span slab bridge supported on concrete abutments and concrete pier bents was constructed on a large skew. The sidewalks are bounded by plain parapets and a utility pipe is hung from the underside of the slab. The span is a representative example of a common bridge type. The Public Service Railroad [P.S.E. & G. trolley] right of way may have historic significance and be eligible for listing in the National Register of Historic Places as a linear historic district. Future evaluation efforts should consider the bridge in the context of the potential district.

INFOR MATION

PHOTO: 211:30-31 (02/92 JPH (5/96)) REVISED BY (DATE): QUAD: Central Park

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0208150 **CO** BERGEN **OWNER** NJDOT **MILEPOINT** 5.3

NAME & FEATURE INTERSECTED NJ 7 OVER PASSAIC RIVER **FACILITY** NJ 7

TOWNSHIP NORTH ARLINGTON BOROUGH

TYPE SINGLE LEAF BASCULE **DESIGN** HEEL TRUNNION **MATERIAL** Steel

 # SPANS 4 **LENGTH** 336 ft **WIDTH** 38.7 ft

CONSTRUCTION DT 1914 **ALTERATION DT** Demolished **SOURCE** PLANS

DESIGNER/PATENT STRAUSS BASCULE BRIDGE COMPANY **BUILDER** STRAUSS BASCULE BRIDGE CO

SETTING / CONTEXT The span carries a 2-lane city street over a major river between the towns of Belleville and North Arlington. The area is a mix of post-World War II commercial buildings and 1920s residential. NJ Route 21 borders the river. A bridge has spanned the Passaic at this historically important crossing since 1790. The bridge is located at the junction of the boundaries of Bergen, Essex, and Hudson Counties.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Bridge was Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 03/12/01

SUMMARY The heel trunnion single-leaf bascule bridge with a riveted Warren thru truss main span and riveted Warren pony truss approach spans is supported on concrete substructure. The original decorative metal railing is extant. The open grid metal deck on the main span was added in 1972, and the operators' house was rebuilt in 1990. The span is well-preserved and technologically significant example of an uncommon bascule bridge type constructed by a prominent bridge company. It is individually eligible for listing in the National Register of Historic Places under Criterion C.

INFOR MATION

Bibliography:
NJDOT (Plans), personal interview with bridge tender, Movable and Long-Span Steel Bridges, by Hoole and Kinne, McGraw Hill Book Co., Inc., 1923.

Physical Description: The Strauss heel trunnion single-leaf bascule bridge supported on a concrete substructure is composed of a riveted Warren through truss main span of 116' and three 60' approach spans to the east side of the main span. The 2 easternmost approach spans are riveted Warren pony trusses and the span adjacent to the bascule span was replaced with a multi-girder span in the 1980's. The most prominent feature of the bridge is the span's massive overhead steel tower structure that includes the supporting truss for the overhead concrete counterweight, and the mechanical pivots, connecting struts, and the operating struts. These exposed operating mechanisms as well as the trusses and the decorative metal railings appear to be unaltered. The floor beams appear to be original but the stringers and the metal grate deck were replaced in 1972. In 1990 the operators house, cantilevered off the south side of the bascule span at the location of the tower structure, collapsed and fell into the river. It was replaced with an aluminum building. The gate keepers house is located on the north side of the bridge on the approach span that is adjacent to the bascule span. The original house was located on the north east approach but was moved onto the span at an unknown date due to a property dispute.

Historical and Technological Significance: The Strauss heel trunnion bascule bridge, constructed in 1914, is a well-preserved example of an uncommon bridge type in New Jersey, and it is technologically significant because it is a patented design by The Strauss Bascule Bridge Company of Chicago, a prominent bridge company that held several patents for bascule bridge designs. The heel trunnion is a variation on the articulated parallel-moving counterweight design developed by Joseph B. Strauss in 1905. The distinctive feature of this design is the above deck steel structure composed of the operating mechanisms for the bascule span and their support structures, and the overhead supporting truss for the counterweight. The span pivots about the main trunnion which is located at the base of the truss end inclined member. The operation is initiated by a motorized pinion that engages the rack on the operating strut. The operating strut is pin-connected to the top of the truss inclined end member. This pin, one of 4 pivot points on the operating structure, translates with the strut, rotating the span as it translates. The 4 pivot points are connected by struts that form a parallelogram. 2 of the pivots translate together and the 2 trunnions remain stationary so that, when in operation, the parallelogram closes and the counterweight, which pivots about the counterweight trunnion through its supporting truss members, moves downward. This complex structural network maintains a condition of constant balance during operation of the bascule. An illustrated explanation of the bascule operation is attached.
Known as the Rutgers bridge named for Anthony Rutgers who owned the first bridge crossing at this location, a wooden toll bridge constructed in 1790, the history of crossings at this location is outlined by a Belleville Historical Society Marker at the southwest approach. The first timber bridge was destroyed by flood in 1841. A new span was built in 1843 that was sold to the three counties in 1851 and became a free bridge. An iron bridge replaced this span in 1879 and remained until the present bridge was constructed.

PHOTO: 209:29-32, 219: (02/92) REVISED BY (DATE): QUAD: Orange

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US
November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0209150 **CO** BERGEN **OWNER** NJDOT **MILEPOINT** 0.1

NAME & FEATURE INTERSECTED US 9W OVER I-95, US 1&9, US 46, & NJ 4 **FACILITY** US 9W

TOWNSHIP FORT LEE BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 5 **LENGTH** 425 ft **WIDTH** 60 ft

CONSTRUCTION DT 1930 **ALTERATION DT** 1964 **SOURCE** NJDOT

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER** GEORGE M. BREWSTER & SON

SETTING / CONTEXT The 5-span, 4-lane bridge with sidewalks spans the depressed multi-lane approach to the George Washington Bridge (GWB). The overpass and three other overpasses to the east (3800004,5,9) were built in 1930-1 in coordination with the GWB in order to carry existing traffic patterns over the approach. The approach itself does not constitute a historic corridor because it is not technologically innovative and has lost its integrity of setting with numerous modern intrusions including high rises.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Historic District Status Unresolved.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased steel stringer bridge with metal railings and concrete abutments and piers was built in 1930 as a three span overpass. In 1964, as part of the GWB lower level expansion, the 2nd and 4th spans from the north were added, and a steel stringer span (0202161) was added to the south. The altered overpass is not technologically or historically significant because it is an example of a typical NJ State Hwy. Dept. solution to separating traffic in a congested area.

INFOR MATION

PHOTO: 218:31-33 (02/92) REVISED BY (DATE): QUAD: Central Park

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0211I86 **CO** BERGEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MARKET STREET OVER PASSAIC RIVER **FACILITY** MARKET STREET

TOWNSHIP ELMWOOD PARK BOROUGH

TYPE DECK GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 6 **LENGTH** 367 ft **WIDTH** 30 ft

CONSTRUCTION DT 1923 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER** BROADHURST COMPANY

SETTING / CONTEXT The bridge carries a 2-lane connector road (formerly State Highway 10) and sidewalks adjacent to I-80 over a major river in an undistinguished industrial area. The Marcal paper plant is located to one side of the bridge.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased deck girder and floorbeam bridge supported on concrete abutments and piers has decorative reticulated pattern concrete balustrades at the cantilevered sidewalks. A large concrete storm drain passes through the west abutment. Guide rails have been added along both curb lines. The bridge is a representative example of a common type, and it is neither technologically nor historically distinguished.

INFOR MATION

PHOTO: 207:13-15 (02/92) REVISED BY (DATE): QUAD: Paterson

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0214152 **CO** BERGEN **OWNER** NJDOT **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED ESSEX STREET OVER NJ 17 **FACILITY** ESSEX STREET

TOWNSHIP MAYWOOD BOROUGH

TYPE THRU GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 150 ft **WIDTH** 40 ft

CONSTRUCTION DT 1931 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries a busy 4-lane collector road over NJ 17, a 4-lane divided highway in a post-World War II industrial and commercial area. The setting is not distinguished.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 2-span encased thru girder bridge supported on a concrete substructure was built on a skew. The original metal railing with concrete posts at the sidewalks is intact. The span is typical of the well-detailed State Highway Department overpasses produced in the pre-WWII era with panelled wingwalls and pilasters. An example of a common bridge type and one of over 23 pre-WWII thru girder bridges in the county, the span is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 213:37-38 (02/92) REVISED BY (DATE): QUAD: Hackensack

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0214157 **CO** BERGEN **OWNER** NJDOT **MILEPOINT** 9.95

NAME & FEATURE INTERSECTED NJ 17 OVER NEW YORK, SUSQUEHANNA & WESTERN RR **FACILITY** NJ 17

TOWNSHIP ROCHELLE PARK TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 123 ft **WIDTH** 50 ft

CONSTRUCTION DT 1932 **ALTERATION DT** 1985ca **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries NJ 17 (formerly NJ 2), a 4-lane barrier-divided highway and sidewalks, over a spur of the New York, Susquehanna and Western Railroad. The bridge borders a covered land fill to one side and a 1980s retirement home.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 3-span encased stringer bridge supported on concrete abutments and open concrete piers has had a new parapet with chain-link fence and a new sidewalk placed along the west side. The span is an altered example of a common 1920s and 1930s overpass bridge type designed by the NJ State Highway Department. The bridge is similar to the nearby NJ 17 bridge (0214158) over the main branch of the same line and is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 213:43-44 (02/92) REVISED BY (DATE): QUAD: Hackensack

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0214158 **CO** BERGEN **OWNER** NJDOT **MILEPOINT** 9.95

NAME & FEATURE INTERSECTED NJ 17 OVER NEW YORK, SUSQUEHANNA & WESTERN RR **FACILITY** NJ 17

TOWNSHIP ROCHELLE PARK TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 156 ft **WIDTH** 50 ft

CONSTRUCTION DT 1931 **ALTERATION DT** 1985ca **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries NJ 17 (formerly NJ 2), a 4-lane barrier-divided highway over the main line of the New York, Susquehanna and Western Railroad. The bridge is bordered by a covered landfill to the east and 1980s apartments to the west. The railroad right-of-way was developed in the 1870s by the New York, Susquehanna, and Western Railroad, which was purchased by the Erie Railroad in 1898.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 3-span encased stringer bridge supported on concrete abutments and open concrete pier bents has a new concrete parapet with a chain-link fence and a new sidewalk placed along the west side. The bridge is a representative example of a common 1920s and 1930s NJ State Highway Department railroad overpass design, and is not historically or technologically distinguished. A similar bridge (0214157) carries NJ 17 over a nearby spur of the same rail line.

INFOR MATION

PHOTO: 213:39,42 (02/92) REVISED BY (DATE): QUAD: Hackensack

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0214159 **CO** BERGEN **OWNER** NJDOT **MILEPOINT** 9.98

NAME & FEATURE INTERSECTED NJ 17 OVER CENTRAL AVENUE **FACILITY** NJ 17

TOWNSHIP ROCHELLE PARK TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 60 ft **WIDTH** 50 ft

CONSTRUCTION DT 1931 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries NJ 17, a 4-lane barrier-divided highway with sidewalks over a 2-lane collector road in a mixed post-World War II residential and light industrial area. The setting is not distinguished.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased stringer bridge supported on scored concrete abutments and wing walls has standard design concrete balustrades. A modern concrete median barrier separates the 2-directional highway traffic. The well-proportioned span is an example of a common bridge type produced by the State Highway Department. One of over 65 pre-WWII stringer bridges in the county, the span is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 213:40-41 (02/92) REVISED BY (DATE): QUAD: Hackensack

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0214160 **CO** BERGEN **OWNER** NJDOT **MILEPOINT** 10.5

NAME & FEATURE INTERSECTED NJ 17 OVER PASSAIC AVENUE **FACILITY** NJ 17

TOWNSHIP ROCHELLE PARK TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 52 ft **WIDTH** 50 ft

CONSTRUCTION DT 1931 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries NJ 17 (formerly NJ 2), a 4-lane barrier-divided highway, over a busy collector road in a mixed commercial and residential area. Access to NJ 17 is provided at one corner of the bridge. An 1890s house stands adjacent to the bridge, and a 1990s office building is located across the street. The remainder of the houses and businesses in the area are post-World War II. The setting is not distinguished.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased stringer bridge supported on concrete abutments has standard design concrete balustrades. The wingwalls and pilasters at abutment corners are panelled. The bridge is a representative example of the well-detailed State Highway Department overpass designs of the pre-WWII era. It is a common type and one of over 65 stringer bridges in the county built prior to 1946. The bridge is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 213:1-2 (02/92) REVISED BY (DATE): QUAD: Hackensack

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0214161 **CO** BERGEN **OWNER** NJDOT **MILEPOINT** 10.55

NAME & FEATURE INTERSECTED NJ 17 OVER PLEASANT AVENUE **FACILITY** NJ 17

TOWNSHIP ROCHELLE PARK TOWNSHIP

TYPE THRU GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 105 ft **WIDTH** 49.8 ft

CONSTRUCTION DT 1932 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries NJ 17, a 4-lane divided highway with shoulders and sidewalks, over a 2-lane local road and the abandoned right-of-way of the Hudson River Traction Company trolley tracks. The surrounding area is mixed mid-20th century light industrial and residential. The setting is not distinguished.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 2-span encased thru girder bridge is supported on scored concrete abutments and column piers. The original metal railing with concrete posts at the cantilevered sidewalks is intact. Modern concrete barriers were placed in front of the girders. An example of a common bridge type with detailing typical of State Highway Department overpasses of the pre-WWII era, and one of over 23 thru girder bridges in the county, the bridge is not technologically or historically distinguished.

INFOR MATION

PHOTO: 213:5-6 (02/92) REVISED BY (DATE): QUAD: Hackensack

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0214162 **CO** BERGEN **OWNER** NJDOT **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED FARVIEW AVENUE OVER NJ 17 **FACILITY** FARVIEW AVENUE

TOWNSHIP PARAMUS BOROUGH

TYPE THRU GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 104 ft **WIDTH** 30 ft

CONSTRUCTION DT 1932 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries a 2-lane collector road with a turning lane and sidewalks over NJ 17, a 4-lane divided highway, formerly State Route 2. The bridge is located in a mixed commercial/light industrial and residential area that includes a major mall. The buildings in the area are post-World War II construction. The setting is not distinguished.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 11/28/90

SUMMARY The encased thru girder bridge is supported on concrete abutments and has curved wingwalls. Bush-hammered finish concrete pilasters stand at each abutment corner. Original metal railings with concrete posts are intact. A chain-link fence was placed on the cantilevered sidewalks in front of the railing. An example of a well-detailed state overpass of a common type, and one of over 23 pre-WWII thru girder bridges in the county, the bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 213:3-4 (02/92) REVISED BY (DATE): QUAD: Hackensack

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0215150 **CO** BERGEN **OWNER** NJDOT **MILEPOINT** 11.4

NAME & FEATURE INTERSECTED NJ 17 OVER NJ 4 **FACILITY** NJ 17

TOWNSHIP PARAMUS BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 98 ft **WIDTH** 76 ft

CONSTRUCTION DT 1931 **ALTERATION DT** 1981 **SOURCE** PLANS

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries NJ 17, a 5-lane barrier-divided highway, over NJ 4, a 6-lane barrier-divided highway. It is located at a congested intersection in the middle of a shopping corridor with a major mall adjacent to the bridge. The structures in the area are predominantly post-World War II. The setting is not distinguished.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased stringer bridge retains its original appearance with a standard design balustrade on the west side only. The east side was widened with 2 stringers and a plain concrete parapet in 1981. An altered example of a common bridge type, and one of over 65 pre-World War II stringer bridges in the county, the span is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 215:37-38,41 (02/92) REVISED BY (DATE): QUAD: Hackensack

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0216150 **CO** BERGEN **OWNER** NJDOT **MILEPOINT** 13.95

NAME & FEATURE INTERSECTED NJ 17 OVER SPROUT BROOK **FACILITY** NJ 17

TOWNSHIP PARAMUS BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 47 ft **WIDTH** 108 ft

CONSTRUCTION DT 1933 **ALTERATION DT** 1955 **SOURCE** PLANS

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries NJ 17, a 6-lane barrier-divided highway, over a small brook in a commercial area developed from the early 1950s to the present. The setting is not distinguished.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased stringer bridge supported on concrete abutments was widened in kind to both sides in 1955. Modern steel railing with concrete end posts were placed on the bridge when the widening took place. One of over 65 stringer bridges in the county built prior to 1946, the altered bridge is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 215:35-36 (02/92) REVISED BY (DATE): QUAD: Hackensack

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0218154 **CO** BERGEN **OWNER** NJDOT **MILEPOINT** 23.25

NAME & FEATURE INTERSECTED NJ 17 SB OVER NEW JERSEY TRANSIT (M.P. 27.91) **FACILITY** NJ 17 SOUTHBOUND

TOWNSHIP RAMSEY BOROUGH

TYPE THRU GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 93 ft **WIDTH** 50 ft

CONSTRUCTION DT 1933 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries the 3 southbound lanes of NJ 17, a shoulder and a sidewalk over NJ Transit railroad tracks in a predominantly post-World War II light industrial area. The setting is not distinguished.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased thru girder bridge supported on scored concrete abutments has a concrete balustrade on one side and a metal railing with concrete posts on the other. The balustrade and railing are standard designs. The span is an example of the bridge designs produced by the State Highway Dept. in the pre-WWII era. One of over 23 thru girder bridges in the county built prior to 1946, the span is a common bridge type and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 208:34-36, 220: (02/92) REVISED BY (DATE): QUAD: Ramsey

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0218158 **CO** BERGEN **OWNER** NJDOT **MILEPOINT** 24.09

NAME & FEATURE INTERSECTED NJ 17 SB OVER TRIBUTARY OF RAMAPO RIVER **FACILITY** NJ 17 SOUTHBOUND

TOWNSHIP MAHWAH TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 22 ft **WIDTH** 50 ft

CONSTRUCTION DT 1933 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries the 3 south bound lanes of a 6-lane divided highway over a small stream set in an area of light industry dating between the 1960s and 1980s. The setting is not distinguished.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The slab bridge set on concrete substructure has a standard design concrete balustrade. The bridge is a representative example of a common NJ State Highway Department pre-WWII bridge type, and is neither technologically nor historically distinguished.

INFOR MATION

PHOTO: 207:37-40 (02/92) REVISED BY (DATE): QUAD: Ramsey

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0218162 **CO** BERGEN **OWNER** NJDOT **MILEPOINT** 25.15

NAME & FEATURE INTERSECTED NJ 17 SB OVER US 202 & RAMAPO RIVER **FACILITY** NJ 17 SOUTHBOUND

TOWNSHIP MAHWAH TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 4 **LENGTH** 250 ft **WIDTH** 50 ft

CONSTRUCTION DT 1933 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries NJ 17 southbound, a 3-lane highway over an arterial road and a major river. The bridge is adjacent to a more modern highway bridge carrying NJ 17 northbound. The area is post-World War II commercial with a 1980s hotel to one side of the bridge. The setting is not distinguished.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 4-span encased stringer bridge is set on a concrete substructure. The concrete balustrades carry decorative concrete lampposts with replacement luminaries at the bridge corners. The pier end columns have decorative pilasters that are continuous with the balustrade posts. The span is a representative example of the architectonic designs produced by the State Highway Department in the pre-WWII era. It is neither technologically nor historically distinguished.

INFOR MATION

PHOTO: 208:5-8 (02/92) REVISED BY (DATE): QUAD: Ramsey

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0220150 **CO** BERGEN **OWNER** NJDOT **MILEPOINT** 64.05

NAME & FEATURE INTERSECTED US 46 OVER RIVER DRIVE **FACILITY** US 46

TOWNSHIP GARFIELD CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 67 ft **WIDTH** 60 ft

CONSTRUCTION DT 1936 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries US 46, a 4-lane barrier-divided highway, over a 2-lane collector road in a mixed commercial and residential area developed in the 1950s to 1960s. US 46 was designated NJ 6 prior to a 1953 route renumbering and was constructed as a result of a 1927 act expanding the system of state highways in NJ.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95, Opinion 02/21/97.

SUMMARY The encased stringer bridge supported on concrete substructure has standard design concrete balustrades and panelled pilasters at the bridge corners. Guide rail has been placed in front of the balustrades. An example of a common type and one of over 65 pre-World War II stringer bridges in the county, the span is not historically or technologically noteworthy.

INFOR MATION

PHOTO: 216:32-33 (02/92) REVISED BY (DATE): QUAD: Paterson

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0220153 **CO** BERGEN **OWNER** NJDOT **MILEPOINT** 65.27

NAME & FEATURE INTERSECTED US 46 OVER MIDLAND AVENUE **FACILITY** US 46

TOWNSHIP GARFIELD CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 58 ft **WIDTH** 70.4 ft

CONSTRUCTION DT 1936 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries US 46, a 4-lane divided highway with modern median barriers over a 2-lane collector road in a mixed residential and commercial area. The structures in the area date from the 1920s to the 1950s. US 46 was designated NJ 6 prior to a 1953 route renumbering and was constructed as a result of a 1927 act expanding the system of state highways in NJ.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95, Opinion 02/21/97.

SUMMARY The encased stringer bridge supported on concrete abutments has standard design concrete balustrades and panelled concrete pilasters at each abutment corner. The span is an example of the well-detailed overpass designs produced by the State Highway Department during the period of expansion in the 1920s and 1930s. One of 15 similar spans on US 46 and one of over 65 pre-WWII stringer bridges in the county, the span is a common type and neither historically nor technologically distinguished.

INFOR MATION

PHOTO: 216:34-35 (02/92) REVISED BY (DATE): QUAD: Hackensack

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0220154 **CO** BERGEN **OWNER** NJDOT **MILEPOINT** 65.41

NAME & FEATURE INTERSECTED US 46 OVER NEW JERSEY TRANSIT **FACILITY** US 46

TOWNSHIP SADDLE BROOK TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 151 ft **WIDTH** 70 ft

CONSTRUCTION DT 1936 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries US 46, a 4-lane highway with sidewalks and modern median barriers, over NJ Transit, originally the Erie-Lackawanna RR. An industrial concrete plant dating to the 1950s is contiguous to the bridge and post-World War II construction commercial buildings line US 46. US 46 was designated NJ 6 prior to a 1953 route renumbering and was constructed as a result of a 1927 act expanding the system of state highways in NJ.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95, Opinion 02/21/97.

SUMMARY The encased stringer bridge supported on concrete spill thru abutments and open concrete piers has cantilevered sidewalks bound by concrete balustrades of standard design. The span is an example of a common NJ State Highway Department railroad overpass design and is not historically associated with the development of the rail line. It is one of over 65 stringer bridges in the county, and is not technologically or historically distinguished.

INFOR MATION

PHOTO: 216:36-38 (02/92) REVISED BY (DATE): QUAD: Hackensack

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0220155 **CO** BERGEN **OWNER** NJDOT **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED OUTWATER LANE OVER US 46 **FACILITY** OUTWATER LANE

TOWNSHIP LODI BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 103 ft **WIDTH** 30 ft

CONSTRUCTION DT 1936 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries a 2-lane collector road and sidewalks over US 46, a 4-lane divided highway. The surrounding area is mixed use with undistinguished post-WWII residential and commercial development. US 46 was designated as NJ 6 prior to a 1953 route renumbering and was constructed as a result of a 1927 act expanding the system of state highways in NJ.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Historic District Status Unresolved.

CONSULT DOCUMENTS SHPO Letter 6/30/95, Opinion 02/21/97.

SUMMARY The encased stringer bridge supported on a concrete substructure has standard design concrete balustrades and panelled pilasters at the abutment corners and pier face. The span is an example of the well-detailed State Highway Department overpasses produced during the period of expansion in the 1920s and 1930s. One of 15 similar bridges on US 46 and one of over 65 stringer bridges in the county, the bridge is a common type and is neither technologically innovative nor historically noteworthy.

INFOR MATION

PHOTO: 216:39-41 (02/92) REVISED BY (DATE): QUAD: Hackensack

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0220157 **CO** BERGEN **OWNER** NJDOT **MILEPOINT** 66.5

NAME & FEATURE INTERSECTED US 46 OVER SADDLE RIVER **FACILITY** US 46

TOWNSHIP LODI BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 104 ft **WIDTH** 68 ft

CONSTRUCTION DT 1936 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries US 46, a 4-lane divided highway with modern median barriers, over a small river in a mixed residential and commercial area that includes a car dealership and multi-level apartment buildings. The structures in the area date from the 1950s to the present. US 46 was designated as NJ 6 prior to a 1953 route renumbering and was constructed as a result of a 1927 act expanding the system of state highways in NJ.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95, Opinion 02/21/97.

SUMMARY The encased stringer bridge supported on a concrete substructure has standard design concrete balustrades. Decorative concrete pilasters stand at abutment corners and at the pier faces. The span is an example of the well-detailed State Highway Department overpasses produced in the period of expansion during the 1920s and 1930s. One of 15 similar bridges along US 46 and one of over 65 stringer bridges in the county, the span is neither technologically nor historically distinguished.

INFOR MATION

PHOTO: 216:42-43 (02/92) REVISED BY (DATE): QUAD: Hackensack

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0220158 **CO** BERGEN **OWNER** NJDOT **MILEPOINT** 66.57

NAME & FEATURE INTERSECTED US 46 OVER MAIN STREET **FACILITY** US 46

TOWNSHIP LODI BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 47 ft **WIDTH** 68 ft

CONSTRUCTION DT 1936 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries US 46, a 4-lane divided highway with modern median barriers, over a 2-lane collector road with sidewalks in a mixed residential and commercial area. The surrounding neighborhood consists of single-family homes dating from the 1920s and 1930s and local businesses dating from the 1940s to the present. US 46 was designated as NJ 6 prior to a 1953 route renumbering, and was constructed as the result of a 1927 act expanding the system of state highways in NJ.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95, Opinion 02/21/97.

SUMMARY The encased stringer bridge supported on concrete abutments has standard design concrete balustrades and panelled concrete pilasters at the abutment corners. The span is an example of the well-detailed State Highway Department overpass designs produced during the period expansion in the 1920s and 1930s. One of over 15 similar bridges along US 46 and one of over 65 stringer bridges in the county, the span is a common type and is neither technologically innovative nor historically noteworthy.

INFOR MATION

PHOTO: 216:1-3 (02/92) REVISED BY (DATE): QUAD: Hackensack

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0220161 **CO** BERGEN **OWNER** NJDOT **MILEPOINT** 67.65

NAME & FEATURE INTERSECTED US 46 OVER VALLEY BOULEVARD **FACILITY** US 46

TOWNSHIP HASBROUCK HEIGHTS BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 85 ft **WIDTH** 70 ft

CONSTRUCTION DT 1936 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries US 46, a 4-lane divided highway with modern median barriers, over a 2-lane collector road in a mixed area of single family homes and professional office buildings. The structures in the area date from the 1950s to the present. US 46 was designated as NJ 6 prior to a 1953 route renumbering and was constructed as the result of a 1927 act expanding the system of state highways in NJ.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95, Opinion 02/21/97.

SUMMARY The 3-span encased stringer bridge supported on concrete substructure has concrete slab approach spans and standard design concrete balustrades. The span is an example of the well-detailed overpass designs produced by the State Highway Department during the period of expansion in the 1920s and 1930s. One of 15 similar spans on US 46 and one of over 65 pre-WWII stringer bridges in the county, the span is a common type and neither historically distinguished nor technologically innovative.

INFOR MATION

PHOTO: 216:4-6 (02/92) REVISED BY (DATE): QUAD: Weehawken

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0221150 **CO** BERGEN **OWNER** NJDOT **MILEPOINT** 67.95

NAME & FEATURE INTERSECTED US 46 OVER TERRACE AVENUE **FACILITY** US 46

TOWNSHIP HASBROUCK HEIGHTS BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 57 ft **WIDTH** 50 ft

CONSTRUCTION DT 1936 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries US 46, a 4-lane divided highway with modern median barriers, over a 2-lane collector road in a residential neighborhood dating from the 1920s to the 1950s. The land bordering US 46 is undeveloped and wooded. US 46 was designated as NJ 6 prior to a 1953 route renumbering and was constructed as a result of a 1927 act expanding the system of state highways in NJ.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95, Opinion 02/21/97.

SUMMARY The encased stringer bridge supported on concrete abutments has standard design concrete balustrades. Panelled concrete pilasters stand at each abutment corner. The span is an example of the well-detailed State Highway Department overpasses produced during the period of expansion in the 1920s and 1930s. One of 15 similar bridges along US 46 and one of over 65 stringer bridges in the county, the span is a common type and is neither technologically innovative nor historically noteworthy.

INFOR MATION

PHOTO: 216:7-8 (02/92) REVISED BY (DATE): QUAD: Weehawken

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0221151 **CO** BERGEN **OWNER** NJDOT **MILEPOINT** 68.05

NAME & FEATURE INTERSECTED US 46 OVER NJ 17 SB **FACILITY** US 46

TOWNSHIP HASBROUCK HEIGHTS BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 82 ft **WIDTH** 50 ft

CONSTRUCTION DT 1936 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries US 46, a 4-lane divided highway with sidewalks and modern median barriers, over the 2 southbound lanes of NJ 17, a divided highway. The land bordering US 46 near the bridge is undeveloped. The area along NJ 17 is mixed residential, commercial and professional dating from the 1950s to the present. US 46 was constructed as a result of a 1927 act expanding the system of state highways. Prior to 1953, US 46 was designated as NJ 6 and NJ 17 was designated as NJ 2.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95, Opinion 02/21/97.

SUMMARY The 3-span bridge has a stringer main span with slab approach spans and is supported on a concrete substructure. The concrete balustrades are of standard design. Panelled pilasters add detail to the abutment corners and end pier column faces. The span is an example of the well-detailed overpasses designed by the State Highway Department in the pre-WWII era. One of 15 similar bridges on US 46 and of over 65 stringer bridges in the county, the span is a common type and is not distinguished.

INFOR MATION

PHOTO: 216:9-10 (02/92) REVISED BY (DATE): QUAD: Weehawken

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0221152 **CO** BERGEN **OWNER** NJDOT **MILEPOINT** 68.15

NAME & FEATURE INTERSECTED US 46 OVER NJ 17 NB **FACILITY** US 46

TOWNSHIP HASBROUCK HEIGHTS BOROUGH

TYPE DECK GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 82 ft **WIDTH** 54 ft

CONSTRUCTION DT 1934 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries US 46, a 4-lane divided highway with modern median barriers, over the 2 northbound lanes of NJ 17, a divided highway. The land bordering US 46 near the bridge is undeveloped. The area along NJ 17 is mixed residential, commercial, and professional dating from the 1950s to the present. US 46 was constructed as a result of a 1927 act expanding the system of state highways. Prior to a 1953 route renumbering, US 46 was designated as NJ 6 and NJ 17 was designated as NJ 2.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95, Opinion 02/21/97.

SUMMARY The encased deck girder and floorbeam bridge supported on a concrete substructure is built on a large skew. The concrete balustrades are of standard design. Scored abutments with bush-hammered finished pilasters at abutment corners are typical architectural treatments that characterize the State Highway Department overpasses of the pre-WWII era. One of at least 4 deck girder bridges in the county, the span is a common type and is not technologically or historically distinguished.

INFOR MATION

PHOTO: 216:11-12 (02/92) REVISED BY (DATE): QUAD: Weehawken

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0221153 **CO** BERGEN **OWNER** NJDOT **MILEPOINT** 68.25

NAME & FEATURE INTERSECTED US 46 OVER NY-NJ RAILROAD & GREEN STREET **FACILITY** US 46

TOWNSHIP HASBROUCK HEIGHTS BOROUGH

TYPE MULTI GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 4 **LENGTH** 238 ft **WIDTH** 78 ft

CONSTRUCTION DT 1934 **ALTERATION DT** 1963 **SOURCE** NJDOT/INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries US 46, a 4-lane divided highway with sidewalks, over a railroad and a 2 lane collector road near Teterboro Airport in an area of predominantly light industry dating from the 1950s to the present. US 46 was designated as NJ 6 prior to a 1953 route renumbering and was constructed as a result of a 1927 act expanding the system of state highways in NJ.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95, Opinion 02/21/97.

SUMMARY The 4-span viaduct consists of an encased multi-girder main span and encased stringer approach spans supported on concrete substructure. In 1963, the bridge was widened to each side with steel stringers. New parapets and railings were added and guide rails were added at the curblines. An altered example of a common type, the bridge is neither technologically nor historically distinguished.

INFOR MATION

PHOTO: 216:13-14 (02/92) REVISED BY (DATE): QUAD: Weehawken

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0221155 **CO** BERGEN **OWNER** NJDOT **MILEPOINT** 70.3

NAME & FEATURE INTERSECTED US 46 OVER HACKENSACK ROAD, CONRAIL, & HOMESTEAD PLACE **FACILITY** US 46

TOWNSHIP LITTLE FERRY BOROUGH

TYPE DOUBLE LEAF BASCULE **DESIGN** TRUNNION **MATERIAL** Steel

 # SPANS 17 **LENGTH** 1549 ft **WIDTH** 50 ft

CONSTRUCTION DT 1934 **ALTERATION DT** 1968, 1969, 1973 **SOURCE** NJDOT

DESIGNER/PATENT WADDELL & HARDESTY **BUILDER** RODGERS & HAGGERTY

SETTING / CONTEXT The viaduct carries a 4-lane highway with sidewalks over a major river, NYS&W and Conrail tracks, and a local road in an area of post-World War II commercial and light industrial structures. Residential areas along the river in the vicinity of the bridge date from the 1920s to the 1980s. US 46 was designated as NJ 6 prior to a 1953 route renumbering and was constructed as a result of a 1927 act expanding the system of state highways in NJ.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Opinion 02/21/97, Letter 03/12/01.

SUMMARY The double-leaf deck-girder trunnion bascule bridge has 16 deck girder with encased floorbeams approach spans. The operators' houses appear unaltered and major repairs have been limited to deck reconstruction and the bascule locks (1968-73). Noted bridge engineers Waddell and Hardesty designed the 185' bascule span for the NJ State Highway Department. It is a technologically distinguished, historically significant, and well-preserved example of an increasingly rare bridge type, which is eligible for listing in the National Register of Historic Places under Criterion C.

INFOR MATION

Bibliography:
NJDOT (Plans)
New Jersey Office of Historic Preservation Historic Sites Inventory # 0250-1, 0230-4
Dictionary of American Biography, volume XI, Charles Scribner's Sons, New York, 1958.

Physical Description: The 1549' long double leaf bascule deck girder bridge supported on a concrete substructure has 16 approach spans composed of deck girders with encased floor beams and stringers. According to plans, the bascule span measures 185' center to center of trunnions and piers, and the variable depth bascule girders are spaced 53' on center. The road measures 50' between curbs. Two 8' concrete sidewalks are bounded by metal railing on the bascule span and concrete balustrades on the approach spans. Four octagonal concrete towers with pyramid roofs and decorative light standards are located at the corners of the bascule span. The tower at the northwest corner of the span is taller than the others and houses the operating mechanisms. The northeast and southwest towers are the gate tender's houses, and the tower at the southeast is a storage house. Alterations to the bridge are limited to an approach span deck reconstruction in 1973, redecking of the bascule span in 1969, and reconstruction of the center lock in 1968.

Historical and Technological Significance: The double leaf bascule deck girder bridge was constructed by Waddell and Hardesty Consulting Engineers for the New Jersey State Highway Department in 1934. The partnership of John Waddell and Shortridge Hardesty, formed in 1927, was noted for their innovative bridge designs. They were responsible for the Mississippi Highway Bridge, a 3,720-foot cantilever at Cairo, Ill., across the Mississippi (1929); the Anthony Wayne High Level Bridge at Toledo, Ohio, a suspension span across the Maumee River (1931); and they were one of the consulting engineers on several major bridges in New York City, including the Outerbridge Crossing and the Goethals Bridge in 1928, and the Marine Parkway Bridge across Rockaway Inlet, with a 540-foot lift span, in 1936-37. John Waddell, a native of Canada and one of the United States best-known civil engineers, opened his first consulting engineering office in Kansas City Mo. after returning from Japan where he held the position of professor of civil engineering at the Imperial University of Tokyo from 1882 to 1886. In the early 1890s Waddell independently invented and successfully introduced the large-scale high-clearance vertical-lift bridge in the United States which became widely used, especially for railroad crossings over waterways. Waddell published many papers and books on engineering including The Designing of Ordinary Iron Highway Bridges (1884), Bridge Engineering (2 vols., 1916), and Economics of Bridgework (1921).

The bridge spans the Hackensack River, an important navigable waterway in northern New Jersey. In early NJ history, the town of Little Ferry was an important termination of Indian trails and a river crossing. When the Europeans arrived in the area they established a ferry crossing here which gave the area its name. The first bridge in the town across the Hackensack was erected in 1812. The current bridge replaced a small metal truss bridge located at a site further to the south.

The bridge was constructed to carry State Highway Route 6 as part of the expansion of the state highway system in the 1920s and 1930s. The bascule bridge was preferred over the swing spans because they could be constructed with longer span lengths. The span is one of only 2 double leaf bascule spans constructed in the 1930s in Bergen County. 0222150, constructed to carry the same state highway over Overpeck Creek in Ridgefield Park Village, has been altered and no longer functions as a bascule bridge. The span is technologically significant as an example of an uncommon type, and it is the only remaining operational span of its type in the county. The well-preserved span is historically significant because it was designed by a prominent civil engineer.

Boundary Description and Justification: The bridge is individually eligible, in and of itself, including superstructure, operators' houses and machinery, substructure, and right-of-way over the river.

PHOTO: 216:15-18 (02/92 JPH (5/96)) REVISED BY (DATE): QUAD: Weehawken

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0221156 **CO** BERGEN **OWNER** NJDOT **MILEPOINT** 70.72

NAME & FEATURE INTERSECTED US 46 OVER TEANECK ROAD **FACILITY** US 46

TOWNSHIP RIDGEFIELD PARK VILLAGE

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 46 ft **WIDTH** 50 ft

CONSTRUCTION DT 1934 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries US 46, a 4-lane highway, over a 2-lane collector road in a mixed residential and commercial area of single-family homes which date from the 1890s to the 1920s, and local businesses which date from the 1950s to present. US 46 was designated as NJ 6 prior to a 1953 route renumbering, and was constructed as the result of a 1927 act expanding the system of state highways in NJ.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95, Opinion 02/21/97.

SUMMARY The encased stringer bridge supported on concrete abutments has standard design concrete balustrades. The panelled bush-hammered finish concrete pilasters at the abutment corners are characteristic of the overpasses designed by the State Highway Department in the pre-WWII era. One of 15 similar spans on US 46 and one of over 65 stringer bridges in the county, the span is a common bridge type and is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 217:29-30 (02/92) REVISED BY (DATE): QUAD: Weehawken

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0222150 **CO** BERGEN **OWNER** NJDOT **MILEPOINT** 71.35

NAME & FEATURE INTERSECTED US 46 OVER OVERPECK CREEK **FACILITY** US 46

TOWNSHIP RIDGEFIELD PARK VILLAGE

TYPE DOUBLE LEAF BASCULE **DESIGN** **MATERIAL** Steel

 # SPANS 6 **LENGTH** 510 ft **WIDTH** 87 ft

CONSTRUCTION DT 1928 **ALTERATION DT** 1951 **SOURCE** PLANS

DESIGNER/PATENT KELLER & HARRINGTON **BUILDER**

SETTING / CONTEXT The bridge carries US 46, a 7-lane divided highway with sidewalks, over a wide river in a commercial area dating from the early 1900s to the 1980s. US 46 was designated NJ 6 prior to a 1953 route renumbering and was constructed as a result of a 1927 act expanding the network of state highways in NJ.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95, Opinion 02/21/97.

SUMMARY In 1928 the bridge was built as a double leaf deck girder bascule bridge on concrete substructure. In 1951 the bridge was widened with steel stringers on the downstream side indicating that by that time the bascule was inoperable and the operators' houses and mechanism had been removed and the span fixed in place. The span is significantly altered and has lost its design integrity and purpose. An intact and distinguished example of the double leaf bascule bridge type is 0221155.

INFOR MATION

PHOTO: 217:35-37 (02/92) REVISED BY (DATE): QUAD: Weehawken

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0222151 **CO** BERGEN **OWNER** NJDOT **MILEPOINT** 71.55

NAME & FEATURE INTERSECTED US 46 OVER CONRAIL **FACILITY** US 46

TOWNSHIP RIDGEFIELD BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 137 ft **WIDTH** 94.4 ft

CONSTRUCTION DT 1930 **ALTERATION DT** 1952 **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The 6-lane barrier-divided bridge with sidewalks spans a single track of Conrail, the former Erie-Lackawanna RR. The setting is mixed industrial/commercial (c.1940-1970). The overpass was built in 1930 as part of improvements to NJ 5 & 6 (renumbered US 46 in 1953) at the time of the George Washington Bridge approach project. The bridge is 1/2 mile west of the merger of US 46 with US 1 & 9.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 11/22/91, Letter 6/30/95, Opinion 02/21/97.

SUMMARY The bridge's main span is an encased steel stringer and the 2 approach spans are T-beams. It has concrete abutments, piers and balustrades. In 1952 the bridge was widened with steel stringers for additional lanes to carry the eastbound traffic. It is a representative example of a common NJ State Highway Department overpass design. It is not historically or technologically distinguished.

INFOR MATION

PHOTO: 217:31-32 (02/92) REVISED BY (DATE): QUAD: Weehawken

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0222152 **CO** BERGEN **OWNER** NJDOT **MILEPOINT** 71.65

NAME & FEATURE INTERSECTED US 46 OVER GRAND AVENUE (CR 93) **FACILITY** US 46

TOWNSHIP RIDGEFIELD BOROUGH

TYPE MULTI GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 69 ft **WIDTH** 68 ft

CONSTRUCTION DT 1930 **ALTERATION DT** 1952 **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The 6-lane barrier-divided highway bridge spans a 2-lane road in a mixed-use commercial/residential area with structures dating from c.1880 to the present. The overpass was built in 1930 as a grade elimination associated with improvements to NJ 5 &6 (redesignated US 46 in 1953) at the time of the George Washington Bridge approach project. The highway does not constitute a historic corridor because it has lost its integrity of setting and has no technologically innovative features.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Rt 46 Historic District. Eligible. Contributing.

CONSULT DOCUMENTS SHPO Finding 11/22/91, Letter 6/30/95, Opinion 02/21/97.

SUMMARY The 2-span encased multi-girder and floorbeam bridge has concrete balustrades, paneled fascia, and concrete substructure. The shorter approach span is skewed and supported with a concrete pier on the north. The bridge is typical of NJ State Highway Department overpass designs. It is not historically or technologically distinguished.

INFOR MATION

PHOTO: 217:33-34 (02/92) REVISED BY (DATE): QUAD: Weehawken

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0222153 **CO** BERGEN **OWNER** NJDOT **MILEPOINT** 62.77

NAME & FEATURE INTERSECTED BROAD AVENUE (US 1&9) OVER US 46 **FACILITY** BROAD AVENUE (US 1&9)

TOWNSHIP PALISADES PARK BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 61 ft **WIDTH** 57 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The 4-lane bridge spans a 4-lane divided highway in a congested commercial/residential area (c.1900-1929). The highway, built in 1930 in conjunction with the GW Bridge approaches, bypassed an existing neighborhood and facilitated the convergence of US 46 and US 1 & 9. Although architecturally cohesive, the structures on the route are not technologically innovative and do not constitute a historic corridor. The setting has numerous modern intrusions.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Rt 46 Historic District. Eligible. Contributing.

CONSULT DOCUMENTS SHPO Finding 11/22/91, Letter 6/30/95, Opinion 02/21/97.

SUMMARY The encased steel stringer bridge with concrete balustrades and paneled fascia is supported on scored concrete retaining walls that border US 46. It is 1 of 2 similarly-detailed bridges spanning the depressed section of US 46 (0222154). The NJ State Hwy. Dept. often chose one architectonic style for each highway route, and the overpass is a typical and unexceptional solution to traffic in a congested area. It is a common bridge type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 217:42-43 (02/92) REVISED BY (DATE): QUAD: Weehawken

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0222154 **CO** BERGEN **OWNER** NJDOT **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED ROFF AVENUE OVER US 46 **FACILITY** ROFF AVENUE

TOWNSHIP PALISADES PARK BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 59 ft **WIDTH** 30 ft

CONSTRUCTION DT 1931 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The 2-lane bridge carries a city street over a depressed 4-lane divided highway in a commercial/residential area (c.1900-1929). The depressed highway, built in 1931 in conjunction with the GW Bridge approaches, bypassed an older neighborhood and facilitated the convergence of US 46 with US 1 & 9 immediately to the east. Although architecturally cohesive, the structures on the route are not technically innovative and do not constitute a historic corridor.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Rt 46 Historic District. Eligible. Contributing.

CONSULT DOCUMENTS SHPO Finding 11/22/91, Letter 6/30/95, Opinion 02/21/97.

SUMMARY The 1-span encased steel stringer bridge with concrete balustrades and paneled fascia stringers is supported on scored concrete retaining walls that border US 46. It is 1 of 2 similarly-detailed bridges spanning the depressed section of US 46 (0222153). The NJ State Hwy. Dept. often chose one architectonic style for each highway route, and the stringer overpass is a typical and unexceptional solution to traffic in a congested area. It is not historically or technologically distinguished.

INFOR MATION

PHOTO: 217:44,1-2 (02/92) REVISED BY (DATE): QUAD: Central Park

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0223150 **CO** BERGEN **OWNER** NJDOT **MILEPOINT** 0.25

NAME & FEATURE INTERSECTED NJ 63 OVER FAIRVIEW AVENUE **FACILITY** NJ 63

TOWNSHIP FAIRVIEW BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 154 ft **WIDTH** 50 ft

CONSTRUCTION DT 1931 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries a 3-lane highway and sidewalks over a 2-lane collector road in a mixed post-World War II commercial and residential area. The setting is not distinguished.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed 3-span encased stringer bridge is supported on concrete stub abutments and open concrete pile bents. The concrete balustrades are standard design. Decorative concrete lamp posts are set atop the balustrades at the bridge corners, although the luminaries are no longer in place. One of over 65 stringer bridges built in the county prior to 1946, the span is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 211:21-22 (02/92) REVISED BY (DATE): QUAD: Weehawken

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0223151 **CO** BERGEN **OWNER** NJDOT **MILEPOINT** 1.8

NAME & FEATURE INTERSECTED NJ 63 OVER NJ 5 & WOLF CREEK **FACILITY** NJ 63

TOWNSHIP RIDGEFIELD BOROUGH

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 7 **LENGTH** 326 ft **WIDTH** 51 ft

CONSTRUCTION DT 1931 **ALTERATION DT** 1981 **SOURCE** NJDOT/STYLE

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries a 4-lane county route and sidewalks over a 3-lane county road and a small stream in an area of predominantly single-family homes dating from the 1920s. The setting is not distinguished.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 7-span stringer bridge is supported on concrete abutments and open concrete piers. The fascia stringers, deck, parapets and sidewalks were replaced and the encasement on the interior stringers was removed in 1981. The bridge is an altered example of a common pre-WWII bridge type in the state. One of over 65 stringer spans in the county, the bridge is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 211:26-27 (02/92) REVISED BY (DATE): QUAD: Central Park

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0250163 **CO** BERGEN **OWNER** UNKNOWN **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED STATE STREET OVER CONRAIL & PALISADES AVENUE **FACILITY** STATE STREET

TOWNSHIP TEANECK TOWNSHIP

TYPE THRU GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 4 **LENGTH** 217 ft **WIDTH** 30 ft

CONSTRUCTION DT 1926 **ALTERATION DT** 1983 **SOURCE** PLANS

DESIGNER/PATENT NY CENTRAL RR COMPANY **BUILDER** WALSH CONSTRUCTION CO.

SETTING / CONTEXT The bridge carries a 2-lane collector road and sidewalks over Conrail tracks. The railroad right-of-way was developed in the early 1880s by the West Shore RR and leased to the New York Central in 1886. The bridge borders vacant wooded land. The surrounding neighborhood is a light industrial area dating from the 1930s to the present.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 4-span thru girder bridge is supported on steel pier bents and concrete abutments. The floorbeams, stringers and deck were replaced in 1983. The bridge sidewalks are bounded by metal pipe railing and a chain-link-fence. It is a common overpass design, and not associated with the historic period of railroad development. It is not technologically innovative or historically distinguished.

INFOR MATION

PHOTO: 207:5-6 (02/92) REVISED BY (DATE): QUAD: Hackensack

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0250164 **CO** BERGEN **OWNER** CITY OR MUNC. **MILEPOINT** 14.07

NAME & FEATURE INTERSECTED IVY AVENUE OVER CONRAIL **FACILITY** IVY AVENUE

TOWNSHIP HAWORTH BOROUGH

TYPE PONY TRUSS **DESIGN** HYBRID **MATERIAL** Wood

 # SPANS 3 **LENGTH** 106 ft **WIDTH** 10.9 ft

CONSTRUCTION DT 1885ca **ALTERATION DT** 1946, 1985 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a one lane 2-directional town road over Conrail tracks in a residential area developed from the 1920s to the 1940s. The bridge is located at the outskirts of the town center. The railroad right-of-way was developed in the 1880s by the New York West Shore and Buffalo Railway Company. In 1885 the railroad agreed to build the bridge across the right-of-way to connect farmland on either side of the track.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 3-span timber truss bridge supported on stone abutments and timber pier bents has a cantilevered sidewalk added in 1967. In 1985 the center span was replaced with a timber glulam superstructure. Property deeds indicate the span was likely built in the 1880s, and plans confirm the bridge was in place by 1903. The truss bridge was rebuilt in kind in 1946. The only known surviving timber truss in the survey, the bridge is associated with the construction of the railroad and is noteworthy.

INFOR MATION

Bibliography:
Bergen County Division of Cultural and Historic Affairs. file Haworth - Ivy Avenue Bridge. Haworth Historic Sites Survey, 1983.
files of and personal interview with Mrs. M. Cooper, Haworth Historical Society.

Physical Description: The 3 span timber bridge supported on ashlar abutments and timber bents spans over Conrail tracks in a deep ravine. The entire superstructure was rebuilt in kind in 1946 according to Conrail records. Originally a 3-span timber pony truss bridge, in 1985 the center trusses were removed and replaced with a glulam deck superstructure topped with asphalt. The remaining truss spans have timber floor beams hung from the top chord members with steel bars and anchor plates, and timber stringers and deck planks. A plan dated 1903 indicates the steel bar hangers were not in place and were added at a later unknown date. A cantilever sidewalk was added in 1967, and it is bordered by a chain-link-fence.

Historical and Technological Significance: The timber pony truss bridge was likely originally built by the New York West Shore and Buffalo Railway Company in the 1880s. The railroad through Haworth began as a single track constructed in the 1870s by the Jersey City and Albany Railroad, which failed shortly after opening the line. The New York West Shore and Buffalo Railway Company built a second track and began operations in the 1880s. The Phyfe's, who owned farmland along the track in Haworth, donated land for the construction of the additional track. In exchange, the railroad agreed to build at least one bridge spanning the railroad to connect the Phyfe's property on either side of the tracks for their personal use as a crossing for cattle and farm equipment. An 1888 map of Haworth shows 2 bridges spanning the tracks in the vicinity of the Phyfe's property, including a span at Ivy Avenue located at the southernmost border of the Phyfe's property. The earliest plan located, dated 1903, was prepared by the New York City and Hudson River Railroad, who took over operations on this line. The 1903 plan does not appear to be construction plans but rather documentation of the existing bridge. The span is technologically distinguished as one of the few remaining early timber truss bridges in the state, and the bridge is historically of note because it is associated with the construction of the railroad.

PHOTO: 212:7-11 (02/92) REVISED BY (DATE): QUAD: Yonkers

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0251160 **CO** BERGEN **OWNER** UNKNOWN **MILEPOINT** 9.29

NAME & FEATURE INTERSECTED HENDRICKS CAUSEWAY OVER NORTH SECOND LINE, RR AVENUE **FACILITY** HENDRICKS CAUSEWAY

TOWNSHIP RIDGEFIELD BOROUGH

TYPE THRU GIRDER **DESIGN** PARTIALLY ENCASED **MATERIAL** Steel

 # SPANS 4 **LENGTH** 180 ft **WIDTH** 30 ft

CONSTRUCTION DT 1931 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT UNKNOWN **BUILDER** MCCLINTIC & MARSHALL

SETTING / CONTEXT The bridge carries a 2-lane collector road and sidewalks over North Second railroad tracks and a road in a light industrial area dating from the 1930s to the 1940s. The setting is not distinguished.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 4-span bridge has a thru girder main span and deck girder approach spans supported on concrete abutments and mixed concrete piers and a steel pier bent. A temporary timber support was placed under the south girder of one approach span. The original metal railing is intact along most of the bridge. An example of a common bridge type and one of over 23 pre-WW II thru girder bridges in the county, the bridge is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 212:25-27 (02/92) REVISED BY (DATE): QUAD: Weehawken

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0254160 **CO** BERGEN **OWNER** UNKNOWN **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PROSPECT AVENUE OVER NY SUSQUEHANNA & WESTERN RR **FACILITY** PROSPECT AVENUE

TOWNSHIP HACKENSACK CITY

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 79 ft **WIDTH** 40 ft

CONSTRUCTION DT 1906 **ALTERATION DT** 1995 **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane residential city street with sidewalks over a railroad. The buildings in the neighborhood are predominantly post-World War II vintage multi-level apartments. The New York, Susquehanna, and Western Railroad developed the right-of-way in the early 1870s. In 1898 the Erie Railroad acquired the line.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 03/12/01

SUMMARY The concrete arch bridge has a concrete substructure and balustrades with decorative balusters. The railings have been rebuilt in places, and the light standards removed. The bridge is similar in style to 020023C which also spans the railroad in the vicinity. The bridge is a relatively early example of reinforced concrete deck technology and is longer than most other structures of this type. The architectonic character is a manifestation of the City Beautiful Movement, which resulted in many highly decorated civic structures in the area. It is an unusual choice of structure type for a railroad overpass. It is individually eligible for listing in the National Register of Historic Places under Criterion C.

INFOR MATION

Bibliography:
NJDOT Bridge Plan File: Bergen. Condit, Carl. American Building Art 19th Century. 1960.

Physical Description: The 79'-long reinforced concrete elliptical-shaped deck arch bridge has incised panels in the spandrel walls. The custom balustrade has square end posts with incised concentric square decoration and balusters detailed like stacked rusticated block. Some of the original balusters are lost and have been replaced with concrete block. The span is well proportioned and has sidewalks flanking the roadway.

Historical and Technological Significance: The handsome deck arch bridge built in 1906 by the Erie Railroad over its depressed right-of-way is a relatively early example of a longer reinforced concrete arch bridge and is thus a good representative of the bridge type that became very popular in northern New Jersey during the decades before World Was I. No plans for the bridge were located, but it was built over the right of way initially developed in the 1870s by the New York Western, and Susquehanna Railroad that was acquired by the Erie Railroad in 1898. Because of its urban setting, the bridge was aesthetically detailed in conformance with the prevailing City Beautiful concepts of making public works structures interesting and beautiful as well as functional (criterion C). The area surrounding the bridge in Hackensack has been redeveloped with predominantly post-World War II apartment houses.

The reinforced concrete deck arch bridge was first used in this country in the late 1880s, but it was not until the late 1890s that the bridge type gained in popularity. By 1905 it was ubiquitous for short (less than 60') spans. This bridge is significant for its size and for its fine custom detailing evident in the railings. The bridge exploits the plastic qualities of concrete. Concrete was favored by some railroads, like the DL&W, but concrete overpasses are not nearly as common in New Jersey as built-up girder bridges on concrete abutments.

Boundary Description and Justification: The bridge is evaluated as individually significant. The boundary is thus limited to the substructure and the superstructure. The neighborhood surrounding the structure has been redeveloped since World War II, so it is not contributing.

PHOTO: 212:33-37 (02/92) REVISED BY (DATE): QUAD: Hackensack

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0302150 **CO** BURLINGTON **OWNER** NJDOT **MILEPOINT** 56.95

NAME & FEATURE INTERSECTED US 9 OVER BASS RIVER **FACILITY** US 9

TOWNSHIP BASS RIVER TOWNSHIP

TYPE SINGLE LEAF BASCULE **DESIGN** STRAUSS UNDERNEATH **MATERIAL** Steel

 # SPANS 1 **LENGTH** 351 ft **WIDTH** 30 ft

CONSTRUCTION DT 1924 **ALTERATION DT** Demolished **SOURCE** PLANS

DESIGNER/PATENT J.B. STRAUSS/NJDOT BRIDGE DIV **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane highway over the tidal Bass River near its confluence with Great Bay. A fixed-span bridge with 22' vertical clearance carries the Garden state Parkway over the same feature is 50 yards northwest or upstream of this bridge. Marinas are located downstream from the bridge.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Bridge was Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-leaf bascule bridge is a well-preserved example of a patented Strauss articulated underneath counterweight. It is also important because it is a chain-driven operating mechanism powered by a gasoline engine, and it may well be the only example of such an operating arrangement in the state. The approach spans are wood stringers supported on pile bents. The bridge is remarkably complete and technologically significant.

INFOR MATION

Bibliography:

NJDOT. Bridge File #0302150. Engineering News-Record. Vol. 120 (May 129, 1938). p. 702. "J.B. Strauss Dies at Los Angles."

Physical Description: The 19-span bridge is composed of 18 short timber stringer supported on pile bents approach spans and a single-leaf deck girder moveable span with an articulated underneath counterweight. The moveable span, with a modern steel grid deck, was designed by the Strauss Bascule Bridge Company of Chicago, and it is a patented design. The moveable span pivots on two trunnions which bear on built-up trunnion towers or columns on a concrete pier. The articulated concrete counterweight moves on linkage and is located under the tail of the moveable span. The manual lattice crash gates and manual locks operated by a hand lever are both original to the span. There are no electrical toe locks. A frame, gable-roofed operators shanty is located on the north end of the downstream side of the moveable span while the operators house is at the south end of the same side. Both buildings are well preserved.

As significant as the moveable span is the operating machinery. The lifting machinery is chain rather than gear driven, and the power source is a Hercules-manufactured gasoline engine. The chain drive may have been selected because of the distance between the engine (power source) and line shafts. Such an arrangement would protect the engine from water damage. Three sets of chains and sprockets are used in the operation of the span. The first speed reduction chain services the reversing gear control to raise and lower the bridge. The second speed reduction chain connects the reversing unit output shaft to a drive sprocket on the first line shaft located under the bridge. A third reduction chain and sprocket powers the secondary transverse shaft with the pinion that engages the segmental rack which raises and lowers the bridge. The operating mechanism appears to be original and has not been modified. Work to the other elements of the span is best characterized as maintenance rather than modification or alteration. With the exception to the new concrete piers for the first line shaft, the bridge appears to survive as built.

Although the wood stringer approach spans have been repaired and rebuilt, the work has been in kind, and it survives as a good example of timber stringer bridge technology.

Historical and Technological Significance: The 1925 bridge that carries US 9 over the Bass River is not only a well-preserved example of a patented Strauss articulated underneath counterweight moveable span bridge, it is also possibly the only chain-driven, gasoline-engine powered moveable bridge in the state. The technological significance of this uncommon mechanical arrangement is matched by the nearly complete state of preservation that the bridge enjoys. It survives, complete with operators shanty and machinery house, as built in 1925, and ranks as one of the most important moveable span bridges in the state.

J.B. Strauss (1870-1938) patented his articulated counterweight bridge in 1905 (patent granted in 1911). The design went on to become one of the most popular in the nation prior to World War II, and it was his best-known design. The underneath counterweight, however, is not as common as the overhead position like that used at Green Bank over the Mullica River and at Federal Street in Camden. The parallelogram-linked counterweight that moves parallel to itself when the bridge is in operation facilitated a lighter counterweight and eliminated the need for a deep counterweight pit.

Chain-driven moveable bridges are not common, although the arrangement is appropriate when the power source and drive shafts are not closely spaced or the bridge is located in an area that is prone to high water that might inundate the engine or motor. The use of chains and sprockets eliminates the need for several sets of reduction gears. No other chain-driven bridge has been identified in New Jersey, but two others are known to survive; the Quinnipiac River at New Haven Connecticut and the ca. 1900 NYNH&H RR bridge over the Sakonnet River at Tiverton, Rhode Island. Both of those bridges, however, are powered by electric motors. This is also the only bridge documented to date that is powered by a gasoline engine. It appears that the engine is original to the bridge.

PHOTO: 301:33A-39A (01/92) REVISED BY (DATE): QUAD: New Gretna

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0306150 **CO** BURLINGTON **OWNER** NJDOT **MILEPOINT** 0.4

NAME & FEATURE INTERSECTED NJ 68 OVER PEMBERTON-TO-SHREWSBURY LINE **FACILITY** NJ 68

TOWNSHIP NEW HANOVER TOWNSHIP

TYPE T BEAM **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 3 **LENGTH** 128 ft **WIDTH** 56 ft

CONSTRUCTION DT 1942 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a four-lane state highway over Conrail in Fort Dix, an army post established in World War I and encompassing over 3000 acres. Conrail operates on a right-of-way that dates back to at least the 1870s with the Pemberton and Hightstown Railroad. The area immediately surrounding the bridge is lightly wooded. Within a half mile of the bridge are several 20th-century army buildings and the base golf course.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The three-span reinforced concrete T beam bridge rests on reinforced concrete abutments and piers. The reinforced concrete parapet, decoratively designed, is somewhat unusual for the county. The bridge is a common type of construction in the state, and it is not technologically or historically distinguished.

INFOR MATION

PHOTO: 306:22-23 (03/92) REVISED BY (DATE): QUAD: Columbus

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0310154 **CO** BURLINGTON **OWNER** NJDOT **MILEPOINT** 20.35

NAME & FEATURE INTERSECTED NJ 70 OVER FRIENDSHIP CREEK **FACILITY** NJ 70

TOWNSHIP SOUTHAMPTON TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 34 ft **WIDTH** 50 ft

CONSTRUCTION DT 1931 **ALTERATION DT** 1970ca **SOURCE** NJDOT

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries the two-lane state highway with shoulders over Friendship Creek on the outskirts of Hampton Lakes and Leisuretowne. The creek is a tributary to the extensive Rancocas Creek river system. Hampton Lakes is a planned community dating to the mid-20th century which included the creation of small lakes by periodically damming Friendship Creek. One dam is within 1/4 mile of the bridge. The immediate area is lightly wooded.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one-span concrete encased steel stringer superstructure rests on reinforced concrete abutments. The bridge, originally built as part of a larger road improvement campaign in the early 1930s, no longer has its original balustrade, but instead has a ca. 1970 reinforced concrete parapet. A modern metal guide rail runs the length of the bridge. The bridge is a common type in the county, and lacks technological or historical significance.

INFOR MATION

PHOTO: 302:3A-4A (03/92) REVISED BY (DATE): QUAD: Pemberton

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0310156 **CO** BURLINGTON **OWNER** NJDOT **MILEPOINT** 14.56

NAME & FEATURE INTERSECTED NJ 70 OVER HAYNES CREEK **FACILITY** NJ 70

TOWNSHIP MEDFORD TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 64 ft **WIDTH** 56 ft

CONSTRUCTION DT 1933 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries the two-lane state highway over Haynes Creek in a mixed area of agricultural and mid- to late-20th century residences on the outskirts of Medford, a village once known as "Belly Bridge," but later named after the town in Massachusetts. The setting is not distinguished.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one-span concrete encased steel stringer bridge rests on reinforced concrete abutments, which extend out about 15 feet from under the deck into stepped retaining walls on the north side of the bridge. It is finished with a common-design concrete balustrade. The bridge is a representative example of the most common pre-World War II bridge type in the state, and it is not historically or technologically distinguished.

INFOR MATION

PHOTO: 301:14A-15A (12/91) REVISED BY (DATE): QUAD: Mount Holly

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0311150 **CO** BURLINGTON **OWNER** NJDOT **MILEPOINT** 27.9

NAME & FEATURE INTERSECTED NJ 70 OVER BISPHAMS MILL CREEK **FACILITY** NJ 70

TOWNSHIP PEMBERTON TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 22 ft **WIDTH** 50 ft

CONSTRUCTION DT 1931 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries a 2-lane state highway, shoulders, and a utility pipe over a minor stream in a wooded setting at the meeting of two manmade lakes. The northerly shore of both lakes are lined with modern subdivisions. The setting is not significant.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The short reinforced concrete slab span has a concrete substructure with corresponding wing walls and a common-design concrete parapet. Although unaltered, the bridge is a representative example of the most common pre-World War II bridge type in the state and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 38:42-43 (07/91) REVISED BY (DATE): QUAD: Browns Mills

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0311151 **CO** BURLINGTON **OWNER** NJDOT **MILEPOINT** 30.5

NAME & FEATURE INTERSECTED NJ 70 OVER MOUNT MISERY BROOK **FACILITY** NJ 70

TOWNSHIP PEMBERTON TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 34 ft **WIDTH** 50 ft

CONSTRUCTION DT 1931 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries a 2-lane highway with shoulders over a minor stream in a sparsely developed wooded setting. The road was originally designated as "Route 40," connecting Camden with Lakewood.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The short encased stringer span is supported on a concrete substructure and is finished with a concrete balustrade. It is a representative example of the most common pre-World War II bridge type in the state, and it is not historically or technologically distinguished.

INFOR MATION

PHOTO: 38:36-37 (07/92) REVISED BY (DATE): QUAD: Browns Mills

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0312150 **CO** BURLINGTON **OWNER** RAILROAD **MILEPOINT** 81.16

NAME & FEATURE INTERSECTED SOUTHERN DIVISION RR OVER NJ 72 **FACILITY** SOUTHERN DIVISION (CONRAIL)

TOWNSHIP WOODLAND TOWNSHIP

TYPE THRU GIRDER **DESIGN** PARTIALLY ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 113 ft **WIDTH** 10.7 ft

CONSTRUCTION DT 1936 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge is located in an undeveloped portion of the Pine Barrens. The railroad was built in the 1860s between Lakehurst and Atsion. For most of its operating existence, it was operated by the Central Railroad of NJ and known as the Southern Division. A small settlement known as Butler Place was just west of this bridge. In 1936, the CCC developed the village site into a picnic grove. The picnic grove is not historically or physically related to the overpass.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The riveted, built up steel thru girder with floor beams bridge carried a single railroad track. The sub-structure consisted of concrete full-wing abutments and a center pier. The bridge was built in 1936 during the construction of NJ 72, a WPA-funded project. The bridge was built so the 2-lane roadway could be expanded to 4 without modifications. The span is an example of a common 20th-century railroad overpass design, and it does not exhibit any outstanding technological features.

INFOR MATION

PHOTO: 37:2-3 38:33-35 (07/01) REVISED BY (DATE): QUAD: Woodmansie

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0314151 **CO** BURLINGTON **OWNER** NJDOT **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 537 (EAST MAIN STREET) OVER NJ 73 **FACILITY** CR 537 (EAST MAIN STREET)

TOWNSHIP MAPLE SHADE TOWNSHIP

TYPE THRU GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 84 ft **WIDTH** 40 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a two-lane county road and sidewalks over a limited access, four-lane highway in a primarily twentieth-century commercial area. There is also a 20-century water treatment plant about one-half block east of the bridge. The Moorestown Industrial Park is one mile north of the bridge. The center of the Moorestown is two miles east of the bridge.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The three-span encased thru girder with floor beams bridge rests on reinforced concrete abutments and columns. The main span, which reaches over the four lanes of traffic, consists of encased plate girders with floorbeams and stringers. The approach spans are encased stringers. Decorative elements include scoring on the abutments and stepped caps on the columns. The bridge is a common type and not technologically distinguished.

INFOR MATION

PHOTO: 303:13-14 (01/92) REVISED BY (DATE): QUAD: Moorestown

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0314152 **CO** BURLINGTON **OWNER** STATE AGENCY **MILEPOINT** 7.9

NAME & FEATURE INTERSECTED PEMBERTON BRANCH RR OVER NJ 73 **FACILITY** PEMBERTON BRANCH

TOWNSHIP MAPLE SHADE TOWNSHIP

TYPE THRU GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 3 **LENGTH** 102 ft **WIDTH** 12 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT PA RR OFFICE OF CHEIF ENGINEER **BUILDER** SNYDER ENGINEERING CO.

SETTING / CONTEXT The one-track railroad bridge over the limited-access, four-lane NJ 73 is set in an area of twentieth-century small industries. The bridge is about 4 miles southeast of Palmyra. A plaque on the abutment indicates that the bridge was "Built for the Pennsylvania Railroad, A.D.1930, By Snyder Engineering Company, Middlesex, N.J." Conrail operates on the right-of-way that dates back to at least 1866 and the consolidated Camden and Burlington County Railroad.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed thru plate girder bridge with floorbeams has a concrete deck. Latticed and battened channels form the columns that support the main span, which clears the four lanes of traffic. The reinforced concrete abutments were originally built with provisions to support a two-track bridge. The abutments have some decorative scoring on them. The bridge is a common type of railroad span and historically undistinguished.

INFOR MATION

PHOTO: 303:17-18 (01/92) REVISED BY (DATE): QUAD: Moorestown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0315150 **CO** BURLINGTON **OWNER** RAILROAD **MILEPOINT** 6.82

NAME & FEATURE INTERSECTED BORDENTOWN SECONDARY OVER NJ 73 **FACILITY** BORDENTOWN SECONDARY

TOWNSHIP PALMYRA BOROUGH

TYPE THRU GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 3 **LENGTH** 86 ft **WIDTH** 27 ft

CONSTRUCTION DT 1931 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge carries one railroad track over the four-lane, limited-access NJ 73 in a twentieth century commercial area in the town of Palmyra. An inscription indicates that the bridge was built in 1931. Conrail operates on the right-of-way originally built in the early 1830s by the nation's first railroad, the Camden and Amboy Railroad.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed three-span bridge has three main plate girders with steel floorbeams and a concrete deck. The bridge is capable of carrying two tracks, but there are no tracks on the northwest half of the span. Riveted channels and steel plates form the steel columns that support the main span, which clears the four lanes of traffic. The abutments are reinforced concrete. The bridge is a common type for railroads and lacks historical and technological distinction.

INFOR MATION

PHOTO: 303:9-10,310:1 (01/92) REVISED BY (DATE): QUAD: Camden

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0316150 **CO** BURLINGTON **OWNER** NJDOT **MILEPOINT** 37.8

NAME & FEATURE INTERSECTED US 130 OVER POMPESTON CREEK **FACILITY** US 130

TOWNSHIP CINNAMINSON TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 27 ft **WIDTH** 88 ft

CONSTRUCTION DT 1925 **ALTERATION DT** 1963 **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries the six-lane, limited access US 130 over Pompeston Creek in an area of late twentieth century commercial and residential buildings. The most prominent local feature is a large cemetery that adjoins US 130 along the southeast. A small dam lies about 30 yards east of the bridge.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The concrete encased steel stringer rests on reinforced concrete abutments and wingwalls. The original bridge doubled in size with an addition made on the western side in 1963. A typical concrete balustrade is on the older section of bridge, while a concrete parapet adorns the newer part. A concrete guiderail runs down the center of the road separating the north-south traffic. The bridge is a common type, and it has been altered too much to have historical significance.

INFOR MATION

PHOTO: 306:24-25;310:2 (01/92) REVISED BY (DATE): QUAD: Beverly

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0317152 **CO** BURLINGTON **OWNER** NJDOT **MILEPOINT** 46.6

NAME & FEATURE INTERSECTED US 130 SB OVER ASSISCUNK CREEK **FACILITY** US 130 SOUTHBOUND

TOWNSHIP BURLINGTON CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 104 ft **WIDTH** 60 ft

CONSTRUCTION DT 1924 **ALTERATION DT** 1935 **SOURCE** PLAQUE

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries two active lanes of southbound traffic and an abandoned 2-lane portion of US 130 over a tidal creek in a twentieth-century commercial area of Burlington. US 130 is a divided highway at this point, with about 50 yards between north and southbound traffic. Northbound traffic is carried on a separate span (0317150) built in 1963. The realignment of northbound traffic eliminated the need for the upstream portion of the older bridge.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 2-span bridge on a concrete substructure was built in two sections. The original span is an encased thru girder with floor beams and a cantilevered sidewalk on upstream side. It was widened in 1935 with a 2-lane encased stringer span finished with a concrete parapet at the sidewalk. The thru girder portion has been abandoned, and is now covered with dirt and grass. Both sections of the bridge are representative examples of their bridge types, and the span is not distinguished.

INFOR MATION

PHOTO: 39:43;310:1-3 (01/92) REVISED BY (DATE): QUAD: Bristol

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0317155 **CO** BURLINGTON **OWNER** NJDOT **MILEPOINT** 51.62

NAME & FEATURE INTERSECTED US 130 OVER CRAFTS CREEK **FACILITY** US 130

TOWNSHIP FLORENCE TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 49 ft **WIDTH** 80 ft

CONSTRUCTION DT 1920 **ALTERATION DT** 1936 **SOURCE** PLAQUE

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries a divided 4-lane highway over a tidal stream in a relatively undeveloped 20th-century commercial area on the outskirts of Roebling, a village owned by the nearby plant of John A. Roebling Sons and Company. The bridge is the intersection of the Roebling access road, and it well outside the Roebling Historic District. The state widened the bridge in 1936 during a general road reconstruction and widening of Route 25.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span bridge was built in two sections. The upstream portion is an encased stringer span on a concrete substructure built in 1920, and the 1936 downstream addition is a T-beam bridge. Both are finished with concrete balustrades. The downstream side is curved to accommodate the intersection of a local road. The bridge is neither technologically or historically distinguished.

INFOR MATION

PHOTO: 303:32-33 (01/92) REVISED BY (DATE): QUAD: Bristol

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0317156 **CO** BURLINGTON **OWNER** NJDOT **MILEPOINT** 52.2

NAME & FEATURE INTERSECTED US 130 NB OVER KINKORA BRANCH (ABANDONED) **FACILITY** US 130 NORTHBOUND

TOWNSHIP MANSFIELD TOWNSHIP

TYPE THRU GIRDER **DESIGN** PARTIALLY ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 124 ft **WIDTH** 29.5 ft

CONSTRUCTION DT 1926 **ALTERATION DT** 1936 **SOURCE** NJDOT/INSCRIPTION

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge carries two lanes on one-directional traffic over the abandoned and overgrown right-of-way of the Kinkora Branch RR of the PA RR. The right-of-way is now used for high voltage lines carried on towers. The bridge is next to but does not share a substructure with 0317157 which carries southbound traffic. The setting is wooded with sparse 20th century development. The railroad, named after the original name of the area, serviced Roebling.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 3-span bridge is composed of deck girder approaches and a built-up thru girder main span. The concrete substructure has stub abutments and pier bents. All floor beams are encased. The original pipe railing survives only at the easterly girder. The approach concrete balustrades match those used on the parallel span added in 1936. The top of the thru girder now serves as a mid-roadway barrier. The bridge has lost integrity of design and setting, and it is not historically noteworthy.

INFOR MATION

PHOTO: 191:4-7 (01/92) REVISED BY (DATE): QUAD: Bristol

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0317157 **CO** BURLINGTON **OWNER** NJDOT **MILEPOINT** 52.17

NAME & FEATURE INTERSECTED US 130 SB OVER KINKORA BRANCH (ABONDONED) **FACILITY** US 130 SOUTHBOUND

TOWNSHIP MANSFIELD TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 123 ft **WIDTH** 32 ft

CONSTRUCTION DT 1936 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries two lanes of one-directional traffic over the abandoned right-of-way of the Kinkora Branch RR of the PA RR. The right-of-way is now used for high-voltage power lines carried on towers. The line, named after the original name of the area, serviced Roebling. The bridge is parallel to but does not share abutments with 0317156 which carries traffic in the opposite direction. The setting is wooded and sparsely developed.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 3-span bridge is composed of encased steel stringers on a concrete substructure. There is a cantilevered sidewalk enclosed with a standard-design concrete balustrade on the westerly side. On the east the span abuts the thru girder bridge placed in 1926. The girder serves as the mid-highway barrier. This common type bridge, built when the "Route 25" was dualized, is technologically and historically undistinguished. The setting has lost its integrity since the rail line has been removed.

INFOR MATION

PHOTO: 191:1-3 (01/92) REVISED BY (DATE): QUAD: Bristol

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0319152 **CO** BURLINGTON **OWNER** NJDOT **MILEPOINT** 58.25

NAME & FEATURE INTERSECTED US 130 OVER CROSSWICKS CREEK **FACILITY** US 130

TOWNSHIP BORDENTOWN TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 67 ft **WIDTH** 78 ft

CONSTRUCTION DT 1928 **ALTERATION DT** 1951 **SOURCE** NJDOT/INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries a 4-lane highway with a grass median over a tidal stream. The setting of the bridge is wooded, but late-20th commercial development is within sight of the span.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased stringer bridge on a concrete substructure was built in two sections. The original portion is located in the middle, and it was finished with a paneled fascia stringer that is visible from the stream level. The original railings were removed, and the bridge was widened with stringers on concrete abutments with wing walls on both sides. The interior stringers are encased, but the fascia stringers are not. The parapet is modern. The span is an altered example of a common type.

INFOR MATION

PHOTO: 129:3-5 (11/91) REVISED BY (DATE): QUAD: Trenton East

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0324150 **CO** BURLINGTON **OWNER** NJDOT **MILEPOINT** 7.25

NAME & FEATURE INTERSECTED US 206 OVER ATSION LAKE **FACILITY** US 206

TOWNSHIP SHAMONG TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 23 ft **WIDTH** 39.8 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries a 2-lane highway over the south end of a manmade lake known as Atison Lake. The lake was created by damming the Mullica River. Located in the Piney Woods, the natural setting of the bridge is preserved because it is located in Wharton State Forest.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The short slab bridge is composed entirely of reinforced concrete, which is used for the deck, abutments with wing walls, and plain balustrade with end posts. Its style and type are well represented in the state, and the span is not historically or technologically significant. US 206 was developed by the state as NJ 39, a bypass from the bridge across the Delaware at Trenton from Yardley, PA to Da Costa. NJ 36 was a route established in the 1926 expansion of the original 15 state highways.

INFOR MATION

PHOTO: 301:9A-10A (07/91) REVISED BY (DATE): QUAD: Atsion

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0324152 **CO** BURLINGTON **OWNER** NJDOT **MILEPOINT** 10.12

NAME & FEATURE INTERSECTED US 206 OVER SPRINGERS BROOK **FACILITY** US 206

TOWNSHIP SHAMONG TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 3 **LENGTH** 55 ft **WIDTH** 40 ft

CONSTRUCTION DT 1929 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries the two-lane highway with shoulders over Springers Brook in a rural undeveloped area in the pinelands of southern New Jersey.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The three-span concrete slab bridge rests on reinforced concrete abutments and piers. Typical concrete balustrades, as well as modern guide rail, run the length of the bridge. The bridge is a common type in the county, and it lacks technological and historical distinction.

INFOR MATION

PHOTO: 301:11A-12A (03/92) REVISED BY (DATE): QUAD: Indian Mills

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0324153 **CO** BURLINGTON **OWNER** NJDOT **MILEPOINT** 13.16

NAME & FEATURE INTERSECTED US 206 OVER MUSKINGUM BROOK **FACILITY** US 206

TOWNSHIP TABERNACLE TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 31 ft **WIDTH** 40 ft

CONSTRUCTION DT 1929 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries the two-lane highway over Muskingum Brook in the rural undeveloped pinelands of southern New Jersey, about 3/4 miles northwest of the village of Oriental. The brook flows into Indian Mills Lake two miles further south.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one-span concrete encased steel stringer rests on reinforced concrete abutments and wingwalls. Typical concrete balustrades, as well as modern metal guide rails, run the length of the bridge, and the fascia stringers are paneled. The bridge is a representative example of the most common pre-world War II bridge type in the state. It lacks technological and historical distinction.

INFOR MATION

PHOTO: 301:13A-15A (03/92) REVISED BY (DATE): QUAD: Indian Mills

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0324155 **CO** BURLINGTON **OWNER** NJDOT **MILEPOINT** 20.61

NAME & FEATURE INTERSECTED US 206 OVER SOUTH BRANCH OF RANCOCAS CREEK **FACILITY** US 206

TOWNSHIP SHAMONG TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 56 ft **WIDTH** 40 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries the two-lane highway over the South Branch of Rancocas Creek 1/2 mile southeast of Vincentown, a village that celebrates its history as a milling center and 18th & 19th century residences. The village center is a National Register-listed district. The bridge is located well outside the district. The immediate area around the bridge consists of late 20th-century commercial establishments.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one-span concrete encased steel stringer bridge rests on reinforced concrete abutments and wingwalls. Typical concrete balustrades, as well as modern metal guide rails, run the length of the bridge. It also has paneled fascia stringers. The bridge is a representative example of the most common pre-World War II bridge type in the state, and it is not technologically significant or historically noteworthy.

INFOR MATION

PHOTO: 302:1A-2A (12/91) REVISED BY (DATE): QUAD: Indian Mills

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0324156 **CO** BURLINGTON **OWNER** NJDOT **MILEPOINT** 21.08

NAME & FEATURE INTERSECTED US 206 OVER STOP THE JADE RUN **FACILITY** US 206

TOWNSHIP SOUTHAMPTON TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 22 ft **WIDTH** 40 ft

CONSTRUCTION DT 1930 **ALTERATION DT** 1980ca **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries the two-lane highway over Stop the Jade Run 1/2 mile east of Vincentown, a village that celebrates its history as a milling center and historic residences with an historic district. The bridge is well outside the district. The area immediately surrounding the bridge is lightly wooded with late-20th commercial establishments.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one-span reinforced concrete slab bridge rests on reinforced concrete abutments and wingwalls. The ca. 1980 railing, which is not original, is a modern metal guide rail. The bridge is a common type and lacks historical and technological significance.

INFOR MATION

PHOTO: 302:43A-44A (12/91) REVISED BY (DATE): QUAD: Pemberton

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0324158 **CO** BURLINGTON **OWNER** NJDOT **MILEPOINT** 24.33

NAME & FEATURE INTERSECTED US 206 OVER NORTH BRANCH RANCOCAS CREEK **FACILITY** US 206

TOWNSHIP EASTAMPTON TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 70 ft **WIDTH** 38 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries the wide two-lane highway with shoulders over the North Branch of Rancocas Creek 3/4 mile east of Smithville, a company town of the H. B. Smith Machine Company in the late-19th and early-20th century. The immediate area surrounding the busy highway is primarily mid- to late-20th century residences.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one-span concrete encased steel stringer bridge rests on reinforced concrete abutments and wingwalls. The bridge has typical concrete balustrades, although the eastern side is missing a section as a result of vehicular impact. The section has been filled with a Jersey barrier. The bridge is a common type frequently used on state-developed roads prior to World War II, but it is technologically and historically undistinguished.

INFOR MATION

PHOTO: 38:44,1 (12/91) REVISED BY (DATE): QUAD: Pemberton

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0324160 **CO** BURLINGTON **OWNER** NJDOT **MILEPOINT** 27.33

NAME & FEATURE INTERSECTED US 206 OVER BARKERS CREEK **FACILITY** US 206

TOWNSHIP SPRINGFIELD TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 47 ft **WIDTH** 68 ft

CONSTRUCTION DT 1929 **ALTERATION DT** 1957 **SOURCE** NJDOT/INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries a four-lane state highway and shoulders over a minor water feature in an area dominated by farms. There is scattered late-20th century commercial development. The area does not have historic district potential. The highway was built as two-lane NJ 39 in 1929 and widened to four lanes in 1957.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The original section of the bridge is the concrete-encased steel stringers on a concrete substructure that is the center portion of the present span. It was widened with slab extensions on both sides in 1957. The concrete parapet with an aluminum railing on top also dates from 1957. The bridge is an altered example of a very common type, and it is thus not historically or technologically noteworthy.

INFOR MATION

PHOTO: 129:30-31191:43 (07/91) REVISED BY (DATE): QUAD: Columbus

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0324162 **CO** BURLINGTON **OWNER** NJDOT **MILEPOINT** 29.54

NAME & FEATURE INTERSECTED US 206 OVER ASSISCUNK CREEK **FACILITY** US 206

TOWNSHIP SPRINGFIELD TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 49 ft **WIDTH** 68 ft

CONSTRUCTION DT 1927 **ALTERATION DT** 1957 **SOURCE** NJDOT/INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a four-lane state highway over a minor water feature in an area dominated by large 19th-century farms and some late-20th century commercial structures. The area is evaluated as not having historic district potential. The road was developed in 1929 as NJ 39, and it was widened to four lanes in this section in 1957.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The original portion of the 68'-wide bridge is the center that is composed of encased steel stringers supported on a concrete substructure. It was widened on both sides by slab extensions in 1957. The concrete parapets with aluminum railings on top also dates from 1957. The span is an altered example of a very common bridge type, and it is not historically or technologically noteworthy.

INFOR MATION

PHOTO: 129:32-33,191:4 (07/91) REVISED BY (DATE): QUAD: Columbus

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0325150 **CO** BURLINGTON **OWNER** NJDOT **MILEPOINT** 34.82

NAME & FEATURE INTERSECTED US 206 OVER BLACKS CREEK **FACILITY** US 206

TOWNSHIP BORDENTOWN TOWNSHIP

TYPE MULTI GIRDER **DESIGN** PARTIALLY ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 52 ft **WIDTH** 71.5 ft

CONSTRUCTION DT 1929 **ALTERATION DT** 1957 **SOURCE** INSCRIPTION/PLANS

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries a 4-lane state highway with a grassy median over a minor stream in a wooded setting. Modern commercial development is within sight of the bridge in both directions. The route was originally developed in 1929 as a bypass of Bordentown. The bridge and roadway were dualized in 1957.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge was built in two sections. The original portion is the upstream side, and it is composed of 5 built-up deck girders bearing on a concrete substructure. Only the fascia girders are encased. The bridge was finished with concrete balustrades, but only the downstream one survives. The other was removed when the bridge was widened with a reinforced concrete rigid frame extension in 1957. The bridge, a common type, has lost its integrity of design and is evaluated as not significant.

INFOR MATION

PHOTO: 129:24-26 (07/91) REVISED BY (DATE): QUAD: Trenton East

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0326151 **CO** BURLINGTON **OWNER** RAILROAD **MILEPOINT** 28.18

NAME & FEATURE INTERSECTED ROBBINSVILLE SECONDARY OVER US 206 **FACILITY** ROBBINSVILLE SECONDARY

TOWNSHIP BORDENTOWN TOWNSHIP

TYPE THRU GIRDER **DESIGN** PARTIALLY ENCASED **MATERIAL** Steel

 # SPANS 5 **LENGTH** 175 ft **WIDTH** 12.5 ft

CONSTRUCTION DT 1929 **ALTERATION DT** 1944 **SOURCE** PLANS

DESIGNER/PATENT PA RR OFFICE OF ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The overpass carries one active Conrail track over a four-lane highway with a grassy center median in a wooded setting with modern development. A 20th-century agricultural processing plant serviced by a spur line is located southeast of the bridge. The right-of-way was initially developed by the Camden & Amboy Railroad in the early 1830s. It is the historic line from Bordentown to the Raritan River on the east side of the state. The highway was built in 1929 as a bypass.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 5-span thru girder with floor beams overpass was built in 2 sections. The earlier, 3-span east portion has a concrete abutment, a concrete pier, which marks the limits of the original bridge, and built-up columns with lattice. The bridge was extended to the west by two spans supported on a concrete abutment and steel columns with battens. The main spans are deeper girders than the approaches. The bridge is a representative example of a common type and is not technologically distinguished.

INFOR MATION

PHOTO: 129:10-11 (08/91) REVISED BY (DATE): QUAD: Trenton East

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0326152 **CO** BURLINGTON **OWNER** NJDOT **MILEPOINT** 38.45

NAME & FEATURE INTERSECTED US 206 NB OVER CROSSWICKS CREEK **FACILITY** US 206 NORTHBOUND

TOWNSHIP BORDENTOWN TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 148 ft **WIDTH** 35 ft

CONSTRUCTION DT 1941 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries 2-lanes of one-way traffic, a shoulder, and a sidewalk over a wide tidal stream. It is 5 yds. east of and parallel to 0326153 that carries 2 lanes of traffic in the opposite direction over the same water feature. The area around the bridge is a mix of mid- to late-20th commercial and residential development. The highway is a major arterial route.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span encased stringer bridge on a concrete substructure has a standard design concrete balustrade. The cantilevered sidewalk on the upstream side is enclosed with a metal railing. While unaltered, the span is a late and representative example of the most common pre-World War II bridge type in the state, and it is not historically or technologically distinguished. It was built when one of the original 15 state highways was improved to be a divided 4-lane bypass of Bordentown.

INFOR MATION

PHOTO: 129:6-7 (11/91) REVISED BY (DATE): QUAD: Trenton East

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0326153 **CO** BURLINGTON **OWNER** NJDOT **MILEPOINT** 38.45

NAME & FEATURE INTERSECTED US 206 SB OVER CROSSWICKS CREEK **FACILITY** US 206 SOUTHBOUND

TOWNSHIP BORDENTOWN TOWNSHIP

TYPE THRU GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 150 ft **WIDTH** 30 ft

CONSTRUCTION DT 1924 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries two lanes of one-directional traffic and a sidewalk on the upstream side over a wide tidal stream. It is 5 yds west of and parallel to 0326152 that carries two lanes of traffic in the opposite direction over the same water feature. The downstream side of the bridge is contiguous to a ca. 1985 ramp that brings US 295 southbound traffic onto US 206.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased thru girder with floor beams bridge is supported on a concrete substructure. The cantilevered sidewalk is enclosed by a metal railing with concrete posts. The thru girder was a frequent bridge type utilized by the State Highway Department during its ambitious early-1920s program to develop the 15 original state highways in the state. The route, designated as Rt. 2 in 1917, ran from Trenton to Camden. The bridge is a common type and is not technologically or historically noteworthy.

INFOR MATION

PHOTO: 129:8-9 (11/92) REVISED BY (DATE): QUAD: Trenton East

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0350161 **CO** BURLINGTON **OWNER** NJDOT **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PRINCE STREET OVER ROBBINSVILLE SECONDARY **FACILITY** PRINCE STREET

TOWNSHIP BORDENTOWN CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 38 ft **WIDTH** 36 ft

CONSTRUCTION DT 1925 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT PA RR OFFICE OF CHEIF ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane city street and sidewalks over 1 active rail line in a residential section of the Bordentown Historic District. The rail line passes through the town on a depressed right-of-way that is lined with a retaining wall of either concrete or ashlar masonry. The wall has been repaired many times, most recently in 1991. Three city streets cross the railroad in a three block area. The line is the original route of the Camden & Amboy line and dates to 1831.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Camden & Amboy Railroad Main Line Historic District, Eligible. Listed. Bordentown Historic District. 06/14/1982. Contributing / Noncontributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95, Opinion 1998.

SUMMARY The encased stringer span is supported on concrete bearings that are rebuilt sections of the early ashlar retaining wall that protects the depressed roadbed. The iron fence railing used at the sidewalks is the same used to enclose the roadbed between Farnsworth and Prince streets. Although the bridge is located within the boundaries of the Bordentown HD, and it crosses the earliest rail line in the state, it is not an early span, and it is outside the district's period of significance.

INFOR MATION

PHOTO: 191:34-38 (10/91 JPH (5/96)) REVISED BY (DATE): QUAD: Trenton East

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0350162 **CO** BURLINGTON **OWNER** UNKNOWN **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED FARNSWORTH AVE (CR 545) OVER ROBBINSVILLE SECONDARY **FACILITY** FARNSWORTH AVENUE

TOWNSHIP BORDENTOWN CITY

TYPE STONE ARCH **DESIGN** BARREL **MATERIAL** Stone

 # SPANS 1 **LENGTH** 22 ft **WIDTH** 97 ft

CONSTRUCTION DT 1831ca **ALTERATION DT** **SOURCE** LOCAL HISTORY

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The arch carries the main street of Bordentown, two sidewalks, and a small green space over the single track of the former Camden & Amboy line, the earliest rail line in New Jersey. The C & A developed the line from the canal terminus in Bordentown to New Brunswick in the early 1830s. The town grew in response to the railroad and canal, and it retains its 19th century character. Most of the small town is listed as a district in the National Register.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Individually Eligible. Camden & Amboy Railroad Main Line Historic District, Eligible. Listed. Bordentown Historic District. 06/14/1982. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95, Opinion 1998.

SUMMARY The nearly 100'-long rubble-coursed stone arch bridge with gauged ring stones appears to be an original feature of the ca. 1831 rail line. The west spandrel wall and intrados have been parged, but most of the coating has spalled. No original railings survive, but the arch is remarkably complete making it a large and well-preserved example of its type. It is the oldest bridge in the county, and it contributes to the historic character of the Bordentown Historic District.

INFOR MATION

Bibliography:
ONJH. National Register File; Burlington County; Bordentown Historic District, 1982. Bordentown Historical Society. Bordentown 1682-1976. 1976.

Physical Description: The 22'-long, 97'-wide rubble-coursed stone arch bridge with gauged ring stones is finished with rubble-coursed spandrel walls. The one on the west side has been parged. At some point the intrados of the arch was gunited, but most of the cementous coating has spalled. The arch span carries the main street of Bordentown and site of a former passenger station over the depressed single-track right-of-way of the railroad, and the roadbed is lined with retaining walls of both ashlar and concrete. The retaining wall on the east side of the arch was buttressed with concrete in 1991.

Historical and Technological Significance: The well-preserved stone arch bridge is individually distinguished as being an early regional example of its type, ranking as the oldest documented bridge in Burlington County. But it is its historical associations that make it an important landmark and a contributing resource in the Bordentown Historic District (Criterion A). The span was built ca. 1831 by the Camden & Amboy Railroad as part of its development of the first railroad in the state. Bordentown, located on the terminus of both the C & A Railroad and the Delaware & Raritan Canal, grew and prospered servicing the transportation industry. The town survives as a well-preserved 18th and 19th-century community whose development was virtually complete by the first world war. Almost the entire mile-square city is listed in the National Register as a district because of its significance it architecture and transportation. The bridge is an early and a historically important structure that contributes to the historic character of the district, and it is one of the few extant tangible records of the early days of railroading in the city that owes so much of its development and appearance to the "iron horse."

Boundary Description and Justification: The bridge is wholly within a National Register-listed historic district that encompasses most of the corporate limits of Bordentown City. It and the surrounding structures are contributing resources. For a detailed district boundary delineation, refer to the National Register files at ONJH.

PHOTO: 129:36-37,191:3 (10/91 JPH (5/96)) REVISED BY (DATE): QUAD: Trenton East

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0350163 **CO** BURLINGTON **OWNER** UNKNOWN **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED SECOND STREET OVER ROBBINSVILLE SECONDARY RR **FACILITY** SECOND STREET

TOWNSHIP BORDENTOWN CITY

TYPE THRU GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 31 ft **WIDTH** 24.5 ft

CONSTRUCTION DT 1933 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT PA RR OFFICE OF CHEIF ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a wide 2-lane city street and sidewalks over one active rail line in a depressed road bed. The road bed is lined with remnants of the original/early ashlar retaining walls that has have numerous concrete repairs and replacements. The street is parallel to the main street in Bordentown, a well-preserved town dominated by 2- and 3-story row houses. Most of the town is listed in the National Register as a historic district.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Camden & Amboy Railroad Main Line Historic District, Eligible. Listed. Bordentown Historic District. 06/14/1982. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95, Opinion 1998.

SUMMARY The thru girder with floor beams bridge is supported on ashlar abutments with concrete seats. The railing, which appears to be original, is composed of angles and plate styles and rails carrying a chain-link fence across the girders and approach parapets. The 1933 bridge was built after the period of significance of the historic district. Even though it crosses the historic C&A Railroad, the span is not an original or early feature of the line, and it is not technologically distinguished.

INFOR MATION

PHOTO: 129:32-33 (11/91 JPH (5/96)) REVISED BY (DATE): QUAD: Trenton East

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0360152 **CO** BURLINGTON **OWNER** STATE AGENCY **MILEPOINT** 12.38

NAME & FEATURE INTERSECTED PEMBERTON BRANCH RR OVER CENTERTON ROAD (CR 537) **FACILITY** PEMBERTON BRANCH (CR 537)

TOWNSHIP MOORESTOWN TOWNSHIP

TYPE THRU GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 65 ft **WIDTH** 10.2 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge carries Conrail over the county road in an agricultural area that is shared with an imposing naval training center. Conrail operates on a right-of-way that dates to the Burlington and Mount Holly Railroad, a branch of the Camden and Amboy, built in 1849.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed open-deck one-span thru plate girder has a floorbeam system with stringers spaced about one foot apart. Under the floorbeams, there are pin-connected lateral braces, one of which is broken. The well-preserved ashlar abutments were originally built to accommodate two tracks, although the girder bridge carries just one. A utility pipe runs along the north side. The bridge is a common type and not technologically or historically distinguished.

INFOR MATION

PHOTO: 303:21-22 (01/92) REVISED BY (DATE): QUAD: Moorestown

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 03A4500 **CO** BURLINGTON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MILL ROAD OVER SOUTH BRANCH PENNSAUKEN CREEK **FACILITY** MILL ROAD

TOWNSHIP MAPLE SHADE TOWNSHIP

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 34 ft **WIDTH** 34.7 ft

CONSTRUCTION DT 1927 **ALTERATION DT** 1954 **SOURCE** PLAQUE

DESIGNER/PATENT WILLIAM R. CATTELL, CO. ENG **BUILDER** HILL CONSTRUCTION COMPANY

SETTING / CONTEXT The bridge is in an undistinguished region of residences and an industrial park dating to the twentieth century. About 100 feet south of the bridge, Mill Road intersects with NJ 38. There is also a gas station in the vicinity. The bridge is also Camden County Bridge 3D-16 (according to the plaque).

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one-span, reinforced concrete deck arch bridge with reinforced concrete wingwalls has concrete railings that date to the 1954 widening of the span. Modern beam guiderails have been added inside the sidewalks. According to county records, the core of the bridge was built by A. Stutzes sometime before 1927. However, the massive widening and reconstruction in 1954 by the Mt. Holly contractors makes the bridge too altered to be of historical significance.

INFOR MATION

PHOTO: 310:39-41 (01/92) REVISED BY (DATE): QUAD: Camden

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 03B4070 **CO** BURLINGTON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 611 OVER NORTH BRANCH OF PENNSAUKEN CREEK **FACILITY** CR 611

TOWNSHIP MOORESTOWN TOWNSHIP

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 2 **LENGTH** 47 ft **WIDTH** 36.2 ft

CONSTRUCTION DT 1940 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT BURLINGTON CO. ENGINEERS OFF. **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries the two-lane CR 611 over a shallow creek in a wooded 20th-century subdivision in Moorestown. A small dam sits about 50 yards upstream from the bridge and holds back Strawbridge Lake. The Moorestown Water Treatment Center (1900 ca.) is south of the bridge. The bridge is not in the Moorestown Historic District.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge is a 2-span deck arch bridge. Corrugated plate steel sections form the arches and provided the false work for the reinforced concrete. There are reinforced concrete wing walls and a center pier, which is pointed on the upstream side and rounded on the downstream. There is a typical reinforced concrete railing. The substructure rests on timber piles. A 2-span arch bridge is not common in Burlington County, but it has little technological or historic significance.

INFOR MATION

PHOTO: 303:19-20 (01/92) REVISED BY (DATE): QUAD: Moorestown

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 03B4610 **CO** BURLINGTON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 537 OVER NORTH BRANCH PENNSAUK CREEK **FACILITY** CR 537

TOWNSHIP MAPLE SHADE TOWNSHIP

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 42 ft **WIDTH** 40.2 ft

CONSTRUCTION DT 1912ca **ALTERATION DT** 1930 **SOURCE** STYLE/PLAQUE

DESIGNER/PATENT **BUILDER** WM C. COOK, INC. (1930)

SETTING / CONTEXT The bridge carries a busy two-lane road and sidewalks over a shallow creek in an undistinguished region of 20th-century mixed commercial development. The bridge borders a vacant lot and is about 1/2 block from NJ 73. The original construction date is unknown, but the plaque and county engineer records indicate the bridge was extensively reconstructed and widened in 1930 a Mount Holly contractor.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The ca. 1912 earth-filled reinforced concrete arch bridge has sidewalks cantilevered out from each side. It is finished with typical concrete balustrades and decorative brackets at the sidewalks. The spandrel and wing walls have decorative scoring. More detailed than the other deck arch spans in the county, the bridge is a representative example of a common type and is not historically or technologically distinguished. It was widened and reconstructed in 1930, date of the present balustrade.

INFOR MATION

PHOTO: 303:15-16 (01/92) REVISED BY (DATE): QUAD: Moorestown

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 03C0420 **CO** BURLINGTON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 537 OVER MASON CREEK **FACILITY** CR 537

TOWNSHIP MOUNT LAUREL TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 84 ft **WIDTH** 40 ft

CONSTRUCTION DT 1941 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** HILL CONSTRUCTION COMPANY

SETTING / CONTEXT The bridge carries the busy two-lane county road over Mason Creek in a wooded, twentieth-century residential area about 3/4 mile upstream from the junction of Mason and Rancocas Creek. The road parallels Conrail, which runs on the same right-of-way as the Camden and Burlington County RR in the 1870s, and uses an early twentieth-century deck plate girder bridge about 30 yards south of the road. The 1941 highway bridge replaced a 1911 concrete arch built by Ferro Concrete Co.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The main span of the skewed, three-span bridge consists of steel stringers, with concrete encasing on the fascia stringers. The slab approach spans, deck, and railing are all reinforced concrete. The reinforced concrete abutments and piers rest on timber piles. Utility pipes hang from exposed reinforcing bars on one side. Hill Construction Company of Mount Holly, NJ built the bridge, one of many the firm did in southern NJ. The bridge is not technologically or historically distinguished.

INFOR MATION

PHOTO: 305:14-15 (01/92) REVISED BY (DATE): QUAD: Mount Holly

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 03C2002 **CO** BURLINGTON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 656 OVER US PIPE RR SIDING **FACILITY** CR 656

TOWNSHIP BURLINGTON TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 33 ft **WIDTH** 33 ft

CONSTRUCTION DT 1925 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT UNKNOWN **BUILDER** US PIPE AND FOUNDRY CO.

SETTING / CONTEXT The bridge carries the two-lane county road over a single RR track and one-lane gravel road that connects two parts of U.S. Pipe's industrial yard. U.S. Pipe is about 1/4 mile northeast of the city of Burlington, and 1/4 mile southeast of the Delaware River. The road curves on an 800 foot radius where the bridge sits. Since the 1950s, there have been periodic disputes between the county and the company over which entity is responsible for maintaining the bridge.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one-span concrete encased steel girder bridge has a reinforced concrete slab deck and a pipe railing. The reinforced concrete abutments were originally built to carry a much wider bridge, which was never built. The shoulders used to be sidewalks, but there have been no major alterations. There is some spalling. The bridge is a representative example of a common type and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 302:23A-24A (01/92) REVISED BY (DATE): QUAD: Bristol

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 03C3116 **CO** BURLINGTON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PEARL STREET OVER ASSISCUNK CREEK **FACILITY** PEARL STREET

TOWNSHIP BURLINGTON CITY

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 84 ft **WIDTH** 22 ft

CONSTRUCTION DT 1914 **ALTERATION DT** Rebuilt: 1949 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane street and sidewalks over a tidal stream at its confluence with the Delaware River. It is located on the northerly edge of the 18th- and 19th-century town of Burlington adjacent to an active marina and parking areas. Some railings from the earlier truss span survive on the southerly approaches to the arch bridge.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 12/10/92

SUMMARY The elliptical earth-filled deck arch bridge of reinforced concrete was built in 1914 by the local traction company to replace a collapsed truss bridge. The arch span was modified in 1949 when the downstream spandrel wall collapsed and was replaced. The concrete railing is not original. The approaches are marked by concrete parapets and some iron railings from the earlier bridge. The span is an altered example of a common bridge type, and is not technologically distinguished.

INFOR MATION

PHOTO: 39:40-42 (07/91) REVISED BY (DATE): QUAD: Bristol

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 03C3640 **CO** BURLINGTON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED J F KENNEDY BLVD OVER MILL CREEK **FACILITY** JFK PARKWAY

TOWNSHIP WILLINGBORO TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 31 ft **WIDTH** 36.5 ft

CONSTRUCTION DT 1925 **ALTERATION DT** 1960 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries the two-lane road through the heart of Willingboro, a post-World War II Levittown suburban residential community. The immediate area surrounding the bridge is wooded and a firehouse stands about 100 yards from the bridge.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY Originally built ca. 1925 as an encased stringer span supported on a concrete substructure, it was widened in 1960 by the addition of prestressed box beams on the east side to nearly double the width. The concrete parapets with top railings were also added in 1960. One wing wall is stone. The alterations are too recent and excessive to make it a historically or technologically distinguished bridge.

INFOR MATION

PHOTO: 305:25-26,310:8 (01/92) REVISED BY (DATE): QUAD: Beverly

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US
November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 03C4004 **CO** BURLINGTON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 635 OVER RANCOCAS CREEK **FACILITY** CR 635

TOWNSHIP MOUNT LAUREL TOWNSHIP

TYPE SWING SPAN **DESIGN** CENTER BEARING **MATERIAL** Steel

 # SPANS 4 **LENGTH** 312 ft **WIDTH** 18.7 ft

CONSTRUCTION DT 1903 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** NEW JERSEY BRIDGE COMPANY

SETTING / CONTEXT The narrow two-lane bridge carries traffic over the Rancocas Creek in a wooded, twentieth-century residential area on the edge of Willingboro, a post-World War II Levittown suburb. The bridge is in the village of Centerton, a town created in 1832 when an iron bridge spanned the creek at this site for the first time. The historic village of Rancocas lies about 1-1/2 miles north of the bridge. Historically, Centerton was a center for phosphorus for fertilizer and industry.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 03/12/01

SUMMARY The riveted Warren pony truss bridge has three fixed approach spans and one main center bearing swing span, originally built by the NJ Bridge Co. of Manasquan, NJ. Rehabilitation's in 1954 and 1985 resulted in replacing elements of the floor system and some in-kind replacement of the manual drive mechanism. But, overall, the span is an early and well-preserved example of a center-bearing swing span. It is also the work of a New Jersey bridge fabricator, which adds to its historical value. The bridge is individually eligible for listing in the National Register of Historic Places under Criteria A and C.

INFOR MATION

Bibliography:
Burlington County Engineer's Office. Bridge File C4.4. "Manasquan, New Jersey." Compiled by the Townfolk for the Diamond Jubilee under the Sponsorship of the Manasquan Chamber of Commerce. 1962. Woodward, E.M. History of Burlington County New Jersey. 1883.

Physical Description: The well-preserved 4-span bridge is composed of light, rivet-connected Warren with vertical pony trusses, 3 of which are fixed spans, and one is a manually operated center-bearing swing span supported on a concrete and stone substructure. All piers except the swing span pier have been augmented by modern steel pier bents. The trusses are designed for secondary stresses, and the top chord and inclined end posts are composed of channels with cover plate. The diagonals and verticals are laced angles while the bottom chords are channels connected by battens. The steel is Phoenix produced. The swing span is supported in the center by a transverse girders with balance wheels that guide the span in opening. A capstan is used to engage the rack and pinion gearing that moves the span. The bridge was never anything but manually operated.

There are no significant alterations to the bridge. In 1985 the approach span decks and stringers were replaced, and there were some repairs to the floor beams. The center bearing was also replaced in kind.

Historical and Technological Significance: The manually operated center bearing Warren with verticals pony truss swing span bridge built in 1903 was fabricated by the new Jersey Bridge Company of Manasquan, New Jersey (Criterion C). In addition to being a well-preserved example of a swing span bridge, it is one of less than six documented bridges by the state fabricator, and that increases the historic significance of the span. Unfortunately, no original plans of the bridge are preserved in the county engineer's office.

The New Jersey Bridge Company was founded at Manasquan in 1890, and it was active until 1907 when financial reversals forced the company to close. It was established by Mr. Wyckoop and Mr. Braly from Canton, Ohio. In its heyday, the operation, located adjacent to the railroad tracks to facilitate shipping of assembled trusses and girders, was the largest employer in Manasquan. The firm marketed bridges nationally, and it is known that they produced spans for Portland, Maine and Grand Rapids, Michigan. The company produced many types of bridges from multi-span pin-connected Pratt through trusses (1903 North Park Street Bridge in Grand Rapids) to large rivet-connected swing spans (1906-07 Vaughn Bridge, Portland, Maine). It is also historically significant that a relatively small designer/fabricator like the New Jersey Bridge Company continued operations after the creation of the American Bridge Company conglomerate in 1901. The 1903 swing span is the oldest moveable span over Rancocas Creek, an important county waterway and transportation route prior to World War I.

The bridge is located at Centerton, a village in Mount Laurel township. About 1880, the village was composed of nine or ten dwellings. Centerton has been the site of a crossing of the tidal creek since 1832. Centerton was the site of a phosphorous manufacturing plant established in 1877-78. The products, which included matches, were shipped to Philadelphia. The factory is not extant.

Boundary Description and Justification: The bridge is evaluated individually eligible because of its technological and historical merits, and is thus not dependent on its surroundings for its significance. Hence the boundaries should be limited to the right-of-way of the roadway the bridge carries and the substructure, including any wingwalls.

PHOTO: 305:18-24 (01/92) REVISED BY (DATE): QUAD: Mount Holly

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 03C4130 **CO** BURLINGTON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CENTERTON ROAD OVER PARKERS CREEK **FACILITY** CENTERTON ROAD

TOWNSHIP MOORESTOWN TOWNSHIP

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 38 ft **WIDTH** 31 ft

CONSTRUCTION DT 1906 **ALTERATION DT** 1957 **SOURCE** FERRO-CONCRETE

DESIGNER/PATENT DANIEL LUTEN **BUILDER** FERRO-CONCRETE CATALOGUE

SETTING / CONTEXT The bridge is carries a 2-lane road over a minor water feature in a wooded setting.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY Although altered in 1957 with slab extensions added to each side of the originally 18' wide reinforced concrete arch, the span is one of the few statewide examples of a patented Luten design, and it is illustrated in his National Bridge Co.'s 1907 catalogue. Ferro-Concrete Co., Luten's regional agent, built several spans in Burlington County before WW I. This span is the most complete of the lot, and it is historically and technologically distinguished because of association with Daniel Luten.

INFOR MATION

Bibliography:
Ferro Concrete Company Harrisburg, Pennsylvania 1908 Catalogue (in possession of Victor Darnell, Kensington, CT). Burlington County Engineer. Bridge File: C-4.13.

Physical Description: Built in 1906 as an approximately 18'-wide earth-filled, reinforced concrete deck arch bridge with a clear span of 32', the span was widened on both sides with prestressed concrete slabs on concrete abutments in 1957. Any original railings or parapets were demolished to accommodate the widening, and the limits of the 31'-wide roadway are now marked by modern beam guide rails. The arch spandrel walls are plain.

Historical and Technological Significance: The 1906 reinforced concrete barrel arch bridge is significant as one of the best examples of a patented Daniel Luten arch bridge in the state (Criterion C). Luten (1869-1946) was a highly successful promoter and patent holder of details for reinforced concrete arch bridges. He appears to have possessed keen business acumen in addition to his skills as a Purdue University-educated civil engineer, as he recognized early on the value and broad application of reinforced concrete bridge technology. Luten received his first patent for a reinforced concrete arch detail in 1899 (649,643), and he received at least 14 more before the first world war. More than his engineering genius was his ability to market efficient, reasonably priced, low-maintenance spans to county engineers all over the country. Luten established the National Bridge Company, based in Indianapolis, to promote his patented designs. The designs were marketed nationally through a network of companies that served as regional representatives for Luten in places like Chicago, Berlin (Connecticut), Topeka, and Los Angeles. Locally he was represented by the Ferro-Concrete Co., initially located in Philadelphia, according to National Bridge Company's 1907 catalogue, and then in Harrisburg, Pennsylvania. Through this network of representatives, Luten marketed literally hundreds of bridges throughout the country with the highest concentration being in the Mid-West. Thus, Daniel Luten represents as much the marketing side of engineering as he does the application or development of technology. His reputation is based in large part on his being very successful at recognizing a market and promoting his own designs.

The Ferro-Concrete Company operated in Harrisburg from 1908 through 1925, according to Harrisburg city directories. It appears that the firm peaked during the 1910s, as it had only 5 employees in 1922 (Industrial Directory of the Commonwealth of Pennsylvania). Ferro-Concrete Company was primarily a small bridge contracting firm noted more for its association with Luten's National Bridge Company than anything it did on its own. Several multi-span concrete arch bridges from the 1910s have been identified in Pennsylvania including the Third Street Bridge over the Lehigh River in Easton, Pennsylvania. It is known that the company built bridges in Burlington and Middlesex counties in New Jersey, but their work has not been located anywhere else in the state. Burlington County, in particular, employed Luten's designs and Ferro-Concrete's erection as early as 1906. This arch and the 1909 bridge at Kirby's Mill in Medford Township (03D4570) are documented as having been built by the Ferro-Concrete Co. as was the 1911 reinforced concrete slab span that carries Chesterfield-Sykesville Road over Blacks Creek in Chesterfield (03F2320). Original plans for the Centerton bridge were not located, so it is not known what patented details the bridge contains.

All three of the documented Ferro-Concrete Co. bridges in the county have been altered, but the Centerton Road arch span is evaluated as significant because it retains more integrity of original design than the others. While the 1957 slab additions are not compatible, the original structure is readily discernable. The historical significance of being associated with one of the early nationally recognized proponents of reinforced concrete arch bridges outweighs the distraction of the alteration. The 1906 bridge stands as a record of the development and promulgation of reinforced concrete arch spans in the first decade of this century. Its historical significance is enhanced by the fact that the bridge was also used as an illustration in Luten's 1907 catalogue, which identifies the 32' arch as being in Hartford in Burlington County. It is the only New Jersey bridge in the nationally distributed catalogue.

Boundary Description & Justification: The bridge, located in a wooded setting, is evaluated as individually eligible for its technological and historical significance. Therefore, the boundaries of the significant resource are limited to the 1907 superstructure and substructure, including wingwalls, of the bridge itself. The 1957 slab additions are not significant.

PHOTO: 305:16-17;31013 (01/92) REVISED BY (DATE): QUAD: Moorestown

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 03C4150 **CO** BURLINGTON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 537 OVER PARKERS CREEK **FACILITY** CR 537

TOWNSHIP MOUNT LAUREL TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 26 ft **WIDTH** 33 ft

CONSTRUCTION DT 1910 **ALTERATION DT** 1930 **SOURCE** PLAQUE

DESIGNER/PATENT H. B. SMITH, COUNTY ENGINEER **BUILDER** WILLIAM C. COOK, INC.

SETTING / CONTEXT The bridge carries the two-lane county road over Parkers Creek in an area of heavy vegetation, making access to the bridge difficult. The surrounding area is a mix of commercial development and scattered farming about 1/2 mile east of the village of Hartford. The road parallels Conrail, which follows a RR right-of-way dating to the Camden and Burlington County RR in the 1870s.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY According to county records, the encased stringer bridge dates to ca. 1910. In 1930, William C. Cook, Inc., a Mount Holly contractor, widened the bridge by adding encased stringers and a reinforced concrete deck to the north side. The bridge has typical mid-twentieth-century balustrades and modern guide rail approaches. It also carries a utility pipe along one side. The abutments are reinforced concrete. The bridge is neither technologically nor historically distinguished.

INFOR MATION

PHOTO: 305:12-13 (01/92) REVISED BY (DATE): QUAD: Moorestown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 03D3600 **CO** BURLINGTON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 670 OVER BRANCH OF ASSISCUNK CREEK **FACILITY** CR 670

TOWNSHIP SPRINGFIELD TOWNSHIP

TYPE STRINGER **DESIGN** PARTIALLY ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 54 ft **WIDTH** 30.3 ft

CONSTRUCTION DT 1941 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a two-lane county road over a branch of the Assicunk Creek in a wooded, rural area 3/4 mile east of Jacksonville.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one-span steel stringer bridge has the fascia stringers encased in concrete and rests on reinforced concrete abutments and wing walls. There is a reinforced concrete railing as well as modern guide rail approaches. This 1-span bridge reportedly replaced a 1906 five-span through truss manufactured by the Canton Bridge Company. The 1906 bridge had stone abutments, which no longer exist. The present bridge is a common type and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 304:28A-29A (12/91) REVISED BY (DATE): QUAD: Bristol

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 03D3760 **CO** BURLINGTON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CEDAR LANE OVER ASSISCUNK CREEK **FACILITY** CEDAR LANE

TOWNSHIP SPRINGFIELD TOWNSHIP

TYPE PONY TRUSS **DESIGN** WARREN **MATERIAL** Steel

 # SPANS 1 **LENGTH** 76 ft **WIDTH** 13.5 ft

CONSTRUCTION DT 1904 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The one-lane bridge over a minor stream is fenced off and closed to all traffic. In a isolated wooded setting at the end of a lightly traveled road, it lies about 1/4 mile north of the NJ Turnpike and is adjacent to the Florence Industrial park.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 6-panel rivet-construction Warren with verticals pony truss bridge has unusual floor beam connections. The floor beams, which extend beyond the deck and support knee braces, have paired filled-top or saddle-like hangers that suspend the beams from the gusset plates at the panel points. The span is very well preserved, but the ca. 1889 rubble-coursed stone abutments were parged in 1991. The seldom-seen floor beam connection makes the span technologically distinctive and significant.

INFOR MATION

Bibliography:
Burlington County Engineer's Office. Bridge File D3.76.

Physical Description: The light 1904 6-panel Warren pony truss bridge is supported on ashlar abutments built in 1889. They were coated with concrete in 1991, covering the original date stone. The trusses themselves are in a more complete state of preservation, and with the exception of replacement of deteriorated lower chords and bearing plates in 1954, appear unaltered. Of riveted construction, the lower and upper chords as well as the diagonals are all composed of angles. The knee braces that extend from the floor beams to the upper chord are original as is the pipe railing on the inner face of the trusses. What gives the span its technological significance are the unusual and possibly unique floor beam hangers. Each floor beam is suspended at the panel point from the oversized gusset plate by a pair of hairpin hangers with filled tops or saddles that are fitted over the gusset plate. The detail appears to be original. The deck is a plank inkind replacement of the original.

Historical and Technological Significance: The 6-panel Warren pony truss bridge built in 1904 is a well preserved example of a once-common bridge type in Burlington County, and it is technologically significant because of its unusual and possibly unique floor beam hanger detail (Criterion C). Fabricated during the period of transition from pinned to riveted field connections, the 76'-long span is all riveted with the exception of the floor beam connections at the lower panel points. The floor beams are suspended from large hairpin hangers with filled tops that straddle the oversized gusset plates. The detail has been identified on no other truss bridge in the state. The county engineer has no original plans for the bridge, so it is not known who designed or fabricated the span. The detail, however, is idiosyncratic and reflective of the experimental nature of truss bridge designs.

Boundary Description and Justification: The bridge is located in an isolated, undeveloped setting. Since it is the bridge that is individually significant, the eligible limits include on the substructure and superstructure.

PHOTO: 304:23A-26A (01/92) REVISED BY (DATE): QUAD: Bristol

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 03D4100 **CO** BURLINGTON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WASHINGTON STREET OVER NORTH BRANCH RANCOCAS CREEK **FACILITY** WASHINGTON STREET

TOWNSHIP MOUNT HOLLY TOWNSHIP

TYPE RIGID FRAME **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 57 ft **WIDTH** 36.2 ft

CONSTRUCTION DT 1942 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER**

SETTING / CONTEXT The bridge carries two lanes of traffic in downtown Mount Holly, a commercial crossroads at the navigable head of Rancocas Creek. It was known as Bridgetown in the eighteenth century. The bridge spans a branch of the creek which is part of a Corps of Engineers flood control project. Twentieth-century small businesses are in the immediate vicinity of the bridge. The span is located within the Mt. Holly Historic District, a 19th-century town.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Listed. Mount Holly Historic District. 02/20/1973. Noncontributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one-span reinforced concrete rigid frame bridge has reinforced concrete abutments and wing walls, which rest on timber pile footings. The bridge has reinforced concrete balustrades and carries utility pipes across the creek. The bridge type is uncommon for Burlington County, but it is common in the state context. The bridge is too recent to correspond to the significant dates of the Mount Holly Historic District and is a noncontributing resource.

INFOR MATION

PHOTO: 38:18-20 (12/91) REVISED BY (DATE): QUAD: Mount Holly

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 03D4108 **CO** BURLINGTON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WHITE STREET OVER NORTH BRANCH RANCOCAS CREEK **FACILITY** WHITE STREET

TOWNSHIP MOUNT HOLLY TOWNSHIP

TYPE BRICK ARCH **DESIGN** BARREL **MATERIAL** Brick

 # SPANS 1 **LENGTH** 35 ft **WIDTH** 19.6 ft

CONSTRUCTION DT 1853 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries one lane of traffic on a side street in Mount Holly, a town that was historically a commercial crossroads because of the Rancocas Creek. Mount Holly, known as "Bridgetown" in the eighteenth century, has an extensive 18th-19th century historic district. Immediately surrounding the bridge are early twentieth-century residences, although the stone foundations, some of which are contiguous to the bridge, probably date to the 19th century.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Individually Eligible. Listed. Mount Holly Historic District. 02/20/1973. Contributing.

CONSULT DOCUMENTS SHPO Letter 03/12/01

SUMMARY A plaque and scant county records support an 1853 construction date for the small brick arch bridge, the only one of its type in the area. The spandrel walls are rubble-coursed stone. The spandrels have been raised with brick extensions that appear to be an addition. The intrados and the inside of the parapets have concrete parging. The east end of the north parapet wall looks reconstructed. The bridge, second oldest in the county, is individually eligible for listing in the National Register of Historic Places under Criterion C, and it contributes to the character of the Mount Holly Historic District.

INFOR MATION

Bibliography: Burlington County Engineer's Office. Bridge File #D4.18. ONJH "Mount Holly Historic District" National Register nomination. 1973.

Physical Description: The elliptical brick arch bridge with a span of 35' is founded on ashlar footings and had a rubble-coursed stone spandrel wall. The footings have been reinforced with concrete skirting. The parapets are brick, and their inner face has been covered with a cementous coating as has the intrados of the arch. A date stone is located on the inner face of the parapet. The bridge crosses a small non-navigable branch of the Rancocas Creek. It is located in a 19th century residential area dominated by 2- and 3-story town houses. The arch appears to be sound.

Historical and Technological Significance: The small brick arch bridge is one of the few example of its type in southern New Jersey, and it is therefore a technologically significant span. Brick arches do not appear to have ever been a common bridge type, and there are less than half a dozen documented as surviving in the state. The documented incidence of brick arch spans places them in the second half of the 19th century with this example in Mount Holly ranking as one of the earliest. No original plans for the bridge survive with the county engineer, and the date of construction is established by a plaque and scant county records.

In addition to its technological significance, the bridge is located within the Mount Holly Historic District. The well-preserved assemblage of 18, 19th, and early 20th century buildings is significant in several areas including architecture, commerce, and transportation, and the bridge, built during Mount Holly's period of significance, contributes to the historic character of the community.

Boundary Description and Justification: The bridge is located within the Mt. Holly Historic District, so the entire area surrounding the bridge for some distance has been evaluated as eligible and contributing to the historic character of the district.

PHOTO: 38:12-15 303:23 (12/91 JPH (5/96)) REVISED BY (DATE): QUAD: Mount Holly

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 03D4110 **CO** BURLINGTON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BISPHAM STREET OVER NORTH BRANCH OF RANCOCAS CREEK **FACILITY** BISPHAM STREET

TOWNSHIP MOUNT HOLLY TOWNSHIP

TYPE STRINGER **DESIGN** PARTIALLY ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 68 ft **WIDTH** 30.1 ft

CONSTRUCTION DT 1938 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a two-lane side street over a minor stream in Mount Holly, an 18th- and 19th-century town historically a commercial crossroads because of the creek. The immediate setting around the bridge includes residences from the turn of the century, and commercial buildings from the mid-late twentieth century. The bridge is located within the Mount Holly Historic District, but it is much newer than the surrounding 19th century buildings.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Listed. Mount Holly Historic District. 02/20/1973. Noncontributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed steel stringer with encased fascia stringers is supported on a concrete substructure. The concrete balustrade is a typical design. Although well preserved, the bridge is a representative example of a common type, and it is not historically or technologically distinguished. It is also too recent to correspond to the significant periods of the Mount Holly Historic District, and it is thus evaluated as noncontributing and not eligible.

INFOR MATION

PHOTO: 38:16-17 (12/92) REVISED BY (DATE): QUAD: Mount Holly

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 03D4130 **CO** BURLINGTON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED FOUNDRY ROAD OVER NORTH BRANCH OF RANCOCAS CREEK **FACILITY** FOUNDRY ROAD

TOWNSHIP EASTAMPTON TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 3 **LENGTH** 56 ft **WIDTH** 18.5 ft

CONSTRUCTION DT 1885ca **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** H. B. SMITH CO.

SETTING / CONTEXT The wide one-lane bridge carries light local traffic over the north branch of the Rancocas Creek in Smithville, a company town named after the flamboyant manufacturer Hezekiah B. Smith. The H.B. Smith Company, founded in 1865 to make woodworking machinery, was also famous for making the Star bicycle and the bicycle railroad between Mount Holly and Smithville in the 1890s.The Smithville Historic District includes the river and lake area, which is now a park.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Individually Eligible. Listed. Smithville Historic District. 05/12/1977. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY When the stringer bridge with unusual cast-iron X-shape pile caps and cast deck brackets or clips on the fascia stringers was built is not documented, but the details make it a historic and technologically distinctive span. It is likely that the pile caps, supported on timber piles, were designed and produced by the H.B. Smith company, a noted manufacturer of woodworking machinery prior to 1926. It is known that the bridge was in place in its present configuration by 1890.

INFOR MATION

Bibliography:
Bolger, William. Smithville, The Result of Enterprise. Burlington County Cultural and Heritage Commission. 1980. Burlington County Engineer's Office. Bridge File # D4.13.

Physical Description: The 56'-long 3-span stringer bridge with a vertical profile and one simple and two continuous spans is supported on ashlar abutments and unusual, possibly unique cast iron X pile caps that fit over timber piles. The X-shaped pile caps are arranged four per bent and support a cast iron pier cap with cast clips to attach to the stingers. The pipe railing is affixed to the fascia stringer with bracketed ends on the cast posts that hold the pipe rails. Remedial work to the span includes rebuilding (specific work elements undefined) in 1940 and strengthening the original stone abutments with concrete buttresses and skirting. The concrete deck dates to 1978. The bridge is an idiosyncratic design and is well preserved considering its late-19th century date of construction.

Historical and Technological Significance: The exact date of construction of the unusually detailed stringer bridge is not precisely documented, but historic photographs of Smithville, the 19th century industrial village on the banks of the Rancocas Creek east of Mount Holly, show that it was in place by at least 1890. It is located within the National Register-listed Smithville Historic District (criteria A, C), and it is a contributing element. County Records indicate that it was built by the H.B. Smith Company, and it is likely that it was in fact designed by Hezekiah B. Smith (1816-1887) or his engineers as part of the his improvement of the former Shreve cotton textile mill complex Smith purchased in 1865. Smith vastly expanded both the water-powered manufacturing facility for his highly successful and technologically innovative manufacture of woodworking machinery, a concern that continued into the 1950s. Smith also expanded the nuclear village that surrounded the works. The iron and steel bridge ranks as one of the earliest and most unusual stringer bridges in the state. Its significance is derived from both its historic association with Smithville, a significant industrial site, and its unusual design. It is reflective of the technological ingenuity of inventor and manufacturer H.B. Smith.

Boundary Description and Justification: The bridge is located within the Smithville Historic District. The area all around the bridge is part of the district. See ONJH's Burlington County National Register file of a map delineating the exact boundaries of the district.

PHOTO: 38:4-8 (12/92) REVISED BY (DATE): QUAD: Mount Holly

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 03D4260 **CO** BURLINGTON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 681 OVER STOP THE JADE RUN **FACILITY** CR 681

TOWNSHIP SOUTHAMPTON TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 33 ft **WIDTH** 29 ft

CONSTRUCTION DT 1915 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT JAMES LOGAN, COUNTY ENGINEER **BUILDER** MEDFORD CONCRETE COMPANY

SETTING / CONTEXT The bridge carries two lanes of the county road over Stop the Jade Run on the edge of Vincentown. The river marks the north boundary of the Vincentown Historic District, which celebrates the town's history as a milling center and its surviving residences from several eras. The immediate vicinity of the bridge is lightly wooded with 19th and 20th century residences within 100 yards.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Listed. Vincentown Historic District 09/21/1988. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span concrete-encased steel stringer, built in 1915, rests on masonry abutments built in 1907. The south abutment has a 1936 concrete addition at its base to control erosion. The center pier is reinforced concrete. The bridge has a nice decorative metal railing in poor condition made by the Canton Bridge Company. Except for the railing, the bridge lacks technological distinction but it does correspond to the historic district's period of significance and is thus contributing.

INFOR MATION

Bibliography:

ONJH. "Vincentown Historic District." 1988.

Physical Description: The 2-span simply supported encased stringer bridge is supported on ashlar abutments built in 1907. The central pier is reinforced concrete. What happened to the previous superstructure is not known. A sidewalk is carried on the east side only. In 1936 a concrete facing was added to the south abutment. The bridge is enclosed by a handsome lattice iron railing with cast iron posts.

Historical and Technological Significance: The encased stringer bridge, built in 1915 on 1097 stone abutments, is a representative example of a common bridge type in the state, but it is located on the boundary of the Vincentown Historic District that is recognized for being an architecturally and historically distinguished residential, commercial, and milling center. The period of significance of the village extends through the 1920s, so the bridge was built within its era of significance and is a contributing resource. The handsome, well-preserved iron railing of the bridge, manufactured by the Canton (Ohio) Bridge Company, according to the plaque, contributes to the historic character of the district. The concrete-encased superstructure was erected by the Medford Concrete Company.

Boundary Description and Justification: The bridge is located across the water course that forms part of the north boundary of the Vincentown Historic District. It is appropriate to consider the north bank of the water course the boundary, which would then include the bridge within the boundary of the historic district. The limit of the boundary of the district clearly does not extend beyond the north bank of the water course.

PHOTO: 39:44, 1-4 (12/91) REVISED BY (DATE): QUAD: Mount Holly

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 03D4270 **CO** BURLINGTON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 616 OVER SOUTH BRANCH OF RANCOCAS CREEK **FACILITY** CR 616

TOWNSHIP SOUTHAMPTON TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 38 ft **WIDTH** 30 ft

CONSTRUCTION DT 1918 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT JAMES LOGAN, COUNTY ENGINEER **BUILDER** JUNIATA COMPANY

SETTING / CONTEXT The bridge carries a 2-lane street and sidewalks over a minor stream in Vincentown's historic district, which celebrates the town's history as a 19th- and early-20th century milling center and its surviving residences from several eras. Mill St. was named after the grist and sawmills that first grew up in the town between 1800 and 1820. A church, 19th and 20th century residences, and a commercial buildings are in the immediate vicinity of the bridge.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Not Individually Eligible. Listed. Vincentown Historic District 09/21/1988. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one-span concrete encased steel stringer bridge rests on reinforced concrete abutments. In 1981, the county made minor concrete repairs to the headwalls, curbs, and facing. The bridge has metal railings and also carries a utility pipe. Although a common bridge type and not individually distinguished, the span was built within the district's period of significance that extends to 1930. It thus contributes to the historic character of the district.

INFOR MATION

Bibliography:

ONJH. "Vincentown Historic District" National Register nomination, 1988. Burlington county Engineer. Bridge File D4.27.

Physical Description: The single-span, 38'-long encased steel stringer bridge is supported on concrete abutments. The sidewalks are enclosed with metal, fence-like railings while the approaches are marked with concrete parapets.

Historical and Technological Significance: The steel stringer bridge is not technologically distinguished, but it is located within the National Register-listed Vincentown Historic District, and it was constructed within the period of significance of the district that extends through the 1920s. Vincentown, which retains its pre-1930 appearance, was an important country commercial and milling center through World War I. The bridge, a well-preserved example of an extremely common bridge type, contributes to the historic character of the district.

Boundary Description and Justification: The bridge crosses a water course that is located within the Vincentown Historic District. Because the bridge is in the "heart" of the district, all the area surrounding it is considered eligible. For a map of the exact district boundaries, refer to the ONJH's Burlington County National Register file.

PHOTO: 39:5-6 (12/91) REVISED BY (DATE): QUAD: Mount Holly

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 03D4300 **CO** BURLINGTON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED RACE STREET OVER SOUTH BRANCH OF RANCOCAS CREEK **FACILITY** RACE STREET

TOWNSHIP SOUTHAMPTON TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 35 ft **WIDTH** 20.9 ft

CONSTRUCTION DT 1909 **ALTERATION DT** Demolished **SOURCE** PLAQUE

DESIGNER/PATENT EARL THOMSON, COUNTY ENGINEER **BUILDER** P. J. BYRNE

SETTING / CONTEXT The bridge carries a 2-lane street over the south branch of Rancocas Creek in Vincentown's historic district, which celebrates the town's history as a milling center and its surviving pre-1930 residences from many eras. The dam that forms the mill pond south of the town is adjacent to the bridge. There are six timber sluice gates directly below the south fascia of the bridge. The bridge is in a municipal park.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Bridge was Not Individually Eligible. Listed. Vincentown Historic District 09/21/1988. Contributed.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased steel stringer bridge rests on reinforced concrete abutments with wing walls. The bridge has pipe railings, and the sluice gates and frames for the mill pond dam are timber. The span is a representative example of a common type, but it was built within the period of significance of the Vincentown Historic District, which extends to 1930. While not individually significant, it does contribute to the history and character of the district.

INFOR MATION

Bibliography:

ONJH. "Vincentown Historic District" National Register Nomination. 1988.

Physical Description: The 35'-long encased steel stringer span is supported on concrete abutments with wing walls and is enclosed by a pipe railings. The upstream side of the simple, well preserved bridge is fitted with wood frames holding manually operated wood sluice gates for the adjacent mill pond.

Historical and Technological Significance: Although a representative example of a common New Jersey bridge type, the stringer bridge is historically significant because is it was built within the period of significance (18th century through the 1920s) of the Vincentown Historic District. The bridge crosses a stream that was dammed to create a mill pond that powered the community's mills that were active until the early years of the 20th century. Although this is not the original bridge at this crossing, it is nevertheless a contributing structure in the historic district based on its date of construction and appearance. Vincentown is a community that retains its pre-1930 appearance, according to the National Register nomination.

Boundary Description and Justification: While not individually significant, the bridge is located in the "heart" of the Vincentown Historic District. It is surrounded on all sides by eligible property. For a map of the exact boundaries of the Vincentown Historic District, refer to ONJH's Burlington County National Register files.

PHOTO: 39:7-9 (12/91) REVISED BY (DATE): QUAD: Mount Holly

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 03D4570 **CO** BURLINGTON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 616 OVER SOUTHWEST BRANCH RANCOCAS CREEK **FACILITY** CR 616

TOWNSHIP MEDFORD TOWNSHIP

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 36 ft **WIDTH** 18.1 ft

CONSTRUCTION DT 1909 **ALTERATION DT** 1989 **SOURCE** PLAQUE

DESIGNER/PATENT UNKNOWN (D. LUTEN ?) **BUILDER** FERRO CONCRETE CO.

SETTING / CONTEXT The bridge carries a 2-lane road over the head race for Kirby's Mill approximately 40' from the turbines. The complex, first built in the 1770s included a 3 1/2 story grist mill, sawmill, shingle mill, carding mill, blacksmith shop, and other structures. The grist mill operated under water power until 1961, the last to do so in New Jersey. It closed in 1969. The well preserved complex is located on a small island, and it is listed in the National Register.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Listed. Kirby's Mill. 08/12/1971. Noncontributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 20'-wide deck arch bridge built in 1909 was partially rebuilt in 1989. Four feet were added on each side and concrete parapets were reproduced. While the span retains some degree of original detailing of the 1909 span, the proportions of the superstructure and the roadway that pass through the center of the historically significant mill complex disrupt the original historical character of the surroundings. The altered span is evaluated as noncontributing based on alterations and proportions.

INFOR MATION

PHOTO: 304:12A-13A (07/91) REVISED BY (DATE): QUAD: Mount Holly

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 03D4850 **CO** BURLINGTON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CREEK ROAD OVER TRIBUTARY OF SOUTH BRANCH RANCOCAS CREEK **FACILITY** CREEK ROAD (CR 640)

TOWNSHIP LUMBERTON TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Wood

 # SPANS 1 **LENGTH** 21 ft **WIDTH** 30.5 ft

CONSTRUCTION DT 1941 **ALTERATION DT** 1950 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** BURLINGTON COUNTY

SETTING / CONTEXT The bridge carries a two-lane county road over a tributary to the south branch of the Rancocas Creek in a rural, wooded area about one mile west of the village of Lumberton, a small village associated with industries such as the lumber, shipbuilding, and iron industries, and significant as an important commercial crossroads in the 19th century.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one-span timber stringer bridge has abutments and wing walls of timber sheeting and piles. The deck is wood with an asphalt overlay. The wood railing has diagonal bracing to the extended pile caps. The county engineers office dates the bridge to 1941, with unspecified reconstruction in 1950. The bridge is a common type in southern New Jersey and is not technologically or historically distinguished.

INFOR MATION

PHOTO: 305:29-30 (12/91) REVISED BY (DATE): QUAD: Mount Holly

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 03D5220 **CO** BURLINGTON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED HAWKIN ROAD OVER SOUTHWEST BRANCH OF RANCOCAS CREEK **FACILITY** HAWKIN ROAD

TOWNSHIP MEDFORD TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 63 ft **WIDTH** 24.3 ft

CONSTRUCTION DT 1919 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a two-lane county road over the southwest branch of the Rancocas Creek on the outskirts of Medford, a village once known as Belly Bridge but later named after the town in Massachusetts. Immediately surrounding the bridge, the vicinity is wooded and near a township park, but most of the surrounding area is thoroughly residential (20th century).

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The three-span concrete encased steel stringer, built in 1919, rests on reinforced concrete abutments, piers, and pier caps. The bridge has a concrete deck and a metal pipe railing. In 1942, the railings, wingwall, and approaches all received repair work. The bridge has spalling on the fascia stringers. The bridge is a common type is not technologically or historically distinguished.

INFOR MATION

PHOTO: 301:27A-28A (12/91) REVISED BY (DATE): QUAD: Mount Holly

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 03D5800 **CO** BURLINGTON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 541 OVER SOUTHWEST BRANCH OF RANCOCAS CREEK **FACILITY** CR 541

TOWNSHIP MEDFORD TOWNSHIP

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 69 ft **WIDTH** 40 ft

CONSTRUCTION DT 1925ca **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a two-lane county road, sidewalks, and a utility pipe over a tidal stream on the southern outskirts of the village of Medford, a town once known as Belly Bridge, but later named after the town in Massachusetts. The bridge is at one end of Main Street in a mid-20th century commercial and residential neighborhood with a park.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one-span reinforced concrete deck arch bridge has plain closed spandrels. The rear of the western abutment may be more recent. The bridge has a common-style concrete balustrade, except over the western approach, which has a concrete parapet. There are no wing walls. The county records regarding the bridge are incomplete, and no verification of a date was possible. The span is a representative example of common bridge type and is not technologically or historically distinguished.

INFOR MATION

PHOTO: 301:16A-17A (12/91) REVISED BY (DATE): QUAD: Mount Holly

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 03E2460 **CO** BURLINGTON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 545 OVER BLACKS CREEK **FACILITY** CR 545

TOWNSHIP CHESTERFIELD TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 38 ft **WIDTH** 24 ft

CONSTRUCTION DT 1925 **ALTERATION DT** 1980 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT BURLINGTON CO. ENGINEER **BUILDER** HILL CONSTRUCTION COMPANY

SETTING / CONTEXT The bridge, not visible from the roadway, carries a 2-lane road over a small stream on the southerly edge of the 19th century settlement of Chesterfield. The stream is the southerly boundary of the Recklesstown Historic District, but the bridge was not evaluated or included as part of the district.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 8/2/90

SUMMARY The two-lane concrete encased stringer bridge, built in 1925 by the county, crosses Blacks Creek at a severe skew. The masonry abutments date to 1892, but they were covered with concrete in 1980 and are no longer visible. The span is finished with paneled concrete parapets. The bridge is a common type in southern New Jersey and is not technologically or historically distinguished.

INFOR MATION

PHOTO: 626:12-15 (07/91) REVISED BY (DATE): QUAD: Columbus

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 03E2540 **CO** BURLINGTON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED DUNNS MILL ROAD OVER BLACKS CREEK **FACILITY** DUNNS MILL ROAD

TOWNSHIP BORDENTOWN TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 39 ft **WIDTH** 19.1 ft

CONSTRUCTION DT 1920 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge carries a 2-lane road over a minor stream in a wooded area between US 206 and the New Jersey Turnpike. The road dead ends at the Turnpike toll plaza and serves as the local access road to the facility.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The steel stringer bridge is supported on ashlar abutments with concrete caps and a large corner buttress on the downstream side. The wingwalls are also ashlar. The deck is timber plank. Wood stringers carried on beams or diaphrams welded between the stringers have been added. The wood railings appear to be an inkind replacement of the original. The bridge is a representative example of a common type and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 129:27-29 (07/91) REVISED BY (DATE): QUAD: Trenton East

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 03E2580 **CO** BURLINGTON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 662 (BURLINGTON STREET) OVER BLACKS BROOK **FACILITY** CR 662 (BURLINGTON STREET)

TOWNSHIP BORDENTOWN CITY

TYPE THRU GIRDER **DESIGN** PARTIALLY ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 55 ft **WIDTH** 30 ft

CONSTRUCTION DT 1921 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries a 2-lane city street, one sidewalk, and a utility pipe over a small tidal stream on the south end of Bordentown City. The road is lined with mid-20th century houses. The elevated overpass for US 295 is parallel to the bridge. The street was one of the original 15 New Jersey state highways. Route 2 went from Trenton to Camden via Bordentown, Fieldsboro, and Roebling.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The built-up thru girder with floor beams bridge is supported on a concrete substructure. The cantilevered sidewalk supported on brackets on the downstream side is enclosed with a metal railing set between concrete posts that match those placed at the end of the girders. Knee braces are located on the inside of the girders. Although unaltered, the bridge is a representative example of a common bridge type and is not innovative or distinctive.

INFOR MATION

PHOTO: 191:39-41 (07/91) REVISED BY (DATE): QUAD: Trenton East

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 03E3330 **CO** BURLINGTON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 537 OVER BARKERS BROOK **FACILITY** CR 537

TOWNSHIP SPRINGFIELD TOWNSHIP

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 53 ft **WIDTH** 37.5 ft

CONSTRUCTION DT 1912 **ALTERATION DT** 1936 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** W.S. GALE

SETTING / CONTEXT The bridge carries a two-lane county road over a small stream in a rural area with woods and some agriculture about one mile west of a small airport and one mile southwest of Jobstown, a village named after an 18th century innkeeper but better known for horse racing in the 19th century.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY In 1912, W.S. Gale built the one-span concrete arch bridge with concrete footings on timber piles. The skewed bridge had an earth deck with a bituminous paving. In 1936, the bridge was widened to a 30' roadway by adding about 8' on either side. There is scoring on the spandrel walls, and the roadway is enclosed by concrete railings dating to 1937. The early bridge has been significantly altered with the result being a span that is not historically or technologically distinguished.

INFOR MATION

PHOTO: 304:32A-33A (12/91) REVISED BY (DATE): QUAD: Columbus

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 03E4220 **CO** BURLINGTON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BRACE ROAD OVER STOP THE JADE RUN **FACILITY** BRACE ROAD

TOWNSHIP SOUTHAMPTON TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Wood

 # SPANS 2 **LENGTH** 24 ft **WIDTH** 12.6 ft

CONSTRUCTION DT 1942 **ALTERATION DT** 1990 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries one lane of the gravel county road over Stop the Jade Run in a rural, wooded area with some agriculture about 3/4 mile west of Buddtown, a village with a sawmill in the 18th and 19th centuries, and named after the ubiquitous (in the county) Budd family.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The timber stringer bridge is supported on concrete-reinforced stone abutments and a braced wood pile bent. The plain wood railings are bolted to the fascia stringers, the wearing surface is plank. In 1990 the county replaced the fascia stringers, deck, and railings. In addition to being a representative example of a common county bridge type, the span contains much replacement material. It is not historically or technologically distinguished.

INFOR MATION

PHOTO: 302:8A-9A (12/91) REVISED BY (DATE): QUAD: Pemberton

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 03E4400 **CO** BURLINGTON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED HILLIARDS BRIDGE ROAD OVER SOUTH BRANCH RANCOCAS CREEK **FACILITY** HILLIARDS BRIDGE ROAD

TOWNSHIP SOUTHAMPTON TOWNSHIP

TYPE PONY TRUSS **DESIGN** WARREN **MATERIAL** Metal

 # SPANS 1 **LENGTH** 40 ft **WIDTH** 16.1 ft

CONSTRUCTION DT 1907 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT CANTON BRIDGE COMPANY **BUILDER** CANTON BRIDGE COMPANY

SETTING / CONTEXT The bridge carries one lane over a small stream in a well-preserved rural setting surrounded by both fields and woods.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 8/2/90

SUMMARY The well preserved 3-panel rivet-connected Warren pony truss bridge on ashlar abutments that have been reinforced with concrete is a well-preserved example of its type and fabricator, the Canton Bridge Company (Ohio). It survives with its plaques and finials. Canton Bridge Company, founded in 1876, was one of the most prolific bridge companies during the late-19th and early-20th centuries. The early and complete Warren pony truss span is a significant example of its type.

INFOR MATION

PHOTO: 39:14-17 (07/91) REVISED BY (DATE): QUAD: Pemberton

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 03E4440 **CO** BURLINGTON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED SMITHVILLE ROAD (CR 684) OVER NORTH BRANCH RANCOCAS CREEK **FACILITY** SMITHVILLE ROAD (CR 684)

TOWNSHIP EASTAMPTON TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 7 **LENGTH** 125 ft **WIDTH** 24.5 ft

CONSTRUCTION DT 1914 **ALTERATION DT** 1951 **SOURCE** PLANS

DESIGNER/PATENT J. LOGAN, BUR. CO. ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries the two-lane county road over the North Branch Rancocas Creek in Smithville, a 19th and early 20th century company town named after flamboyant manufacturer Hezekiah B. Smith. The H.B. Smith Company, founded in 1865, produced woodworking machinery, the Star bicycle, and the bicycle railroad between Mount Holly and Smithville.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible. Listed. Smithville Historic District. 05/12/1977. Contributing.

CONSULT DOCUMENTS SHPO Letter 03/12/01

SUMMARY The 7-span continuous concrete slab, built in 1914, rests on reinforced concrete piles, pile caps, abutments, and wingwalls. It is finished with the original pipe railing. The piles are spalled. In 1951, most of the members were gunited. In addition to being built within the period of significance of the Smithville Historic District, the span is technologically distinguished as being an early example of a reinforced concrete pile bent-supporting a slab deck bridge. The bridge is individually eligible for listing in the National Register of Historic Places and is a contributing element of the Smithville Historic District, eligible under Criteria A and C.

INFOR MATION

Bibliography:
Burlington County Engineer's File # E4.44. Condit, Carl. American Building Art 20th Century, 1960.

Physical Description: The 7-span bridge is a continuous slab bridge supported on reinforced concrete abutments and reinforced concrete bents composed of five 16" square piles set 6' on center apart and a 34'-deep pier cap. The slab deck is covered by an asphalt wearing surface, and the bridge is finished with the original pipe railing. With the exception of gunite that was sprayed on most of the members in 1951, the superstructure and substructure survive in a good state of preservation.

Historical and Technological Significance: The 1914 bridge is technologically significant because it is an early example of a reinforced concrete driven-pile substructure (criterion C). The original plan of the bridge is preserved in the Burlington County Engineer's Office, and it confirms that the 7-span structure designed by James Logan, Burlington County Engineer in 1914, survives in "as built" condition. Reinforced concrete quickly became a popular and commonly used material in bridge construction in the years between 1895 and 1905, but the applications were primarily for reinforced concrete arch and slab spans. This bridge is one of the earliest documented applications in New Jersey of reinforced concrete technology for supporting piles that make up a reinforced concrete pier bent.

The bridge is located within the Smithville Historic District, but it was built outside the 1800-1899 period of significance of the district specified in the nomination. The nomination does not address the period after H. B. Smith's death in 1897, but the H.B. Smith Machine Company continued in operation until the 1960s.

Boundary Description and Justification: The bridge is located on a road that forms part of the east boundary of the Smithville Historic District. The area on the west side of the bridge as well as the approaches to the north and south are thus within the district. The area east of the abutments is not within the district, and is evaluated as not eligible. The east side of Smithville Road (CR 684) is the appropriate boundary for the district and the bridge.

PHOTO: 38:9-11 (12/91) REVISED BY (DATE): QUAD: Pemberton

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 03E4500 **CO** BURLINGTON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BIRMINGHAM ROAD OVER NORTH BRANCH RANCOCAS CREEK **FACILITY** BIRMINGHAM ROAD

TOWNSHIP PEMBERTON TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Wood

 # SPANS 2 **LENGTH** 35 ft **WIDTH** 30.8 ft

CONSTRUCTION DT 1941 **ALTERATION DT** 1981 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries an unimproved 2-lane road over the North Branch Rancocas Creek in a wooded setting with scattered 20th-century residential development.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span timber stringer bridge rests on two wooden abutments and a center braced pile bent. It has a wooden deck and wood railings braced at the bent caps. County records indicate that the bridge was constructed in 1941 and that the stringers, deck and railings were replaced in 1981. There is no record of the piles being replaced. The span is one of over 20 wood stringer bridges in the county, and it is not technologically or historically distinguished.

INFOR MATION

PHOTO: 37:33-34 (07/91) REVISED BY (DATE): QUAD: Pemberton

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 03E4510 **CO** BURLINGTON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BIRMINGHAM-ARNEY'S MOUNT ROAD OVER NORTH BR RANCOCAS CK **FACILITY** BIRMINGHAM ARNEY'S MOUNT ROAD

TOWNSHIP PEMBERTON TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Wood

 # SPANS 2 **LENGTH** 30 ft **WIDTH** 16.8 ft

CONSTRUCTION DT 1935 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge spans a branch of the Rancocas Creek in the vicinity of the village of Birmingham, which was established in the 1700's. Today a few of the older houses remain at the convergence of three roads, however, most of the remaining housing beyond this junction was built after WWII. This now consolidated community relied on farming and the mining of marl and sand for most of the 19th and 20th centuries, however, in the mid-1900s a chemical plant was built in the vicinity.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 2-span timber stringer bridge rests on a stone abutment on the north end, a wood plank abutment to the south, and a timber pile bent. County records indicate that the north abutment predates 1924. The bridge has a wood deck and railings. The plain, utilitarian structure has no significant engineering innovations. Records give 1935 as the last date of reconstruction, although the wood members appear to be less than 20 years old, suggesting inkind replacement of early fabric.

INFOR MATION

PHOTO: 37:36-37 (07/01/) REVISED BY (DATE): QUAD: Pemberton

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 03E4550 **CO** BURLINGTON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED HANOVER STREET (CR 616) OVER NORTH BRANCH RANCOCAS CREEK **FACILITY** HANOVER STREET (CR 616)

TOWNSHIP PEMBERTON BOROUGH

TYPE PONY TRUSS **DESIGN** WARREN **MATERIAL** Steel

 # SPANS 1 **LENGTH** 104 ft **WIDTH** 29.8 ft

CONSTRUCTION DT 1932 **ALTERATION DT** 1950 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a two-lane road, sidewalks, and a utility pipe over the north branch of the Rancocas Creek in Pemberton, a village that was traditionally an agricultural center for the surrounding region. Located on the edge of the congested portion of the center of Pemberton, it is surrounded by an eclectic mix of structures. The creek is the boundary of the State Register-listed Pemberton Historic District, but the bridge is not evaluated.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Listed. Pemberton Historic District. 03/22/1989. Noncontributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 6-panel rivet-connected Warren with verticals pony truss bridge is composed primarily of latticed and laced channels. The bridge was moved, reconditioned, and set on a new concrete substructure in 1950 when the road was realigned. A steel grid deck was also installed then. The county rehabilitated the span again in 1977. A late example of a truss designed for secondary stresses, the span is not technologically or historically distinguished. It is not fully within the district and is outside the 19th and early 20th century period of significance. It is later than its setting.

INFOR MATION

PHOTO: 37:40-43 (12/91) REVISED BY (DATE): QUAD: Pemberton

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 03E4600 **CO** BURLINGTON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED VINCENTOWN-RETREAT ROAD OVER SOUTH BRANCH RANCOCAS CREEK **FACILITY** VINCENTOWN RETREAT ROAD

TOWNSHIP SOUTHAMPTON TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Wood

 # SPANS 3 **LENGTH** 50 ft **WIDTH** 25.4 ft

CONSTRUCTION DT 1942 **ALTERATION DT** 1952 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** BURLINGTON COUNTY

SETTING / CONTEXT The bridge carries the two-lane county road over the south branch of the Rancocas Creek in a rural, lightly wooded area about 1/4 mile from US 206 and one mile southeast of Vincentown, a village that established a national historic district celebrating its heritage as a regional milling center. The bridge is well outside the district.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The three-span timber stringer bridge rests on timber piles, pile caps, abutments, and wingwalls. The timber abutments replace stone abutments that predated 1924. Since 1988, the extended pile caps have carried a gas line across the creek. The deck is timber, and there is a timber railing and a modern steel guide rail. Although the county engineers records mention no alterations to the superstructure since 1942, the wood has clearly been periodically replaced. The bridge is undistinguished.

INFOR MATION

PHOTO: 39:18-19 (12/91) REVISED BY (DATE): QUAD: Pemberton

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 03F2280 **CO** BURLINGTON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CHESTERFIELD-GEORGETOWN ROAD OVER BLACKS CREEK **FACILITY** CHESTERFIELD GEORGETOWN ROAD

TOWNSHIP CHESTERFIELD TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 2 **LENGTH** 22 ft **WIDTH** 33 ft

CONSTRUCTION DT 1928 **ALTERATION DT** 1939 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane road over a minor stream in a wooded setting on the sparsely developed southern limit of the village of Chesterfield. Blacks Creek forms the southern boundary of the National Register-listed Recklesstown Historic District. The bridge, which is not visible from the road, is not mentioned in the nomination that emphasizes the 18th- and 19th-century character of the settlement.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 12/07/89

SUMMARY The short reinforced concrete slab span with fascia and wing wall panels in a contrasting finish was built with a central concrete pier and invert slab. Any original/early railing has been replaced by modern beam guide rails. The bridge is technologically undistinguished and is outside the period of significance of the Recklesstown Historic District. It is neither historically or technologically distinguished.

INFOR MATION

PHOTO: 129:12-14 (07/91) REVISED BY (DATE): QUAD: Columbus

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 03F2300 **CO** BURLINGTON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED ORR ROAD OVER CROSSWICKS CREEK **FACILITY** ORR ROAD

TOWNSHIP CHESTERFIELD TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Wood

 # SPANS 6 **LENGTH** 87 ft **WIDTH** 15 ft

CONSTRUCTION DT 1923 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge carries one lane of a rural lightly traveled road over a minor stream in a wooded setting. Late-20th century residential development is adjacent to the bridge. The setting is not significant.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 11/22/91

SUMMARY The 6-span wood stringer bridge is supported on wood braced pile bents and a stone abutment on the east end and a concrete abutment on the west end. The stone abutment predates this span. Modern beam guide rail railings replace any original/early railings. The bridge appears to incorporate modern inkind replacement material. It is a representative example of a common bridge type, and it not historically or technologically distinguished.

INFOR MATION

PHOTO: 129:21-23 (07/91) REVISED BY (DATE): QUAD: Allentown

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 03F2320 **CO** BURLINGTON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CHESTERFIELD-SYKESVILLE ROAD OVER BLACKS CREEK **FACILITY** CHESTERFIELD SYKESVILLE ROAD

TOWNSHIP CHESTERFIELD TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 2 **LENGTH** 46 ft **WIDTH** 19.5 ft

CONSTRUCTION DT 1911 **ALTERATION DT** 1940 **SOURCE** PLAQUE/CO. RECORDS

DESIGNER/PATENT **BUILDER** FERRO-CONCRETE COMPANY

SETTING / CONTEXT The bridge carries a 2-lane county road over a minor stream just downstream from a mill pond dam. The pond was established as early as the early-19th century. None of the mill-related buildings appear to survive, but the house, shown as the Norden House on the 1876 Scott Atlas Map, remains, but it has been reworked in the Colonial Revival taste. It was later Wallace Mill. The surroundings are wooded. There is modern residential development on the south side of the bridge.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 01/10/92, Letter 11/22/95. DOE 01/19/95.

SUMMARY Built in 1911 as a 2-span reinforced concrete slab span on a concrete substructure, the bridge is arranged like a 2-cell culvert with an invert slab, and wood flood gates (removed). Built by the Ferro Concrete Co. of Harrisburg, the technology represented by the bridge is one of the state's earliest surviving examples of concrete slab construction. The builder was the local agent for D. Luten's National Bridge Co. and his designs, but no plans survive to show if this is a patented design.

INFOR MATION

PHOTO: 129:15-20 (07/92 JPH (5/96)) REVISED BY (DATE): QUAD: Columbus

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 03F4400 **CO** BURLINGTON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 646 OVER GREENWOOD BRANCH OF RANCOCAS CREEK **FACILITY** CR 646

TOWNSHIP PEMBERTON TOWNSHIP

TYPE STRINGER **DESIGN** PARTIALLY ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 50 ft **WIDTH** 36.4 ft

CONSTRUCTION DT 1941 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT F. L. BRANIN, COUNTY ENGINEER **BUILDER** HILL CONSTRUCTION COMPANY

SETTING / CONTEXT The bridge carries the two-lane county road over the Greenwood Branch of the Rancocas Creek on the outskirts of New Lisbon, a village that had a sawmill and forge early in the 19th century. The wood used to build the Camden and Amboy Railroad supposedly came from the New Lisbon area. The bridge is about 1/4 mile from Conrail, which operates on a right-of-way dating back at least to the 1870s. The bridge is also next to a 1935 pumping station.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one-span steel stringer bridge, built in 1941, has the fascia stringers encased in concrete. The bridge rests on reinforced concrete abutments and wing walls, and has a reinforced concrete deck and railing. The span replaced an earlier timber stringer bridge. It lacks historical or technological distinction.

INFOR MATION

PHOTO: 37:44-1 (03/92) REVISED BY (DATE): QUAD: Pemberton

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 03F6001 **CO** BURLINGTON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CARRANZA ROAD OVER TRIBUTARY OF SHANE BRANCH **FACILITY** CARRANZA ROAD

TOWNSHIP WASHINGTON TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Wood

 # SPANS 2 **LENGTH** 30 ft **WIDTH** 30 ft

CONSTRUCTION DT 1940 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge is located in an isolated, undeveloped setting near the site of a non-extant settlement north of Friendship. All that remains are concrete pier and stone foundations. There are no above-ground remnants of the settlement. The area is in the Pine Barrens.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 2-span bridge is composed of timber stringers on wood abutments and a center pile bent. The plain wood railing is braced. The short bridge is an undistinguished example of a locally common bridge type, and it is not historically or technologically noteworthy. It is one of over 20 wood stringer spans in Burlington County.

INFOR MATION

PHOTO: 302:41a,42a (07/91) REVISED BY (DATE): QUAD: Chatsworth

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 03F8270 **CO** BURLINGTON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 542 OVER MULLICA RIVER **FACILITY** CR 542

TOWNSHIP WASHINGTON TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Wood

 # SPANS 4 **LENGTH** 48 ft **WIDTH** 22.3 ft

CONSTRUCTION DT 1930 **ALTERATION DT** Rebuilt: 1975 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge carries a two-lane road over the Mullica River in Wharton State Forest, a large preserve in the Piney Woods section of the state.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The simple 4-span timber stringer bridge is supported on timber abutments and pile bents. It was rebuilt completely with inkind replacement material in 1975. Any early railing has been replaced by modern beam guide rails attached to the fascia stringers. The bridge type is common in the county, and this representative example is neither historically or technologically distinguished. It is also of recent construction.

INFOR MATION

PHOTO: 301:7A-8A (07/91) REVISED BY (DATE): QUAD: Atsion

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 03G4370 **CO** BURLINGTON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED UPTON-MOUNT MISERY ROAD OVER MOUNT MISERY BROOK **FACILITY** UPTON-MOUNT MISERY ROAD

TOWNSHIP PEMBERTON TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Wood

 # SPANS 2 **LENGTH** 25 ft **WIDTH** 11.7 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a county road over Mount Misery Brook in a rural and flat area predominated by cranberry bogs. One unsubstantiated folk story claims the area received its name partly because of the problems associated with poor roads. The bridge is currently inaccessible. It was not field inspected.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY In 1985, Burlington County closed the timber stringer bridge, which had timber abutments. Although county records indicate 1930 was the last time the bridge had major structural changes, since it is a timber bridge, it would have been periodically rehabilitated. The bridge is a common type in Burlington County, and is not technologically or historically distinguished. The bridge is inaccessible, and this evaluation is based on data from county files. There are not photographs.

INFOR MATION

PHOTO: NONE (03/92) REVISED BY (DATE): QUAD: Browns Mills

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 03G8045 **CO** BURLINGTON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED LOWER BANK ROAD (CR 542) OVER MULLICA RIVER **FACILITY** LOWER BANK ROAD (CR 652)

TOWNSHIP WASHINGTON TOWNSHIP

TYPE SINGLE LEAF BASCULE **DESIGN** STRAUSS OVERHEAD **MATERIAL** Steel

 # SPANS 1 **LENGTH** 450 ft **WIDTH** 18 ft

CONSTRUCTION DT 1925 **ALTERATION DT** Demolished: 1992 **SOURCE** PLANS

DESIGNER/PATENT J.B. STRAUSS **BUILDER** HILL CONSTRUCTION COMPANY

SETTING / CONTEXT The bridge carries two narrow lanes over the scenic Mullica River, the boundary between Burlington and Atlantic Counties. The Burlington side is lined with small frame houses primarily dating from this century while the Atlantic County side is a salt marsh. The surrounding country side is in the Pine Barrens.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Bridge was Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 1992, Letter 6/30/95.

SUMMARY The well-preserved overhead counterweight single-leaf moveable bridge designed by noted bridge engineer J.B. Strauss was completed in 1926. It was demolished in 1992 so that a replacement span of similar design could be erected. The bridge was documented according to HAER standards, and the documentation, which includes prints of the original plans, is deposited at the Library of Congress. HAER No. NJ-73.

INFOR MATION

PHOTO: 301:44a-6a (07/91) REVISED BY (DATE): QUAD: Green Bank

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 03H7003 **CO** BURLINGTON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED ANDREWS ROAD OVER OSWEGO RIVER **FACILITY** ANDREWS ROAD

TOWNSHIP BASS RIVER TOWNSHIP

TYPE BOX CULVERT **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 2 **LENGTH** 20 ft **WIDTH** 30 ft

CONSTRUCTION DT 1932 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The culvert allows the Oswego River to flow under an abandoned township road in a region of cranberry bogs and a state forest. The county is in the process of legally abandoning the bridge because local landowners have blocked the road and denied access to county engineers attempting to inspect the bridge. The bridge is attached to the spillway that controls the level of Oswego Lake.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span reinforced concrete box culvert has reinforced concrete wing walls. The lake's reinforced concrete spillway is adjacent to the east side of the bridge. The south approach suffers from erosion. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 304:5A-7A (03/92) REVISED BY (DATE): QUAD: Oswego Lake

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 03H8001 **CO** BURLINGTON **OWNER** STATE AGENCY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 542 OVER WADING RIVER **FACILITY** CR 542

TOWNSHIP WASHINGTON TOWNSHIP

TYPE SINGLE LEAF BASCULE **DESIGN** STRAUSS OVERHEAD **MATERIAL** Steel

 # SPANS 31 **LENGTH** 401 ft **WIDTH** 24 ft

CONSTRUCTION DT 1928 **ALTERATION DT** Rebuilt: 1984 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT A. G. LICHTENSTEIN & ASSOC. **BUILDER**

SETTING / CONTEXT The bridge carries a 2-lane road across the Wading River about four miles from the mouth of the river. On both sides of the river, there are small villages called Wading River. There was a bridge on this site at least as early as the first half of the 19th century. Throughout the 1800s, the site retained the name Bridgeport. The area is rural and low lying.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge consists of 30 steel stringer approach spans resting on timber abutments and pile bents and a single leaf Strauss-type overhead bascule bridge with a timber pile rest pier but reinforced concrete trunnion pier. In 1984, the moveable span was replaced with an overhead counterweight span designed by A.G. Lichtenstein & Assoc. The substructure, however, was not replaced. Because of the date of the moveable span, the bridge is evaluated as not old enough to be historic.

INFOR MATION

PHOTO: 301:40A-41A (03/92) REVISED BY (DATE): QUAD: New Gretna

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 03H8014 **CO** BURLINGTON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 653 OVER IVES BRANCH **FACILITY** CR 653

TOWNSHIP BASS RIVER TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Wood

 # SPANS 1 **LENGTH** 24 ft **WIDTH** 32.5 ft

CONSTRUCTION DT 1940 **ALTERATION DT** Rebuilt: 1983 **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge is located in an undeveloped area of the Piney Woods. It carries a two-lane road and shoulders over a small stream.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The short timber stringer bridge with timber abutments has a plank wearing surface and a plain wood railing. The entire structure was rebuilt in kind in 1983. A representative example of a technology that is well represented throughout the state, especially in the southern half, the bridge is not historically or technologically significant. It is composed of modern material and is thus too new to be evaluated as significant.

INFOR MATION

PHOTO: 301:42A-43A (07/92) REVISED BY (DATE): QUAD: Oswego Lake

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0401151 **CO** CAMDEN **OWNER** RAILROAD **MILEPOINT** 102.74

NAME & FEATURE INTERSECTED SOUTHERN BRANCH RR OVER US 30 **FACILITY** SOUTHERN BRANCH

TOWNSHIP WINSLOW TOWNSHIP

TYPE THRU GIRDER **DESIGN** BUILT UP **MATERIAL** Steel

 # SPANS 3 **LENGTH** 76 ft **WIDTH** 11 ft

CONSTRUCTION DT 1917 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The area surrounding the bridge is sparsely developed with a few truck farms, some scattered housing, and large tracts of undeveloped pinelands. The overpass crosses a busy 4-lane highway.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 3-span built-up thru girder bridge with stone abutments and 2 steel bents carries a single track of the former Central RR of NJ's Southern Division (now Conrail). The bridge was constructed in 1917 as part of the improvement of Whitehorse Pike, the existing road that became NJ 30, one of the original state highways. The bridge is one of over 20 thru girder overpasses in the county. It is a representative example and not historically nor technologically noteworthy.

INFOR MATION

PHOTO: 35:6-7 (05/01/91) REVISED BY (DATE): QUAD: Hammonton

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0401153 **CO** CAMDEN **OWNER** NJDOT **MILEPOINT** 24.81

NAME & FEATURE INTERSECTED US 30 OVER ATLANTIC CITY LINE **FACILITY** US 30

TOWNSHIP WINSLOW TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 3 **LENGTH** 124 ft **WIDTH** 40 ft

CONSTRUCTION DT 1925 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT This bridge is located in a sparsely developed section of Winslow Township characterized by a mix of small-moderately sized farms, residential neighborhoods, and tracts of the pine barrens. It carries 2-lane NJ 30 over a single active track. Another track has been removed.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 11/22/91

SUMMARY The multi-stringer overpass on concrete abutments and bents was built by the Pennsylvania Railroad in 1925. It has a metal railing and is an example of common period technology. The bridge is not historically or technologically distinguished. It replaces an overpass installed in 1902 by the Reading Railroad over its Atlantic City line.

INFOR MATION

PHOTO: 32: 5-8 (05/01/91) REVISED BY (DATE): QUAD: Hammonton

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0404150 **CO** CAMDEN **OWNER** NJDOT **MILEPOINT** 53.46

NAME & FEATURE INTERSECTED US 30 OVER NEWTON CREEK **FACILITY** US 30

TOWNSHIP COLLINGSWOOD BOROUGH

TYPE DECK ARCH **DESIGN** BARREL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 25 ft **WIDTH** 41 ft

CONSTRUCTION DT 1916 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT J.J. ALBERTSON, CO. ENGINEER **BUILDER** INTEGRITY CONST. CO.

SETTING / CONTEXT The bridge is located in a mid-20th century commuter suburb and is surrounded by modern commercial development. US 30, known as the Whitehorse Pike was the primary highway between Camden and Atlantic City until construction of the Atlantic City Expressway. Although the road this bridge carries dates to the 18th century, the setting is not historically significant.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 03/12/01

SUMMARY The well-preserved and well-proportioned 1916 reinforced concrete arch with a paneled parapet and wing walls is a good example of its structural type. It is one of 8 built by the county between 1905 and 1937. It was designed by the county engineering department under County Engineer J.J. Albertson and is better detailed than most of the other concrete arch bridges in the county. It is technologically significant based on its design and state of preservation.

INFOR MATION

Bibliography:

Camden County Engineer's Office. Bridge File.

Physical Description: The well-proportioned and well-detailed single-span barrel arch bridge of reinforced concrete is a good representative example of its type. it is finished with paneled spandrels and abutments. The parapets are finished with the same shallow panels, and the massive posts have oversized chamfered caps. The bridge carries a wide two-lane road, now part of the state highway system, and two sidewalks over a tidal creek.

Historical and Technological Significance: The handsome reinforced concrete arch bridge was built in 1916, and it is a good, representative example of a concrete arch span, a significant period technology. It is the best detailed and example of the bridge type in the county (criterion C). Introduced into this country in the late-1890s, the reinforced concrete arch became immensely popular for crossings under 60' in the 1900s and 1910s before being eclipsed by the encased steel stringer bridge. The structure was designed by the Camden County Engineer's Office, J.J. Albertson, County Engineer. The original plans are preserved in the Engineer's office, and they show that the bridge has not been altered. The US 30 bridge is the best of six similar spans built by the county between 1915 and 1919, and that is why it is evaluated as significant.

Boundary Description and Justification: The bridge is evaluated as individually significant based on its type and detailing. Its setting is not well preserved. Therefore, the boundary is limited to the substructure and superstructure of the span itself.

PHOTO: 32:25-26 (05/01/91) REVISED BY (DATE): QUAD: Camden

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0405151 **CO** CAMDEN **OWNER** PRIVATE **MILEPOINT**

NAME & FEATURE INTERSECTED PATCO OVER US 30 AND US 130 **FACILITY** PATCO

TOWNSHIP COLLINGSWOOD BOROUGH

TYPE THRU GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 2 **LENGTH** 85 ft **WIDTH** No Data

CONSTRUCTION DT 1927 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The overpass carries 2 tracks over busy, 4-lane US 130 in a densely developed early-20th century suburban community. The rail line is used by PATCO in its high-speed service to Philadelphia. PATCO is an automated, electric commuter line that has been in operation since 1969. It runs between Philadelphia and Lindenwold via the Ben Franklin Bridge on a right-of-way initially developed by the Camden and Philadelphia City Railroad in 1877.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The simple built-up thru plate girders with floor beams bridge is supported on concrete abutments and later steel H-section columns. The original concrete pier was replaced by the steel columns when the road was widened. The bridge is one of over 20 thru girder overpasses in Camden County. This example was built as part of the late-1920s Camden Extension road improvement program. It, like the others, is representative of common period technology and is not noteworthy.

INFOR MATION

PHOTO: 34:13-14 (06/01/91) REVISED BY (DATE): QUAD: Camden

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US
November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0405153 **CO** CAMDEN **OWNER** NJDOT **MILEPOINT** 55.02

NAME & FEATURE INTERSECTED US 30 & US 130 OVER COOPER RIVER **FACILITY** US 30 & US 130

TOWNSHIP CAMDEN CITY

TYPE DECK GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 116 ft **WIDTH** 64 ft

CONSTRUCTION DT 1926 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located in a wooded setting in the linear county park that parallels the Copper River east from Camden. It was built in former farmland as part of the mid-1920s Camden Extension. The bridge now carries a limited access divided 4-lane highway. The bridge is .5 mile south of Airport Circle, so it is not part of the circle. All approaches to the prototype circle are surface roads and are not technologically distinguished or part of a significant corridor.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Agreed Potential Historic District. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The simple 2-span built-up encased multi-girder bridge on concrete abutments and pier has paneled fascias and a typical concrete balustrade. It is a representative example of period bridge technology. It is located in Cooper River Park, an important local civic project dating from the late 1920s through the 1930s, but it is a standard design, not a custom bridge detailed to defer to its setting. The bridge is technologically undistinguished but a contributing element to the park that has historic distinction.

INFOR MATION

PHOTO: 32:14-15 (05/01/91) REVISED BY (DATE): QUAD: Camden

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0406154 **CO** CAMDEN **OWNER** NJDOT **MILEPOINT** 3.04

NAME & FEATURE INTERSECTED US 30 OVER CHANDLERS RUN **FACILITY** US 30

TOWNSHIP PENNSAUKEN TOWNSHIP

TYPE T BEAM **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 32 ft **WIDTH** 102 ft

CONSTRUCTION DT 1925 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER** UNKNOWN

SETTING / CONTEXT The 102' wide bridge carries the original right-of-way of NJ 30 into Airport Circle. The famous circle was built in 1925 as part of the Camden Extension traffic improvement program mandated by the opening of the Ben Franklin Bridge. The bridge is now crossed by a flyover ramp added in 1946. The congested circle is located in an undistinguished post- WWII commercial area. It has been enlarged and revamped several times and has little integrity of original design.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 30' long, 102' wide T-beam bridge with a concrete balustrade was built in 1925 as part Airport Circle, but it has little integrity of design or setting. In 1946 its wide sidewalks were removed, and the center portion of the bridge was crossed by the enclosed flyover ramp added to the circle. The outer balustrade s of the bridge that is on both sides of the ramp are original, but the inner ones were removed when the ramp was constructed. The alterations render it not eligible.

INFOR MATION

PHOTO: 300:8-9 (06/01/91) REVISED BY (DATE): QUAD: Camden

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0406158 **CO** CAMDEN **OWNER** NJDOT **MILEPOINT** 57.05
NAME & FEATURE INTERSECTED US 30 OVER COOPER RIVER **FACILITY** US 30
TOWNSHIP CAMDEN CITY
TYPE DOUBLE LEAF BASCULE **DESIGN** TRUNNION **MATERIAL** Steel
 # SPANS 1 **LENGTH** 117 ft **WIDTH** 88 ft

CONSTRUCTION DT 1927 **ALTERATION DT** 1968 **SOURCE** PLAQUE
DESIGNER/PATENT HARRINGTON, HOWARD & ASH **BUILDER** KOLYN CONSTRUCTION

SETTING / CONTEXT The bridge is in an extensively developed commercial corridor that is an approach to the 1926 Ben Franklin Bridge. It carries a non-distinguished 8 and 10 lane limited-access road initially improved as part of the Camden Extension project. Historically there was some industrial activity along the river in the vicinity of the bridge, river traffic ceased about 1960. Much of the surrounding area has been cleared.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No
CONSULT STATUS Not Individually Eligible.
CONSULT DOCUMENTS SHPO Finding 6/30/93

SUMMARY Each leaf of the double-leaf trunnion bascule bridge is composed of four haunched girders. The racks and pinions power the inside girders. The gear sets are in place but inoperable. Two-story operator/mechanical houses are located at each corner. While the span retains its original appearance, it has been inoperable since about 1968. It has lost integrity of original design. It is one of at least a dozen Ash, Howard, Needles & Tammen movable bridges in the state. Others are more complete.

INFOR MATION

Bibliography:
Hanover & Hardesty. Inspection Reports, 1970, 1980. Brown, Kathi Ann. Diversity By Design. 1989. U.S. Patent 1,633,565.

Physical Description: The main span of the 3-span bridge is a 171'-long double leaf trunnion movable span of built-up haunched deck girders. Because the bridge is wide, 118' out-to-out, each leaf is composed of four girders. The cantilevered sidewalks are carried on brackets attached to the outside girders. The sidewalk is enclosed by a standard state design metal railing. The roadway, now 88'-wide, was widened from 76' wide in 1952 by taking 5' from each sidewalk. The steel grid deck, replacing the original wood block pavers, was placed at that time. The substructure is concrete with the counterweight pit walls also serving as the abutment and trunnion columns supports. The concrete counterweight is affixed to the tail end of each leaf.

The bridge was operated by two electric 125-horsepower motors and open reducer gear sets. Racks are attached to the inside girders and moved by drive pinions. This tandem arrangement is common. The back up power was supplied by 35 horsepower gasoline engines. Neo-classically inspired reinforced concrete and brick houses, each with a shallow hip roof, are located at each corner of the movable span with the one in the southwest corner being the operators house. Windows, originally small-light metal casements, are primarily boarded, and access to the interior of the house was not possible. Electrical service was disconnected by at least 1975. The electrical system was reported to be in "badly deteriorated" condition in 1970. The original crash/safety gates have been completely removed as have navigational lights.

The bridge is not operable and is sealed.

Historical and Technological Significance: The double-leaf trunnion bascule bridge was designed in 1926 and built in 1927 on one of the roads built as part of the Camden Extension, a network of existing roads and connectors to improve traffic flow generated by the completion of the Delaware River (Ben Franklin) Bridge in 1926. The Camden Extension, as the project was known, was developed under State Highway Engineer William S. Sloan, and it was one of several late-1920s programs by the State Highway Department to address traffic related to major river crossings on both the Delaware and Hudson rivers. The plan for access to the Delaware River Bridge was to use a new connecting road to link the old Burlington Pike (NJ 2), the Moorestown Pike, the Whitehorse Pike, and NJ 6, the road to Millville, as well as many other roads that lead to Camden. The connecting road joined the entrance road through Camden to the bridge toll plaza. Traffic circles were used along the route as a means of addressing unimpeded traffic flow. The Camden Extension is not distinguished by innovative solutions to crossings; they are typical solutions to common problems.

The Cooper River bridge was built on the entrance road portion of the Camden Extension. The bascule portion was designed by the consulting engineering firm of Harrington, Howard & Ash, which was established in 1914 after the dissolution of the Kansas City, Missouri firm of Waddell & Harrington. Harrington, Howard & Ash opened their New York City office in 1922 with Enoch Needles (1888-1972) as its head. The office saw the East Coast, with its numerous private toll bridge commissions and state highway departments, as a great potential market for its movable span bridges. The firm, initially founded by J.A.L. Waddell, the engineer who developed the modern vertical lift bridge, went on in the 1920s to become the most prolific designer of trunnion bascule bridges in New Jersey, thanks in large part to the reputation of its New York office. Harrington left the firm in 1928, after which it was styled Ash, Howard, Needles & Tammen (AHNT) and is Howard, Needles, Tammen & Bergendoff (HNTB) today.

The patented detail involved with the design of all AHNT's bascule bridges in New Jersey relates to the trunnion column which provides "improved span support, braced to resist the various stresses to which it is subject at different positions of the span, and to provide supplemental support of the free end of the fixed span at all times." The movable span itself was a traditional trunnion bascule with a fixed counterweight at the tail end. This design requires satisfactory clearance above mean high water or else a counterweight pit, like that at the Cooper River Bridge, to keep the counterweight out of the water when the bridge is open. At least a dozen trunnion bridges designed by AHNT between 1927 and 1942 survive in the state and are located in Bergen, Monmouth, and Cape May counties with the most complete being two built in Monmouth County in 1932 and 1939 (1300S31 and 1315150) and four built by the Cape May County Toll Bridge Commission in 1938-1940 (3100003, 0500028, 3100005, 3100006). Those examples still operate, are complete with their original

operating mechanism, and enjoy integrity of setting.

The Cooper River bridge has lost integrity of original design in that it no longer functions as a movable span bridge. It last opened prior to 1968, and since that time the electrical service has been removed as have the safety and navigation equipment. The bridge was sealed about 1968. While the gearing remains in place, it has been unmaintained for about 25 years, and the electrical equipment, including the drive motors, is inoperable. The operators house and mechanical houses are unaltered, but they too have not been maintained. In addition to the loss of integrity and thus technological significance due to disuse and deterioration, the setting of the bridge has also been altered through decline of the businesses that once relied on water-borne transportation. Much of the surrounding area has been cleared.

The Cooper River bridge is one of the earlier examples of the popular AHNT bascule design, but it is the same design as other more complete examples. It represents a bridge type and design, the trunnion bascule, that was common technology by the mid-1920s. The Cooper River bridge is also the newest of movable span bridge on the Cooper River at Camden. The other two, the 1906 Strauss overhead counterweight bridge at Federal Street (0406159) and the 1898 center bearing swing span thru truss bridge at State Street (042A001), are both historically and technologically significant. The State Street span is in operable condition, and both bridges were built in response to Camden's importance as an industrial center.

PHOTO: 500:21A-22A (05/01/91) REVISED BY (DATE): QUAD: Camden

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0406159 **CO** CAMDEN **OWNER** PLANS **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED FEDERAL STREET OVER US 30 **FACILITY** FEDERAL STREET (CR 537)

TOWNSHIP CAMDEN CITY

TYPE THRU GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 14 **LENGTH** 408 ft **WIDTH** 40.1 ft

CONSTRUCTION DT 1925 **ALTERATION DT** 1971 **SOURCE** NJDOT

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER** UNKNOWN

SETTING / CONTEXT This structure connects the industrial Cooper River area with downtown Camden. It crosses US 30 (Admiral Wilson Blvd.), the approach road to the Ben Franklin Bridge and main link between Camden and center city Philadelphia. North of the structure is the 20th-century industrial area that lines the Cooper River, and to the south is the downtown business district of Camden. Numerous modern intrusions have made the area not historic.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The thru girder main span is the only original feature of the bridge, built in 1925 as 14-span viaduct to carry Federal Street, a main city thoroughfare, over the newly built Ben Franklin Bridge approach road. It has been altered twice, so it has little integrity. In the 1950s US 30 (feature crossed) was widened considerably, and the approach spans and supports were changed. The bridge was rehabilitated in 1971, date of the present railing.

INFOR MATION

PHOTO: 30:25-26 (05/01/91) REVISED BY (DATE): QUAD: Camden

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0406160 **CO** CAMDEN **OWNER** CONRAIL **MILEPOINT** 1.2

NAME & FEATURE INTERSECTED BORDENTOWN SECONDARY OVER US 30 **FACILITY** BORDENTOWN SECONDARY

TOWNSHIP CAMDEN CITY

TYPE THRU GIRDER **DESIGN** BUILT UP **MATERIAL** Steel

 # SPANS 3 **LENGTH** 208 ft **WIDTH** 40 ft

CONSTRUCTION DT 1927 **ALTERATION DT** 1971 **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge, built for 3 tracks but carrying only one active line, is located in downtown Camden over busy NJ 30, a half a mile southeast of its junction with the toll booths for the Ben Franklin Bridge. NJ 30 is a divided 6-lane road with a 2-lane access ramp on the north side. The overpass carries all 8 lanes of traffic. The rail line was the PA RR's line from its Camden terminal at the end of Federal St. to Trenton. The bridge was part of the Camden Extension improvement.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 208' long 3-span simple thru girder bridge is supported on concrete abutments and columns. The main span was built in 1927 as part of the Camden Extension. The present approach spans, columns, and abutments were built in 1971. The bridge is one of over 10 thru girder overpasses built in the county between 1927-1933. The main span is a representative example of a locally common structural type and is not individually noteworthy, especially in light of the 1971 alterations.

INFOR MATION

PHOTO: 34:19-20 (06/01/91) REVISED BY (DATE): QUAD: Camden

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0408153 **CO** CAMDEN **OWNER** STATE AGENCY **MILEPOINT** 5.84

NAME & FEATURE INTERSECTED DRRR & BRIDGE COMPANY BRANCH OVER NJ 38 **FACILITY** DRRR & BRIDGE COMPANY BRANCH

TOWNSHIP CHERRY HILL TOWNSHIP

TYPE THRU GIRDER **DESIGN** BUILT UP **MATERIAL** Steel

 # SPANS 2 **LENGTH** 93 ft **WIDTH** 12.5 ft

CONSTRUCTION DT 1933 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT **BUILDER** MCCLINTIC-MARSHALL

SETTING / CONTEXT The 2-track overpass crosses a busy 2- and 3-lane divided highway in an undistinguished industrial and warehouse corridor. The rail line was initially developed by the Delaware River Railroad and Bridge Company (part of the Pennsylvania RR system) to connect the newly-opened Delran railroad bridge across the river with existing lines. The Delran bridge and circumferential route were built in 1896-1897. The rail line joined the Pennsylvania RR's main line in West Haddonfield.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The simple, 2-span overpass consists of 3 deep built-up girders with floor beams and a concrete deck. It is supported on concrete abutments and a well-proportioned concrete pier with open arched spandrels. Part of the Camden Extension road improvement program, the bridge is one of 3 similar structures built by the DRRR&B Co. line around 1930 over arterial roads in the north part of the county. The bridge is technologically undistinguished.

INFOR MATION

PHOTO: 34:34-35 (06/01/91) REVISED BY (DATE): QUAD: Camden

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0408160 **CO** CAMDEN **OWNER** NJDOT **MILEPOINT** 4.41

NAME & FEATURE INTERSECTED MILL ROAD OVER SOUTH BRANCH PENNSAUKEN CREEK **FACILITY** MILL ROAD

TOWNSHIP CHERRY HILL TOWNSHIP

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 37 ft **WIDTH** 35 ft

CONSTRUCTION DT 1915 **ALTERATION DT** 1954 **SOURCE** STYLE/PLAQUE

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge over a small stream is located in a residential section dominated by mid-20th century houses on large lots. The stream bed is wooded.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY Originally constructed ca. 1915, the reinforced concrete barrel arch bridge was enlarged in 1954. In addition to its widening, which was finished to imitate the original styling, a concrete railing was added. The railing style was first used in the county in the 1930s. The bridge, while representative of the small concrete arches built by the county in the 1910s and 1920s, is not historically nor technologically distinctive. Plans for the 1954 enlarging were done by the county.

INFOR MATION

PHOTO: 33:4,8 (09/12/91) REVISED BY (DATE): QUAD: Camden

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0408161 **CO** CAMDEN **OWNER** NJDOT **MILEPOINT** 4.35

NAME & FEATURE INTERSECTED NJ 38 OVER SOUTH BRANCH PENNSAUKEN CREEK **FACILITY** NJ 38

TOWNSHIP CHERRY HILL TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 29 ft **WIDTH** 82.1 ft

CONSTRUCTION DT 1932 **ALTERATION DT** 1959 **SOURCE** PLAQUE

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge carries a busy 4 lane highway over a small tributary of the Pennsauken Creek in a mid-20th century mixed-use area. NJ 38 follows an historic thoroughfare from agricultural Burlington County to Camden and Philadelphia.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased stringer bridge on concrete abutments was built in 1932 as a 2-lane span. It was widened with stringers on both sides in 1959. The concrete parapet and steel railing also date from 1959. Since the original design has been extensively altered by the removal of the original railing and the widening, the span has lost its integrity of design. It now has no historical or technological significance.

INFOR MATION

PHOTO: 33:5-7 (06/01/91) REVISED BY (DATE): QUAD: Camden

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0413155 **CO** CAMDEN **OWNER** STATE AGENCY **MILEPOINT** 6.81

NAME & FEATURE INTERSECTED DRRR & BRIDGE COMPANY BRANCH OVER NJ 70 **FACILITY** DRRR & BRIDGE COMPANY BRANCH

TOWNSHIP CHERRY HILL TOWNSHIP

TYPE THRU GIRDER **DESIGN** BUILT UP **MATERIAL** Steel

 # SPANS 2 **LENGTH** 139 ft **WIDTH** 12.5 ft

CONSTRUCTION DT 1933 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The 2-track railroad overpass crosses a major 6-lane divided highway in a highly developed commercial area developed within the last 25 years. At one side of the bridge is the sprawling Garden State Park complex. The setting is undistinguished.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY This technologically undistinguished railroad overpass consists of 3 built-up girders with floor beams and a concrete floor system supported on concrete abutments and a central pier with open arched spandrels. While well preserved and built as part of the ca. 1930 Camden Extension road improvement program, the bridge is not innovative. It is a representative example of common technology. The Camden Extension is known for its innovative intersections rather than its bridges.

INFOR MATION

PHOTO: 34:32-33 (06/01/91) REVISED BY (DATE): QUAD: Camden

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0415150 **CO** CAMDEN **OWNER** NJDOT **MILEPOINT** 15.46

NAME & FEATURE INTERSECTED NJ 73 OVER US 30 **FACILITY** NJ 73

TOWNSHIP WATERFORD TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 3 **LENGTH** 76 ft **WIDTH** 44.4 ft

CONSTRUCTION DT 1931 **ALTERATION DT** 1952 **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge is located at the intersection of two busy 4-lane roads in the southern portion of the county. It eliminates the grade crossing between NJ 73 (overhead) and US 30 (grade). Both roads are lined primarily by mid-size commercial development. Both roads were once primary routes between Philadelphia and the Shore.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 02/08/90

SUMMARY The 3-span stringer bridge with concrete abutments and columns is a representative example of the most common mid-20th century bridge type in the state. It has a concrete balustrade typical of the period. The bridge is not historically or technologically significant, and it is not an early or innovative grade crossing elimination span. It was widened in 1952 which diminishes its integrity of design.

INFOR MATION

PHOTO: 9:35-36 (06/01/91) REVISED BY (DATE): QUAD: Runnemede

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0415151 **CO** CAMDEN **OWNER** STATE AGENCY **MILEPOINT** 17.58

NAME & FEATURE INTERSECTED ATLANTIC CITY LINE RR OVER NJ 73 **FACILITY** ATLANTIC CITY LINE

TOWNSHIP BERLIN TOWNSHIP

TYPE THRU GIRDER **DESIGN** BUILT UP **MATERIAL** Steel

 # SPANS 1 **LENGTH** 104 ft **WIDTH** 24.5 ft

CONSTRUCTION DT 1932 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT This single track railroad overpass is located in a sparsely developed portion of Camden County consisting of small-moderate sized farms, some recent commercial developments along US 30 and large tracts of pinelands. The railroad crosses a busy 4-l

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The built-up thru-girder with floor beams and a ballasted deck is supported on concrete abutments. Thru girders are a common overpass bridge type dating to the late-19th century, and this example is not innovative or distinctive. It is representative of a frequent structural type. The bridge was erected for the Reading Railroad on a right-of-way initially developed by the Philadelphia & Atlantic City Railroad in 1877.

INFOR MATION

PHOTO: 34:32-33 (06/01/91) REVISED BY (DATE): QUAD: Runnemede

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0416151 **CO** CAMDEN **OWNER** NJDOT **MILEPOINT** 32.38

NAME & FEATURE INTERSECTED NJ 73 & RAMP G OVER US 130 **FACILITY** NJ 73 & RAMP G

TOWNSHIP PENNSAUKEN TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 146 ft **WIDTH** 99 ft

CONSTRUCTION DT 1930 **ALTERATION DT** 1959 **SOURCE** NJDOT

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The overpass is located in the center of Camden at the intersection of 6-lane US 130 (grade road) and NJ 73, a busy divided east-west route. Both are limited access roadways at this point. The bridge is surrounded by undistinguished 20th-century commercial development.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY Originally a 40'-wide overpass, the bridge was enlarged in a 1959 road-widening project. Little if any of the 1930 bridge remains visible. Because of the extent of the 1959 alterations, the bridge has no integrity and is thus not historically nor technologically significant.

INFOR MATION

PHOTO: 33:9,12 (05/01/91) REVISED BY (DATE): QUAD: Camden

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0416152 **CO** CAMDEN **OWNER** NJDOT **MILEPOINT** 33.3

NAME & FEATURE INTERSECTED NJ 73 OVER PENNSAUKEN CREEK **FACILITY** NJ 73

TOWNSHIP PENNSAUKEN TOWNSHIP

TYPE THRU GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 98 ft **WIDTH** 56 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge over a wide tidal stream is located on NJ 73, an approach to the 1929 Tacony-Palmyra Bridge. Its undistinguished setting consists of a mixture of commercial development along NJ 73, residential neighborhoods built in the 1960s and 70s, and undeveloped flood plains. Around the turn-of-the-century there was some commercial traffic on the creek, but by the time this bridge was built, the waterway was used only by recreational boaters.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased thru girder on concrete abutments with floor beams was built as part of the main approach road to the 1929 Tacony Palmyra Bridge. The girders rest on steel bearings atop concrete abutments while the back floor beams are supported on concrete columns set into the concrete back wall. A geometric-pattern metal railing with concrete posts encloses the cantilevered sidewalk. The span is common period technology, but the railing and supports give it a modicum of interest.

INFOR MATION

PHOTO: 33:10-11 (05/01/91) REVISED BY (DATE): QUAD: Camden

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0419150 **CO** CAMDEN **OWNER** RAILROAD **MILEPOINT** 5.38

NAME & FEATURE INTERSECTED MILLVILLE SECONDARY OVER US 130 **FACILITY** MILLVILLE SECONDARY

TOWNSHIP BROOKLAWN BOROUGH

TYPE THRU GIRDER **DESIGN** BUILT UP **MATERIAL** Steel

 # SPANS 1 **LENGTH** 83 ft **WIDTH** 39 ft

CONSTRUCTION DT 1929 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge is located in a mid-20th century mixed-use area along busy US 130, a regional corridor. Originally built for 3 tracks, it carries one track of ConRail's Millville Secondary, a railroad line between Camden and southern New Jersey. The line was developed in 1839 as the Camden & Woodbury Railroad to service southern New Jersey. The one active track is electrified.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The deep built-up thru-girder overpass on concrete abutments consists of 4 girders with floor beams. It is a representative example of common period technology and is not a noteworthy bridge. The overpass was built in 1929 as part of the state's development of the Camden Extension to ease traffic flow to the 1926 Ben Franklin bridge. It is the road patterns, which featured a variety of traffic circles, that is innovative about the Camden Extension, not its bridges.

INFOR MATION

PHOTO: 34:17-18 (06/01/91) REVISED BY (DATE): QUAD: Camden

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0419151 **CO** CAMDEN **OWNER** NJDOT **MILEPOINT** 26.42

NAME & FEATURE INTERSECTED US 130 OVER LITTLE TIMBER CREEK **FACILITY** US 130

TOWNSHIP GLOUCESTER CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 46 ft **WIDTH** 64 ft

CONSTRUCTION DT 1927 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge over a small tidal stream is located in an area along busy US 130 which is dominated by mid-20th century commercial development. The road is a main approach to the Ben Franklin Bridge, and more recently, the Walt Whitman Bridge.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY Built as part of the post-1926 expansion of state highways, the 4-lane encased stringer bridge with a plain concrete balustrade is representative of the style and type favored by the state highway department. It was built as an element of the late-1920s Camden Extension for Ben Franklin bridge traffic. NJ 45, the original route designation, was built as a 4-lane north/south road feeding the entrance road in downtown Camden. The highway and its bridges are not innovative.

INFOR MATION

PHOTO: 32:23-24 (05/01/91) REVISED BY (DATE): QUAD: Camden

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0420150 **CO** CAMDEN **OWNER** NJDOT **MILEPOINT** 27.43

NAME & FEATURE INTERSECTED US 130 OVER SOUTH BRANCH OF NEWTON CREEK **FACILITY** US 130

TOWNSHIP GLOUCESTER CITY

TYPE DECK GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 102 ft **WIDTH** 66 ft

CONSTRUCTION DT 1927 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries 6-lane wide US 130 over a branch of a tidal creek with extreme changes in the water level. The surrounding area is mid-20th century commercial.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased deck plate girder with floor beams span is supported on 2-cell concrete abutments. It is reasoned that the abutment type was used to save material. The bridge is finished with a concrete balustrade at the clear span and paneled parapets at the abutments. The span is similar to the original plan for the bridge over the main branch of Newton Creek (0420151). It is not an innovative or unusual design and is not technologically or historically significant.

INFOR MATION

PHOTO: 32:21-22,105:27-28 (05/01/91) REVISED BY (DATE): QUAD: Camden

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0420151 **CO** CAMDEN **OWNER** NJDOT **MILEPOINT** 27.94

NAME & FEATURE INTERSECTED US 130 OVER MAIN BRANCH NEWTON CREEK **FACILITY** US 130

TOWNSHIP HADDON TOWNSHIP

TYPE DECK GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 65 ft **WIDTH** 66 ft

CONSTRUCTION DT 1927 **ALTERATION DT** 1956 **SOURCE** PLANS

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located on busy US 130, a main arterial road. It is a limited access divided 6-lane roadway lined with modern commercial structures. The setting is not historic. US 130 was developed as part of the connector road to funnel traffic to the 1926 Ben Franklin bridge entrance in downtown Camden.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased deck plate girder with floor beams span is supported on 2 open bin-type concrete abutments. The north abutment was severely damaged prior to 1941, and when it was repaired, the cell abutment was lengthened. The sheet piles that serve as supports for the north end of the girders were placed in 1941. Although a variation from the more common stringer bridges designed by the State Hwy Department Bridge Division, the span is not innovative or technologically distinguished.

INFOR MATION

PHOTO: 32:16-19 (05/01/91) REVISED BY (DATE): QUAD: Camden

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0421150 **CO** CAMDEN **OWNER** CONRAIL **MILEPOINT** 4.16

NAME & FEATURE INTERSECTED CLEMENTON BRANCH RR OVER US 130 **FACILITY** CLEMENTON BRANCH RR

TOWNSHIP COLLINGSWOOD BOROUGH

TYPE SLAB **DESIGN** CONTINUOUS **MATERIAL** Reinforced Concrete

 # SPANS 4 **LENGTH** 107 ft **WIDTH** 41 ft

CONSTRUCTION DT 1929 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries 2 tracks of ConRail's Clementon Branch over US 130, a 6-lane limited-access divided highway. It is located in an early 20th-century commuter suburb in mixed use area with both industrial and residential areas within sight. The north side of the bridge is obscured by a 1955 overpass. Initially developed by the Philadelphia and Atlantic City RR in 1877, the rail line became part of the Reading system in 1883. It was their main line to Atlantic City and Cape May.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The continuous slab 2-track overpass has concrete abutments and piers with open arched spandrels and a concrete parapet with paneled posts. It is unaltered and appears to be an infrequent application of slab bridge technology to a rail-carrying span in the area. It is however, not an innovative or early use of reinforced concrete in railroad bridge construction. It is not technologically distinguished. Another multi-span slab overpass is located in Gloucester County (0805154).

INFOR MATION

Bibliography:
Condit, Carl. American Building Art 20th Century. New York: Oxford University Press, 1960. NJDOT. File 6104.

Physical Description: The well-proportioned skewed 4-span reinforced concrete continuous slab bridge is supported on scored concrete abutments with wing walls and concrete piers with arched struts and paneled square column end posts. The parapet is detailed with blind panels and posts as well as larger paneled posts defining the span lengths. The ballasted deck bridge appears to be unaltered.

Historical and Technological Significance: The handsome, well-proportioned span is a rare state application of a slab bridge technology to a rail-carrying overpass. Approximately half a dozen have been identified on rail lines not managed by New Jersey Transit, and this example, built by the Reading Railroad in 1927 on its main line from Camden to Atlantic City, ranks as the most ambitious in size and detailing. It is also well preserved.

Flat-slab construction (e.g. mushroom column) was adapted to bridge construction in 1909 by the Soo Line in St. Paul. It reached its greatest length at Brick Church, New Jersey on the DL&W line, a national leader is the application or reinforced concrete technology to railroad use. It is not however, a common bridge type for railroad overpasses in the southern two-thirds of the state. No plans for the US 130 bridge were located, so the reinforcing system is not known.

PHOTO: 34:15-16, 105:29-31 (06/01/91) REVISED BY (DATE): QUAD: Camden

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0422150 **CO** CAMDEN **OWNER** NJDOT **MILEPOINT** 30.0

NAME & FEATURE INTERSECTED US 130 OVER CHANDLER'S RUN **FACILITY** US 130

TOWNSHIP CAMDEN CITY

TYPE T BEAM **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 29 ft **WIDTH** 62 ft

CONSTRUCTION DT 1925 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries US 130 over a small stream at entrance/exit to the Airport Circle (1925). The area is an extensively developed modern commercial corridor. Airport Circle has been extensively altered to accommodate increased usage, and it has no integrity of design or setting.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The short T-beam span with a concrete balustrade was built as part of the Camden Extension road improvement program, but it is not technologically distinguished. It is one of two similar bridges erected over the small stream on the west side of Airport Circle. The circle has been altered numerous times to accommodate larger traffic volume. While it is one of the early circles in the state, it has no integrity of original design or setting and thus is an ineligible resource.

INFOR MATION

PHOTO: 300:4-5 (06/01/91) REVISED BY (DATE): QUAD: Camden

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0422154 **CO** CAMDEN **OWNER** STATE AGENCY **MILEPOINT** 3.82

NAME & FEATURE INTERSECTED PEMBERTON BRANCH RR OVER US 130 **FACILITY** PEMBERTON BRANCH

TOWNSHIP PENNSAUKEN TOWNSHIP

TYPE THRU GIRDER **DESIGN** BUILT UP **MATERIAL** Steel

 # SPANS 2 **LENGTH** 111 ft **WIDTH** 12 ft

CONSTRUCTION DT 1927 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The overpass carries 1 active track over busy 6-lane US 130, a major north-south arterial road. The land adjacent to the bridge and tracks is dedicated to mid-20th century industrial and warehouse development. The setting is not historic. The rail line was part of the Pennsylvania Railroad system. US 130 was developed as part of the late 1920s Camden Extension to improve traffic flow through the area to the 1926 Ben Franklin Bridge.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed single-track riveted thru girder with floor beams overpass is supported on concrete abutments and replacement H-section beam columns. The original concrete pier, similar to that at 0413155 was removed when the road was widened from 4 to 6 lanes, and the Jersey barrier was installed. The present arrangement is narrower than the original design. The bridge is a representative example of a structural type that is very common in Camden County.

INFOR MATION

PHOTO: 34:11-12 (06/01/91) REVISED BY (DATE): QUAD: Camden

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0422155 **CO** CAMDEN **OWNER** RAILROAD **MILEPOINT** 3.58

NAME & FEATURE INTERSECTED DRRR & BRIDGE COMPANY BRANCH OVER US 130 **FACILITY** DRRR & BRIDGE COMPANY RAILROAD

TOWNSHIP PENNSAUKEN TOWNSHIP

TYPE THRU GIRDER **DESIGN** BUILT UP **MATERIAL** Steel

 # SPANS 2 **LENGTH** 92 ft **WIDTH** 26 ft

CONSTRUCTION DT 1927 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER** MCCLINTIC-MARSHALL

SETTING / CONTEXT Crossing busy US 130, a divided 6-lane highway, the bridge carries 2 tracks through an industrial and warehouse corridor. A power station is located at the northeast corner of the bridge. The surroundings are mid- to late-20th century. The rail li

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed simple 2-span bridge is composed of 3 built-up girders with floor beams and a concrete deck. It is supported on the original concrete abutments, but the original concrete pier has been replaced by H-sections columns. When built, the bridge, fabricated by McClintic-Marshall Corp., was similar to 0408153. It is the least original of 3 ca. 1930 overpasses built by the railroad as part of the Camden Extension road improvement program. None of the 3 are eligible.

INFOR MATION

PHOTO: 34:9-10 (06/01/91) REVISED BY (DATE): QUAD: Camden

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0422156 **CO** CAMDEN **OWNER** NJDOT **MILEPOINT** 35.7

NAME & FEATURE INTERSECTED US 130 OVER NORTH BRANCH OF PENNSAUKEN CREEK **FACILITY** US 130

TOWNSHIP PENNSAUKEN TOWNSHIP

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 72 ft **WIDTH** 104 ft

CONSTRUCTION DT 1926 **ALTERATION DT** 1959 **SOURCE** NJDOT

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries busy, 6-lane wide US 130 over a branch of the Pennsauken Creek through an industrial/warehouse corridor. The setting is not historic.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge is composed of structures from three periods. A pre-1926 concrete arch was widened in kind to 30' when the road was developed in 1926 as part of the Camden Extension. A cantilevered sidewalk was also added in 1926, and that bridge composes the north half of this span. Its width was doubled in 1959 by a prestressed box beam addition to the south of the arch. It is finished with a modern concrete barrier parapet. The bridge has lost its integrity of setting and original design.

INFOR MATION

PHOTO: 34:7-8 (06/01/91) REVISED BY (DATE): QUAD: Camden

NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0424151 **CO** CAMDEN **OWNER** NJDOT **MILEPOINT** 0.8

NAME & FEATURE INTERSECTED NJ 154 OVER NORTH BRANCH COOPER RIVER **FACILITY** NJ 154

TOWNSHIP CHERRY HILL TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 34 ft **WIDTH** 40.2 ft

CONSTRUCTION DT 1935 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER** UNKNOWN

SETTING / CONTEXT Located in a residential neighborhood developed in the 1960s, the bridge carries a 2-lane road over a small branch of the Cooper River. When this structure was built, the surrounding area was mostly undeveloped or farmland.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The concrete-encased stringer bridge on concrete abutments was built by the state in 1935 to carry NJ 41, a route proposed to run from the Tacony Palmyra Bridge to Fairview near Haddonfield. It is a representative example of the most common type of highway bridge in the state. Its concrete balustrade is also typical of the period. The bridge is technologically and historically undistinguished.

INFOR MATION

PHOTO: 34:30-31 (06/01/91) REVISED BY (DATE): QUAD: Camden

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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Correction Updates Etc should be sent to
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0426153 **CO** CAMDEN **OWNER** NJDOT **MILEPOINT** 9.52

NAME & FEATURE INTERSECTED NJ 168 OVER NEWTON CREEK **FACILITY** NJ 168

TOWNSHIP HADDON TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 26 ft **WIDTH** 63 ft

CONSTRUCTION DT 1929 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries a 4-lane road over a small stream in a mid-20th century residential suburb just outside of Camden. The road is lined with mid- to late-20th century commercial development. NJ 168 follows the old stage coach route from Camden to the county line at Grenloch.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The simple slab bridge was with a combination concrete parapet and balustrade used in Camden County in the late 1920s is a representative example of a bridge type used for short spans. The slab span is supported on concrete abutments with wing walls. The bridge is not technologically nor historically noteworthy.

INFOR MATION

PHOTO: 34:3-4 (06/01/91) REVISED BY (DATE): QUAD: Camden

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 042A001 **CO** CAMDEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED STATE STREET OVER COOPER RIVER **FACILITY** STATE ST

TOWNSHIP CAMDEN CITY

TYPE SWING SPAN **DESIGN** CENTER BEARING **MATERIAL** Steel

 # SPANS **LENGTH** 158 ft **WIDTH** 25 ft

CONSTRUCTION DT 1898 **ALTERATION DT** 1977 **SOURCE** PLAQUE

DESIGNER/PATENT **BUILDER** B.F. SWEETON & SONS.

SETTING / CONTEXT The structure spans the Cooper River between a redeveloped residential section and the early-20th century industrial area along the Cooper River. The east side has been redeveloped with a large post-WW II housing project while the west side is 19th-century urban residential and commercial. The bridge is just south of the confluence of the Cooper and Delaware rivers. It is an important transportation link in the development of the community.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY A pin-connected hybrid type thru truss center bearing swing span on ashlar abutments and central pier has some repairs and modifications, but it remains the oldest and most complete example of its type in the area. The 1977 rehab work is not intrusive, and new elements are compatible with the original design of the bridge. It is the earliest extant crossing of the Cooper River in Camden, a city noted for its 20th century industrial heritage. The bridge is of historic and technological value.

INFOR MATION

Bibliography:
AGLAS Inspection Reports. Camden County Engineer. File A1-21.

Physical Description: The pin-connected 8-panel Warren thru truss center bearing swing span bridge is supported on a circular ashlar center pier and ashlar abutments with concrete bearings added in 1976. The end posts, diagonals, and verticals are composed of laced angles, and eye bars are used as the diagonals in panels where no compressive load was anticipated. The original operating machinery appears to have been replaced in 1928, and it is still in place, although the 1928 electric motor was replaced in 1976. Other modifications to the span include new floor beams, sidewalks and corresponding railing, and new wedges, all installed in 1976. The portal braces are not original, but they were on the bridge by 1955. Repairs have been made to the trusses themselves as needed. The operators shanty is at the southwest corner of the bridge. Despite the many modifications and repairs, the span survives as one of the more complete thru truss swing spans in the region.

Historical and Technological Significance: The State Street Warren thru truss center-bearing swing span bridge was built in 1898 by contractor B.F. Sweeton & Son. The designer is not known. No original/early plans of the bridge were located. Despite the lack of documentation related to the designer and builder, the span stands as one of the most complete 19th-century highway thru truss center-bearing swing spans in the state. The bridge type represents one of the oldest types or mechanically operated moveable bridges, and although once a common late-19th and early 20th-century bridge, swing spans were frequently replaced by trunnion or vertical lift spans that provided a wider clear channel and faster openings. The State Street Bridge represents an important early technology that was eclipsed in urban settings, for the most part, by 1910. Despite the modifications to its original design, the bridge retains its integrity of original design and function.

Boundary Description and Justification: The bridge is evaluated as individually significant. Its original setting has been cleared and, in areas, redeveloped. Therefore, the boundary is limited to the superstructure and substructure of the span itself.

PHOTO: 30:26-32 (05/01/91) REVISED BY (DATE): QUAD: Camden

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 042D009 **CO** CAMDEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MAPLE AVENUE OVER SOUTH BRANCH PENNSAUKEN CREEK **FACILITY** MAPLE AVENUE

TOWNSHIP CHERRY HILL TOWNSHIP

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 50 ft **WIDTH** 44.5 ft

CONSTRUCTION DT 1919 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT J.J. ALBERTSON, CO. ENGINEER **BUILDER** REES TAYLOR & CO

SETTING / CONTEXT The bridge is located in a ca. 1960 residential neighborhood and spans a small branch of the Pennsauken Creek. Immediately northeast of the bridge is a small park. Its surroundings have little historical significance. Maple Avenue is the historic stagecoach route between Camden and Mt. Holly (Burlington County).

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The reinforced concrete arch with a paneled parapet is representative of the bridges designed by and built for the county following World War I. It is one of eight bridges of its type in the county, and while well preserved, it is not technologically innovative or distinctive. A similar arch bridge carrying Kings Highway over the Cooper River in Cooper River Park has been evaluated as eligible owing to its location in the locally significant park developed by the CCCs in the late 1930s.

INFOR MATION

PHOTO: 34:5-6 (06/01/91) REVISED BY (DATE): QUAD: Camden

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0431150 **CO** CAMDEN **OWNER** RAILROAD **MILEPOINT** 21.48

NAME & FEATURE INTERSECTED CLEMENTON BRANCH OVER NJ 73 **FACILITY** CLEMENTON BRANCH RR

TOWNSHIP WINSLOW TOWNSHIP

TYPE THRU GIRDER **DESIGN** BUILT UP **MATERIAL** Steel

 # SPANS 1 **LENGTH** 74 ft **WIDTH** 11.4 ft

CONSTRUCTION DT 1937 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge carries a single track of ConRail's Clementon Branch over NJ 73, a 4-lane highway, in a sparsely developed area of Winslow Township. The area is a mix of small to moderately sized farms, some residences, some commercial development along undeveloped tracts of the pine barrens. The right-of-way was initially part of the Philadelphia & Atlantic City Railroad's 1877 line to the shore through Winslow Junction.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge, composed of 3 deep riveted steel thru girders on concrete abutments, originally carried two tracks. It was built in 1937 by the joint Pennsylvania-Reading Seashore line. It is a late but representative example of one of the most common20th century overpass bridge types. The span is not historically nor technologically distinguished.

INFOR MATION

PHOTO: 35:10-11 (06/01/91) REVISED BY (DATE): QUAD: Clementon

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 043B006 **CO** CAMDEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED KAIGHN AVENUE OVER COOPER RIVER **FACILITY** KAIGHN AVENUE

TOWNSHIP PENNSAUKEN TOWNSHIP

TYPE THRU GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 112 ft **WIDTH** 40 ft

CONSTRUCTION DT 1925 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT COUNTY **BUILDER** AARON WARD

SETTING / CONTEXT Located 1000' west of Airport Circle (1925), the bridge crosses the tidal Cooper River at the northwest edge of Cooper River Park, a county-owned linear park that parallels the river from Kaighn Ave. in Camden to Haddonfield. The park was established in 1927. The bridge carries Kaighn Avenue, a busy local collector road that was a historic route into Camden. The road ended at the Kaighn's Point Ferry Co. ferry house in Camden (non-extant).

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 2-span encased thru girder with floor beams bridge on concrete abutments and pier has contrasting concrete panels and posts in the parapet and light standards. It is a representative example of its type, but it is not technologically significant. It was built as part of regional traffic improvements for easy access to the Ben Franklin Bridge that opened in 1926. The county park in which it is located was created in 1927, two years after the bridge was completed.

INFOR MATION

PHOTO: 30:42-44 (05/01/91) REVISED BY (DATE): QUAD: Camden

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 043B008 **CO** CAMDEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED FEDERAL STREET OVER COOPER RIVER **FACILITY** FEDERAL STREET

TOWNSHIP CAMDEN CITY

TYPE SINGLE LEAF BASCULE **DESIGN** STRAUSS OVERHEAD **MATERIAL** Steel

 # SPANS 1 **LENGTH** 134 ft **WIDTH** 34 ft

CONSTRUCTION DT 1906 **ALTERATION DT** ? **SOURCE** PLANS

DESIGNER/PATENT STRAUSS BASCULE BRIDGE COMPANY **BUILDER** STRAUSS BASCULE BRIDGE CO

SETTING / CONTEXT The moveable span carries Federal Street, a main thoroughfare into Camden over the Cooper River in an industrial area dating to the late 19th century. Until ca. 1960 the river was used by some of the waterfront industries to ship and receive goods.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY One of about 6 overhead counterweight bascule bridges remaining in the state, the patented Strauss bridge was erected in 1906. The rarity of the once-common structural type coupled with its distinctive Beaux Arts concrete detailing combine to make the Federal St. bridge one of the most significant movable bridges in the state. Its decorative concrete detailing reflects the tenets of the City Beautiful movement that dominated pre-World War II civic projects. The span is well preserved.

INFORMATION

Bibliography:
J.B. Strauss Dies at Los Angeles." Engineering News-Record. 120 (May 19, 1938), p. 702. Camden County Engineer. Bridge File.

Physical Description: The single-leaf overhead counterweight bridge is composed of a 78' rivet-connected Warren pony truss moveable span supported on concrete abutments. Cantilevered sidewalks on both sides are enclosed by handsome cast-iron filigree railings while the approaches are protected by concrete parapets with reticulated panels. The overhead counterweight, supported on built-up steel columns, linkage, and operators house are "hidden" beneath the two-level concrete Beaux Arts veneer that transforms the utilitarian and decidedly non-aesthetic elements of the bridge into an elaborate arch or portal finished with oversized consoles, segmental parapets on the corner pavilions, and reticulated panels. The windows in the corner pavilions have been removed, but otherwise the rich classically inspired ornamentation, including some original light standards, is well preserved. Alterations to the original design appear to be few. The original wearing surface has been replaced by a steel grid deck, and modern beam guard rails protect the road side of the trusses. The operating mechanism was not inspected, and it is assumed to remain in place.

Historical and Technological Significance: The 1906 Federal Street Bridge is one of the most significant moveable span bridges in the state because of its date of construction, type, embellishments, and state of preservation (Criterion C). It is a nearly complete example of a patented bridge design that represents a milestone in the development of moveable spans. Its single-leaf trunnion with an articulated overhead counterweight main span was designed by Joseph B. Strauss (1870-1938), the most widely recognized early-20th century moveable bridge engineer in the country. The pivoting counterweight linkage, like that on the Federal Street span, was invented by Strauss in 1905 (patent granted in 1911), and the first span of this type was built in Cleveland, also in 1905, the same year Strauss established the Strauss Bascule Bridge Company in Chicago. His parallelogram-linked counterweight bascule bridges were his best-known design. Once common, the Strauss overhead articulated counterweight bridge is becoming increasingly rare. Only four other highway examples are known to remain in New Jersey, and of that total, only one other dates to the 1900s.

The Federal Street Bridge is not only a very early example of the patented design, it is also one of the most architectonic bridge in the state. It is the only documented example of its type in the region with the an architectonic finish, which gives the bridge national significance. An expression of the City Beautiful philosophy of civic projects, the utilitarian, mechanical aspects of the bridge are hidden behind a classically inspired concrete veneer as richly detailed as a public building. Strauss later adapted his articulated counterweight to the underneath position, and while more expensive, it was frequently the choice for moveable spans in congested, urban settings. The choice was not available to the Camden authorities because it had not been developed yet, so their solution was to disguise the workings of the bridge. A similar Strauss overhead counterweight moveable span bridge was built on Broadway in Camden in 1913, and it too was given architectural embellishments. The tower and mechanical equipment have been removed from the Broadway bridge and the moveable span has been fixed in place.

The Camden County Engineer's nearly complete set of drawings for the Federal Street bridge show that the architectural encasing was delineated on the original plans. The bridge as built, however, does not match exactly with those plans, which specify more detailing than was actually executed.

The bridge has had some modifications and replacement of original fabric, but none of the changes, not the fact that it does not match the plans exactly, compromise the original design and functioning of the span. The deck of the moveable was replaced in 1934, and the counterweight and concrete were repaired in 1974. The bridge ranks as the most significant of all the Strauss overhead articulated counterweight bridges as well as one of the most significant movable spans of any design in the entire state.

Boundary Description and Justification: The bridge is evaluated as individually significant. The boundary is limited to the span itself, and includes the approach and the tower.

PHOTO: 30:33-41 (05/01/91) REVISED BY (DATE): QUAD: Camden

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 043C024 **CO** CAMDEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CUTHBERT BLVD OVER COOPER RIVER **FACILITY** CUTHBERT BLVD

TOWNSHIP HADDON TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 76 ft **WIDTH** 57 ft

CONSTRUCTION DT 1939 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER** OLE HANSEN

SETTING / CONTEXT The bridge carries a local 4-lane road over the Cooper River in Cooper River Park, a linear park and parkway developed by the county beginning in 1927. The park is casually landscaped green belt that follows the river from Camden to Haddonfield. Developed by the CCCs in the 1930s, the well-preserved park has historical significance and appears to meet the criteria for a National Register historic district. The bridge, one of six contiguous to the park, was not built as a park feature.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 4-lane wide bridge with a center island was built by the county with plans of a standardized design and aid funds supplied by the state. It is composed of stringers supported on concrete abutments. The railing is a composite of concrete posts a

INFOR MATION

PHOTO: 34:21-22 (06/01/91) REVISED BY (DATE): QUAD: Camden

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 043E007 **CO** CAMDEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CHURCH ROAD OVER SOUTH BR PENNSAUKEN CREEK **FACILITY** CHURCH ROAD

TOWNSHIP CHERRY HILL TOWNSHIP

TYPE RIGID FRAME **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 29 ft **WIDTH** 34.2 ft

CONSTRUCTION DT 1933 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT B.M SCHMUKER, CO. ENGINEER **BUILDER** J. H. TERRY CO.

SETTING / CONTEXT Located in an area dominated by late-20th century garden apartment buildings built on former farm acreage, the bridge carries a 2-lane collector street over a small stream. Stream serves as green belt through the area.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The short rigid frame bridge is a plain example of a structural type developed in Europe and popularized in this country in the 1910s and 1920s. The concrete railing is original, and it appears to be one of the earliest uses of this particular type. This bridge is not historically nor technologically distinguished. It is one of over ten examples of its type in the county.

INFOR MATION

PHOTO: 300:10 (06/01/91) REVISED BY (DATE): QUAD: Moorestown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 044A002 **CO** CAMDEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED NICHOLSON ROAD OVER SOUTH BRANCH NEWTON CREEK **FACILITY** NICHOLSON ROAD

TOWNSHIP GLOUCESTER CITY

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Concrete

 # SPANS 1 **LENGTH** 75 ft **WIDTH** 35.8 ft

CONSTRUCTION DT 1918 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge carries a 2-lane street through a city park that is surrounded by a post-World War II residential neighborhood. Park is developed with playgrounds and sports fields. The bridge spans a small branch of the Newton Creek.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The reinforced concrete arch with a paneled concrete parapet is a representative example of the 7 similar pre-1930 arch spans built in the county. Although well preserved and representative of its structural type, the bridge is not individually distinguished or historical. Reinforced concrete arches came into common use for short spans in the 1905-1910 era, and they were a bridge type that some county engineers greatly favored through the 1910s.

INFOR MATION

PHOTO: 35:16-17 (06/01/91) REVISED BY (DATE): QUAD: Camden

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 044A007 **CO** CAMDEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BROADWAY (CR 551) OVER NEWTON CREEK **FACILITY** BROADWAY (CR 551)

TOWNSHIP CAMDEN CITY

TYPE THRU GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 2 **LENGTH** 141 ft **WIDTH** 38 ft

CONSTRUCTION DT 1913 **ALTERATION DT** 1964 **SOURCE** PLANS

DESIGNER/PATENT STRAUSS BASCULE BRIDGE COMPANY **BUILDER** KELLY MCFELLEY

SETTING / CONTEXT Located in an industrial area of South Camden adjacent to the New York Shipbuilding Company yard and a modern sewage treatment facility, the bridge crosses a tidal creek. None of the adjacent properties are National Register eligible. New York Shipbuilding's facility is now closed, and much of its historic machinery and buildings have been removed. The bridge was constructed as a Strauss overhead counterweight movable span.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 4/30/91

SUMMARY Although built in 1913 as an architectonic single-leaf overhead counterweight Strauss-patent bascule bridge, it is now a simple 2-span thru girder bridge. The counterweight, operators houses, and tower were removed in 1964, and the movable girders are fixed in place. The handsome reticulated metal sidewalk railing remains, but all other ornamentation was lost in 1964. The bridge is no longer significant because it has been so drastically altered. Original plans survive with the county.

INFOR MATION

PHOTO: 30:6-8 (05/01/91) REVISED BY (DATE): QUAD: Camden

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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 044B009 **CO** CAMDEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BETTLEWOOD AVENUE OVER NEWTON LAKE **FACILITY** BETTLEWOOD AVENUE

TOWNSHIP OAKLYN BOROUGH

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 3 **LENGTH** 26 ft **WIDTH** 31 ft

CONSTRUCTION DT 1939 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT HERBERT TAYLOR, CO. ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a two-lane road over the end of a small lake in a late-19th and early-20th century residential area with no architectural cohesiveness. Oaklyn is a residential community that was established in the late 19th century.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 1939 steel stringer bridge with a reinforced concrete railing at the cantilevered sidewalks incorporates the stone abutments of an earlier, shorter span. The wingwalls were lengthened and new back walls were added for this longer replacement span. The bridge is not technologically significant. The concrete railing is a standard county design from the early 1930s. It is found on at least half a dozen other bridges from the period.

INFOR MATION

PHOTO: 32:27-28 (05/01/91) REVISED BY (DATE): QUAD: Camden

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NJDOT updated data 03-01-2001.

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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 044B014 **CO** CAMDEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED EAST ATLANTIC AVENUE OVER NICHOLSON ROAD **FACILITY** EAST ATLANTIC AVENUE (CR 729)

TOWNSHIP AUDUBON BOROUGH

TYPE THRU GIRDER **DESIGN** BUILT UP **MATERIAL** Steel

 # SPANS 1 **LENGTH** 46 ft **WIDTH** 20.9 ft

CONSTRUCTION DT 1920 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT Located in Audubon, a residential community developed beginning in the 1890s, the bridge carries the main street (E. Atlantic Ave.) over 2-lane Nicholson Rd. It parallels the Atlantic City Div. railroad, 20' to the west, which also crosses Nicholson Rd. on a deck girder bridge. Both bridges, as well as the similar pair 500' to the north are located in an area of Audubon that is not architecturally cohesive enough to comprise a National Register-eligible historic district.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The shallow thru girder with floor beams on concrete abutments is contiguous to a similar but deeper railroad overpass, but the railroad bridge is on earlier ashlar abutments. The 2-lane highway bridge with cantilevered sidewalks and pipe railings is dated 1920 by NJDOT. The only surviving drawing is undated and refers to strengthening the span. It is an early highway grade crossing elimination needed more to keep E. Atlantic Ave. at the same grade as the railroad than to separate traffic.

INFOR MATION

PHOTO: 32:29-30 (05/01/91) REVISED BY (DATE): QUAD: Camden

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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 044B015 **CO** CAMDEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED EAST ATLANTIC AVE OVER PETERS CREEK **FACILITY** EAST ATLANTIC AVE

TOWNSHIP AUDUBON BOROUGH

TYPE THRU GIRDER **DESIGN** BUILT UP **MATERIAL** Steel

 # SPANS 2 **LENGTH** 95 ft **WIDTH** 20.8 ft

CONSTRUCTION DT 1920ca **ALTERATION DT** Demolished **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in Audubon, a residential community initially developed in the 1890s along the rail line. There are many intrusions and alterations to the ca. 1910 workers housing, so the area does not have NR-district potential. The bridge spans the right-of-way of the abandoned Westville cutoff, once part of the PA RR system, and a small stream with a large flood plain. A parallel railroad bridge to the west shares the abutment, and a similar pair of bridges is 150 yards to the south.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Bridge was Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 2-span continuous thru girder rests on concrete abutments and steel columns. An undated drawing for replacement steel survives in the county records. Technologically the bridge is not significant, nor is the similar parallel railroad-carrying span. Both bridges appear to date to the first quarter of this century. Of greater importance is the fact that it carries E. Atlantic Ave. at the same grade as the parallel Atlantic City Division rail line which was developed in 1877.

INFOR MATION

PHOTO: 32:31-32 (05/01/91) REVISED BY (DATE): QUAD: Camden

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 044D001 **CO** CAMDEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED GROVE ST (CR 644) OVER COOPER RIVER **FACILITY** GROVE STREET (CR 644)

TOWNSHIP HADDONFIELD BOROUGH

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 61 ft **WIDTH** 44.3 ft

CONSTRUCTION DT 1931 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT B.M. SCHUMUCKER, CO.ENGINEER **BUILDER** WM EISENBERG & SONS

SETTING / CONTEXT The bridge carries a local street across the river in Cooper River Park, a linear park and parkway that parallels the Cooper River in Camden County. It is casually landscaped with the river being the main feature. The park is surrounded by mixed-use properties from the mid-20th century on the north side of Haddonfield. Grove Street is a local collector road.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The stringer bridge with a concrete balustrade is supported on concrete abutments. While well preserved, it is technologically undistinguished. It is representative of the most common pre-World War II bridge type in the state. While located in Cooper River Park, the bridge is a standard design promoted by the NJ State Hwy Department Bridge Division and thus not detailed to reflect its setting within the park. Its only association with the historically significant park is its location.

INFOR MATION

PHOTO: 9:39A-40A (05/01/91) REVISED BY (DATE): QUAD: Camden

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NJDOT updated data 03-01-2001.

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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 044D009 **CO** CAMDEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED KINGS HIGHWAY (CR 573) OVER COOPER RIVER **FACILITY** KINGS HIGHWAY (CR 573)

TOWNSHIP HADDONFIELD BOROUGH

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 48 ft **WIDTH** 46.3 ft

CONSTRUCTION DT 1915 **ALTERATION DT** Unknown **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge over the Cooper River is located in the casually landscaped Cooper River Park, the linear park that runs along the river from Camden to Haddonfield. The park is a notable civic project and was developed in part by the CCC in the late 1930s. The bridge carries Kings Highway, the historic road developed in the late 1600s as part of a series of "Great Roads" between major cities. The bridge predates the creation of the park and is thus outside its areas of significance.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The plain reinforced concrete arch with paneled parapets was built in 1915 by the county as a part of the improvement of the Kings Highway through Haddonfield. Paving of the historic road began in 1913. Founded on a pile foundation, the arch appears not to have been widened, but the sidewalks have been added (date unknown). It is one of six concrete deck arch spans built in the county between 1915-1919, and it is not technologically noteworthy. Its history is independent of Cooper River Park.

INFOR MATION

PHOTO: 9:36-37 (05/01/91) REVISED BY (DATE): QUAD: Camden

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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 044D025 **CO** CAMDEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED COOPER RIVER DRIVE OVER NORTH BRANCH COOPER RIVER **FACILITY** COOPER RIVER DRIVE

TOWNSHIP CHERRY HILL TOWNSHIP

TYPE RIGID FRAME **DESIGN** **MATERIAL** Concrete

 # SPANS 1 **LENGTH** 48 ft **WIDTH** 41 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge spans a small branch of the Cooper River in Cooper River Park, a linear park along the river from Kaighn Ave. in Camden to Haddon Ave. in Haddonfield. The primarily open park parallels the river, and it has broad lawns, wooded areas, and s

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The well-proportioned rigid frame bridge with concrete posts and rustic wood railing was built in 1930 as part of the parkway in Cooper River Park. It was built for the Parks Commission. The bridge type was used frequently in the county in the 1930s.

INFOR MATION

Bibliography:
Brown, C. Oscar, editor. Camden County Park System As Constructed by Camden County Park Commission. np, nd. (Xerox copy in collection of Janet Fittipaldi - NJDOT).

Physical Description: The 48'-long rigid frame bridge with an arched soffit is finished with stepped rectangular end posts and rustic-style wood post-and-rail railings. The same railings are used on the reinforced concrete approaches to the span. The bridge appears to survive in original condition, and its setting, in a casually landscaped park, is also well preserved.

Historical and Technological Significance: Although not individually technologically distinguished, the 1930 rigid frame bridge is a contributing element to the potentially historic Cooper River Park Historic District (criterion C). The bridge was the first built by the Camden County Park Commission as a landscape feature in the park. Other bridges that are in or contiguous to the linear park that parallels the Cooper River were not built as park features and are thus evaluated as not contributing to the historic theme of the development of the civic amenity.

County park commissions in New Jersey are as early as 1895, but the Camden County Park Commission was not established until November of 1926. In September, 1927, the new commission defined its goal as "development of the Cooper River valley parks and boulevards from Camden to Haddonfield and beyond (Brown, p. 29). The only section of the boulevard completed before the depression was this section, which was located between Grove Street and Kings Highway. Originally known as section 12, it was renamed Pennypacker Park in 1934 to honor James Lane Pennypacker, the Haddonfield historian and botanist who died in the summer of 1934 (Jones, p. 99). This section of the park was landscaped by the CCCs in the mid 1930s. The bridge was the first and largest built by the park commission, and it was originally fitted with Neoclassical lights atop the end posts. The rustic style of the wood post-and-rail railings were used on other bridges built throughout the greater park system by the CCCs in the mid 1930s.

The Camden County Park Commission was able to complete its ambitious plan for a boulevard from Crescent Boulevard in Pennsauken to Caldwell Street in Cherry Hill only with assistance from the depression-era work relief programs of the federal government. Loans and grants made it possible to complete the road and recreational facilities, and the Civilian Conservation Corps (CCC) did the dredging, filling, masonry, damming, and landscaping that transformed the swampland along the river into a greenway dotted with small lakes and meandering trails. The depression-era, work-assistance programs were responsible for local civic projects like this one all across the country, and they made a significant contribution to the mid-century redevelopment of the nation's urban and open areas. The CCC programs of the mid- to late-1930s did more to develop park land in this country than any other activity short of the initial acquisition of property. Cooper River Park, which is composed of several contiguous sections, is historically significant as an example of the lasting influence and importance of depression-era work-relief programs to recreational spaces in America.

Boundary Description and Justification: The bridge is evaluated as a contributing resource to a potential historic district because it was built as part of the development of the district. It is thus related to the potential historic district by historic association. The bridge, the roadway that it carries, and the land to the south and west of it are in the potential historic district. Bridges in or contiguous to the park that were not built as part of its development do not contribute to the area(s) of significance of the park and were thus evaluated as not significant.

PHOTO: 34:36-37 (06/01/91) REVISED BY (DATE): QUAD: Camden

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0452160 **CO** CAMDEN **OWNER** UNKNOWN **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED RIVER ROAD OVER PETTY ISLAND BRANCH **FACILITY** RIVER ROAD (CR 543)

TOWNSHIP CAMDEN CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 36 ft **WIDTH** 30.5 ft

CONSTRUCTION DT 1917 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT PENNA RR DEPT OF BRIDGES **BUILDER** UNKNOWN

SETTING / CONTEXT Located on the line between the city of Camden and Pennsauken Township, the bridge spans ConRail's single track Petty's Is. Branch, a short line built during World War I to serve the industries on Petty's Is. There is a late-19th, early-20th century industrial district to the north of this bridge, and an early 20th-century residential neighborhood to the south. The bridge carries River Road, a highway that runs parallel to the Delaware River between Camden and Burlington City.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The concrete encased stringer bridge, bearing on concrete abutments has a paneled balustrade. It was built in 1917 as part of the spur line to connect industrial Petty's Is. with Pennsauken and PA RR main lines. The well-preserved span is a representative example of the most common pre-WW II bridge type in the state. It is historically significant because of its association with the development of Petty's Island by the Crew Levick Co. The rail line is abandoned.

INFOR MATION

Bibliography:

Cranston, Paul. Camden County 1681-1931. Camden, New Jersey: Camden County Chamber of Commerce, 1931. Halber, Edmund. A History of Pennsauken Township. Pennsauken, New Jersey: Pennsauken Historical Society, 1966.

Physical Description: The 36'-long concrete-encased steel stringer span is supported on concrete abutments with sloped wing walls. It carries a two-lane road and sidewalks over a two-track railroad right-of-way. The flat-panel parapets at both the road and sidewalks have deeply incised scoring, and the end post are finished with chamfered tops. While simply detailed, the bridge is well proportioned and well preserved. one set of track has been removed.

Historical and Technological Significance: The short encased stringer span is historically significant for its association with Petty Island, a major industrial site in Camden County. The island had various uses from Colonial times through the early 20th century. In 1916 it was acquired by Crew Levick Company, a subsidiary of Cities Services Company. Crew Levick initially the island refining and manufacturing mineral and lubricating oils. In 1920 the bulk fuel oil storage capability was added to the island, and in 1925-27 the refinery was built. The island was linked to the main line of the Pennsylvania Railroad by a spur built in 1918, the same year a rolling lift railroad was bridge built by the Bethlehem Steel Company was completed. This bridge was designed by the Pennsylvania Railroad, but the builder is not known. Materials and products were shipped to the plant by both sea and rail, and Petty Island became a major production and distribution center of petroleum products as well as one of the largest employers in the area. The spur line was, until the early 1980s, the island's only transportation link with the mainland. The moveable span railroad bridge was demolished in 1991, leaving the River Road overpass as the only original railroad bridge historically associated with the Cities Service's development of the island. The island flourished as an industrial site due to its strategic location in the Delaware River opposite Philadelphia.

PHOTO: 30:18-19 (05/01/91) REVISED BY (DATE): QUAD: Camden

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0453160 **CO** CAMDEN **OWNER** UNKNOWN **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED KINGS HIGHWAY OVER CLEMENTON BRANCH & EAST ATLANTIC AVENUE **FACILITY** KINGS HIGHWAY SPUR (CR 551)

TOWNSHIP HADDON HEIGHTS BOROUGH

TYPE THRU GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 120 ft **WIDTH** 40 ft

CONSTRUCTION DT 1927 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge spans ConRail's single track Clementon Branch and East Atlantic Avenue through a mid-20th century residential neighborhood. The road is the late-1700s Kings Highway or Great Road from Burlington to Salem County. The rail line crossed by the bridge was developed by the Camden & Atlantic City Railroad in the 1850s. It was absorbed later by the Pennsylvania RR system.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 2-span thru girder with cantilevered sidewalks and plain concrete parapets was built in 1927 to eliminate grade crossings. The central support consists of concrete piers and steel bearings. The abutments are also concrete. The cambered bridge is a representative example of a common structural type and is not technologically innovative.

INFOR MATION

PHOTO: 500:19-20A (05/01/91) REVISED BY (DATE): QUAD: Runnemede

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0455160 **CO** CAMDEN **OWNER** UNKNOWN **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BROADWAY OVER VINELAND SECONDARY **FACILITY** BROADWAY (CR 551)

TOWNSHIP CAMDEN CITY

TYPE RIGID FRAME **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 5 **LENGTH** 121 ft **WIDTH** 52 ft

CONSTRUCTION DT 1945 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT Located in an industrial section of Camden, this rigid frame structure spans the throat of the Bulson Street yard, adjacent to the Kaign terminal for the Philadelphia and Atlantic City Railroad, a narrow-gauge line built in 1877. It became part of the Reading line. A former railroad hotel (non-extant and vacant by 1926) built prior to 1924 stood adjacent to the northern abutment and shared a common wing wall. The former span was the historic structure associated with the railroad's heyday.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 11/22/95

SUMMARY The 5-span rigid frame overpass was built in 1945 to replace a 1904 Parker truss located at the south end of the Bulson Street yard of the Atlantic City Div. of the Reading Railroad. By the time the bridge was built, the Reading had merged operations with the PA RR and both were in decline. It is one of two reinforced concrete rail-carrying overpasses in the county and is one of the largest rigid frame bridges in the region. Because of its well-preserved condition, historical association with the railroad, and its size, the bridge is historically and technologically significant. The bridge is individually eligible.

INFOR MATION

PHOTO: 30:3-5 (05/01/91) REVISED BY (DATE): QUAD: Camden

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 045A004 **CO** CAMDEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED KINGS HIGHWAY OVER LITTLE TIMBER CREEK **FACILITY** KINGS HIGHWAY

TOWNSHIP MOUNT EPHRAIM BOROUGH

TYPE RIGID FRAME **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 35 ft **WIDTH** 46.5 ft

CONSTRUCTION DT 1935 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT M. SCHMUCKER, CO. ENGINEER **BUILDER** C. D. PROSSER

SETTING / CONTEXT The bridge carries a 2-lane road over a small stream in a mixed use neighborhood dating to the 1960s and 1970s. Large tracts of undeveloped wetlands are adjacent to the tidal creek. The road itself was established in the late 1600 as the King's Highway between Burlington and Salem counties. While the right-of-way has historical interest, the surroundings are undistinguished.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The plain rigid frame bridge with a concrete railing is one of over 11 examples of its type built by the county between 1930 and 1942. The bridge type came into common usage in the 1920s and was favored for right-angle crossings because of its economy of materials. This example, as well as the others that are all under 50' in length, are technologically and historically undistinguished. None were evaluated as eligible.

INFOR MATION

PHOTO: 30:11-12 (05/01/91) REVISED BY (DATE): QUAD: Camden

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 045E012 **CO** CAMDEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED SPRINGDALE ROAD OVER NORTH BRANCH COOPER RIVER **FACILITY** SPRINGDALE ROAD

TOWNSHIP CHERRY HILL TOWNSHIP

TYPE RIGID FRAME **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 35 ft **WIDTH** 35 ft

CONSTRUCTION DT 1941 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT S. HERBERT TAYLOR, CO ENGINEER **BUILDER**

SETTING / CONTEXT The bridge carries a 2-lane road over a stream in a wooded setting. The area is dominated by mid- to late-20th century residential development of detached homes.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY One of 11 rigid frame bridges with concrete railings built in the county between 1930 and 1945, it is a complete but undistinguished example of its type. It was constructed in 1941. Rigid frame bridges came into common use in the 1920s and were favored for right-angle crossings of less than 75' because of their economy of construction. The bridge type utilizes the continuity between pier and slab afforded by the material--reinforced concrete.

INFOR MATION

PHOTO: 35:12-13 (06/01/91) REVISED BY (DATE): QUAD: Moorestown

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0460150 **CO** CAMDEN **OWNER** STATE AGENCY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 561 OVER CAPE MAY BRANCH **FACILITY** CR 561

TOWNSHIP WINSLOW TOWNSHIP

TYPE PONY TRUSS **DESIGN** WARREN **MATERIAL** Steel

 # SPANS 1 **LENGTH** 98 ft **WIDTH** 29 ft

CONSTRUCTION DT 1906 **ALTERATION DT** Demolished: 1997 **SOURCE** PLAQUE

DESIGNER/PATENT AMERICAN BRIDGE CO. **BUILDER** AMERICAN BRIDGE COMPANY

SETTING / CONTEXT The bridge carries a 2-lane road over a single track rail line less than a mile southwest of Winslow Junction, the meeting point of 3 rail lines. It is the middle of the 3 nearly parallel rail lines. The surroundings are undistinguished and sparsely developed. The rail line is the right-of-way used jointly by the Pennsylvania and Reading systems as a turnout from the main line to Atlantic City to their Cape May routes.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Bridge was Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The riveted steel Warren pony truss with built-up braced verticals was built in 1906 by the American Bridge Company. It is supported on deteriorating concrete abutments. The pipe railing is original as are the handsome cast iron posts on the south end (north end removed). Alterations include new floor beams and stringers and some welded repairs to the diagonals on the north end. The bridge is significant as the only pony truss in the county and one of the best preserved in the region.

INFOR MATION

Bibliography:
Cook, W. George and Coxey, William J. Atlantic City Railroad. Ambler, Pennsylvania: Crusader Press, 1980.

Physical Description: The single span rivet-connected Warren pony truss span is supported on concrete abutments. Its design differs from the traditionally composed pony truss in that it has moment-resisting top chord members composed of a web set between angles. The design redistributes secondary stresses in bending. The verticals are knee braces while the diagonals are back-to-back toe-out angles. The pipe railings with handsome cast-iron end posts are original. The are many small welded and bolted repairs, but the overall design of the bridge is preserved.

Historical and Technological Significance: The well-preserved rivet-connected Warren pony truss bridge is the only example of its type in Camden County. It was fabricated in 1906 by the American Bridge Company, the largest bridge-manufacturing firm in the country. It is a complex truss in that the top chord was designed to be a moment-resisting member that redistributes secondary stresses in bending. It was a somewhat advanced design for its day, and it represents the railroad's transition from pin to rivet connections and moment-resisting design. The design was developed by the railroads during the first decade of this century, and it was used for both rail- and road-carrying spans. It is not a common bridge type, especially in southern New Jersey (criterion C).

The bridge was built by the Atlantic City Railroad (ACRR) as part of its ambitious joint-line improvement program undertaken by the ACRR, controlled by the Philadelphia & Reading Railroad, and the West Jersey & Seashore line (WJ&S), controlled by the Pennsylvania Railroad, for better service to southern New Jersey coastal points. The two lines shared a 25-year trackage right agreement that resulted in a new route over the Cape May Branch of the Atlantic City Railroad right-of-way to Winslow Junction, where WJ&S trains connected with the C&A main line for direct service to Camden and Philadelphia. Because of the high-speed connections needed between the ACRR and WJ&S as well as the Central Railroad of New Jersey (CNJ) at busy Winslow Junction, the junction was greatly improved, and several grade crossings between road and rail and two different rail lines were eliminated with overpasses. The Warren pony truss was built as part of the 1906 line improvement program that was completed in record time so as not to disrupt the lucrative summer business the ACRR enjoyed between Philadelphia and shore points. It carries a county road over the original right-of-way of the ACRR's Cape May Branch that was developed in the mid-1890s.

Boundary Description and Justification: The bridge is evaluated as individually distinguished. Therefore, the boundary is the superstructure and substructure of the span itself. The rail line was not evaluated as a historic corridor.

PHOTO: 32:1,3,4 (06/01/91) REVISED BY (DATE): QUAD: Hammonton

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0460151 **CO** CAMDEN **OWNER** STATE AGENCY **MILEPOINT** 26.22

NAME & FEATURE INTERSECTED CAPE MAY BRANCH RR OVER CR 561 **FACILITY** CAPE MAY BRANCH RR

TOWNSHIP WINSLOW TOWNSHIP

TYPE THRU GIRDER **DESIGN** BUILT UP **MATERIAL** Steel

 # SPANS 1 **LENGTH** 45 ft **WIDTH** 12.6 ft

CONSTRUCTION DT 1906 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge over a 2-lane road is located in a sparsely developed wooded and agricultural section and is surrounded by large tracts of pine barrens. The line was built in 1896 by the Atlantic City Railroad as a branch to Cape May from Winslow Junction. The line is one of several built during the second half of the 19th century to service the rapidly developing south Jersey shore.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single track riveted thru girder with floor beams and concrete abutments was built as part of a project undertaken by the Atlantic City Railroad to replace its original timber overpasses. This bridge is a representative example of the thru girder spans frequently used for rail overpasses in the area. Although built as part of a line improvement program and surviving in unaltered condition, the bridge is not technologically or historically distinguished.

INFOR MATION

PHOTO: 35:8-9 (06/01/91) REVISED BY (DATE): QUAD: Hammonton

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0462150 **CO** CAMDEN **OWNER** STATE AGENCY **MILEPOINT** 13.85

NAME & FEATURE INTERSECTED UNITED STATES AVENUE OVER ATLANTIC CITY LINE **FACILITY** UNITED STATES AVE

TOWNSHIP LINDENWOLD BOROUGH

TYPE THRU GIRDER **DESIGN** BUILT UP **MATERIAL** Steel

 # SPANS 3 **LENGTH** 103 ft **WIDTH** 16.5 ft

CONSTRUCTION DT 1904 **ALTERATION DT** 1981 **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT Crossing double track of the recently reactivated NJT and Amtrak line between Atlantic City and Philadelphia, the overpass is located in a wooded setting in a sparsely developed area of the Pine Barrens. Limited surrounding development is mid-20th century

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 3-span shallow thru girder with its original floor system of stringers riveted to the floor beams and plank deck is well preserved. It is supported on handsome ashlar abutments and built-up steel bents on ashlar plinths. It is one of 4 nearly identical overpasses built by the Pennsylvania Railroad in lower Camden County from 1902-1905, but it was modified during 1981 work. There are bolted repairs to the stringers and girders. The plank wearing surface has been retained.

INFOR MATION

PHOTO: 33:13-14,105:36-37 (05/01/91) REVISED BY (DATE): QUAD: Clementon

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0462151 **CO** CAMDEN **OWNER** STATE AGENCY **MILEPOINT** 14.95

NAME & FEATURE INTERSECTED FRANKLIN AVENUE OVER ATLANTIC CITY LINE **FACILITY** FRANKLIN AVENUE (CR 692)

TOWNSHIP BERLIN TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 118 ft **WIDTH** 30 ft

CONSTRUCTION DT 1941 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The 2-lane bridge with sidewalks is located in a mid-20th century suburban residential area. It crosses a single track of the line originally built by the Camden and Atlantic City Railroad in 1854. The line is now used by Amtrak and NJT for Atlantic City.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed 3-span encased stringer overpass with concrete abutments and bents was built in 1941 and has a concrete parapet nicely detailed in the prevailing Art Moderne style. The parapet style is the most distinguishing feature of the otherwise typical overpass. The bridge is a representative example of its structural type and is not technologically nor historically distinguished.

INFOR MATION

PHOTO: 33:15-16 (05/01/91) REVISED BY (DATE): QUAD: Hammonton

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0462153 **CO** CAMDEN **OWNER** STATE AGENCY **MILEPOINT** 15.9

NAME & FEATURE INTERSECTED HADDON AVE (CR 561) OVER ATLANTIC CITY LINE **FACILITY** HADDON AVENUE (CR 561)

TOWNSHIP HADDONFIELD/BERLIN

TYPE THRU GIRDER **DESIGN** PARTIALLY ENCASED **MATERIAL** Steel

 # SPANS 6 **LENGTH** 436 ft **WIDTH** 54 ft

CONSTRUCTION DT 1941 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT PA & READING SEASHORE RR **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in a congested section of suburban sprawl dominated by mid- and late-20th century commercial and residential development. It carries the wide 2-lane county route over the recently reactivated Amtrak/NJT Atlantic City rail line. The railroad was originally built in 1854 by the Camden & Atlantic Railroad.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 6-span thru girder with floor beams with encasement is supported on concrete columns. While the concrete parapet is nicely detailed in the severe Moderne style, the span itself is a late, representative example of a common type and is not noteworthy. The bridge was designed by and built for the Pennsylvania-Reading Seashore Railroad, a joint company formed by the Pennsylvania and Reading systems in 1933. Plans exist.

INFOR MATION

PHOTO: 105:12-14 (06/01/91) REVISED BY (DATE): QUAD: Runnemede

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0462157 **CO** CAMDEN **OWNER** STATE AGENCY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED OLD WHITE HORSE PIKE OVER ATLANTIC CTY LINE **FACILITY** OLD WHITE HORSE PIKE

TOWNSHIP WATERFORD TOWNSHIP

TYPE THRU GIRDER **DESIGN** BUILT UP **MATERIAL** Steel

 # SPANS 3 **LENGTH** 91 ft **WIDTH** 15.4 ft

CONSTRUCTION DT 1904 **ALTERATION DT** 1997 **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT Carrying a 2-lane road over Amtrak and NJT's recently reactivated double-track line between Atlantic City and Philadelphia, the bridge is located in a wooded setting with sparse modern development. Old White Horse Pike is a bypassed section of the

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The shallow built-up 3-span continuous thru girder with its original flooring system of stringers riveted to floor beams and wood decking (in-kind replacement) is a well-preserved example of an early overpass. It is supported on random ashlar abutments and steel bents on ashlar plinths. It is one of 4 similar overpasses built by the PA RR in lower Camden County between 1902-1905, and it is the best preserved of the four. The bridge is historically and technologically significant.

INFOR MATION

Bibliography:
Condit, Carl. American Building Art 19th Century. New York: Oxford University Press, 1960.

Physical Description: The narrow 3-span built-up thru girder bridge is supported on well-preserved rusticated ashlar abutments and steel columns on corresponding ashlar plinths. The flooring system is composed of stingers connected to the floor beams by riveted brackets and a plank wearing surface. The outside girders are shallow owing to the light capacity of the span. A modern beam guard rail has been added. The bridge crosses one active track.

Historical and Technological Significance: The 3-span overpass is one of a series of four built by the Pennsylvania Railroad in Camden County on its Atlantic City route between 1902 and 1905. The right-of-way was initially developed in 1854 by the Camden & Atlantic City Railroad which was absorbed by the Pennsylvania system in the early 1880s. This was the first line to service Atlantic City which became an extremely lucrative rail market. The Pennsylvania and Reading Railroads ran competing lines to Cape May and Atlantic City until 1933 when the two lines combined operations and created the Pennsylvania & Reading Seashore Line.

This span ranks as not only one of the oldest overpass bridges in the area but also one of the most complete. It is a well-preserved example of an early-20th century light-capacity built-up girder bridge. While thru girder bridges are common for both rail-over-road and road-over-rail spans, few survive with their original floor system preserved. Technologically the bridge is important as a record of the development of the built-up thru girder bridge type, easily one of the most popular bridges during the first half of the 20th century. The built-up girder bridge was developed for railroad use in 1846-47 for the Baltimore & Susquehanna Railroad, and, in time, it became the only serious competitor of the truss for railroad use.

PHOTO: 9:32-34, 33:17-18 (05/01/91) REVISED BY (DATE): QUAD: Hammonton

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0462158 **CO** CAMDEN **OWNER** STATE AGENCY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED DAYTON AVE OVER ATLANTIC CITY LINE **FACILITY** DAYTON AVENUE

TOWNSHIP WATERFORD TOWNSHIP

TYPE THRU GIRDER **DESIGN** BUILT UP **MATERIAL** Steel

 # SPANS 3 **LENGTH** 130 ft **WIDTH** 13 ft

CONSTRUCTION DT 1905 **ALTERATION DT** 1991 **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT Located in the Pine Barrens region of the state, the bridge is isolated in a sparsely developed, forested area. It carried a 2-lane local road over Amtrak's and NJT's recently reactivated railroad line between Philadelphia and Atlantic City. The right-of-way was initially developed by the Pennsylvania RR system about 1883.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 3-span thru girder on ashlar abutments and built-up steel bents has been rehabilitated. The original floor system was replaced with modern beams and stringers supporting a corrugated asphalt pan and wearing surface. The replacement elements are bolted and welded to the original girders. The lower portion of each steel bent has been encased. The 1991 remedial work is so extensive that the bridge no longer has historical or technological significance.

INFOR MATION

PHOTO: 33:19-20,105:38-40 (05/01/91) REVISED BY (DATE): QUAD: Clementon

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0462159 **CO** CAMDEN **OWNER** STATE AGENCY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED OLD WHITE HORSE PIKE OVER ATLANTIC CTY LINE **FACILITY** OLD WHITE HORSE PIKE

TOWNSHIP WATERFORD TOWNSHIP

TYPE THRU GIRDER **DESIGN** BUILT UP **MATERIAL** Steel

 # SPANS 5 **LENGTH** 275 ft **WIDTH** 27.5 ft

CONSTRUCTION DT 1902 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The 2-lane bridge over one track is located in an agricultural area in the lower portion of the county. A modern agribusiness building is on the west side of the bridge, but all other sides are surrounded by farmland. The railroad line was developed by the Camden & Atlantic City Railroad in 1854. It later became part of the Pennsylvania RR system, and this span was built for the Pennsylvania RR.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The heavily skewed 5-span continuous thru girder with built-up floor beams survives in relatively complete condition, but its floor system has been altered by the modern installation of a corrugated asphalt pan replacing the original plank deck. It is the longest of the 4 similar 1902-1905 PA RR overpasses in lower Camden County, but alterations to the floor system make is not as complete or historically and technologically significant as 0462157, which is a better example of the type.

INFOR MATION

PHOTO: 32:9-13 (05/01/91) REVISED BY (DATE): QUAD: Hammonton

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0466151 **CO** CAMDEN **OWNER** STATE AGENCY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CHURCH STREET OVER DRRR&B COPANY BRANCH **FACILITY** CHURCH STREET (CR 616)

TOWNSHIP MERCHANTVILLE BOROUGH

TYPE BOX BEAM **DESIGN** **MATERIAL** Steel

 # SPANS 3 **LENGTH** 98 ft **WIDTH** 41 ft

CONSTRUCTION DT 1921 **ALTERATION DT** 1982 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge is located in a mid-20th century residential area, and it carries a two- lane secondary road over ConRail's DRRR&B Co. Branch. The rail line was built in 1896 by the PA RR to link the new Delair bridge over the Delaware with the its subsidiary Camden & Atlantic's main line in West Haddonfield. The line ran to Atlantic City and Cape May.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The superstructure was replaced with box beams in 1982. Modifications were also made to the steel bents, and a concrete barrier-like parapet with a fence was installed. Surviving unaltered are the ashlar abutments. The bridge is of modern construction and has no historical or technological distinction.

INFOR MATION

PHOTO: 33:34,105:15 (05/01/91) REVISED BY (DATE): QUAD: Camden

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0466152 **CO** CAMDEN **OWNER** STATE AGENCY **MILEPOINT** 4.79

NAME & FEATURE INTERSECTED MAPLE AVENUE (CR 537) OVER DRRR & BRIDGE COMPANY BRANCH **FACILITY** MAPLE AVENUE (CR 537)

TOWNSHIP PENNSAUKEN TOWNSHIP

TYPE THRU GIRDER **DESIGN** BUILT UP **MATERIAL** Steel

 # SPANS 3 **LENGTH** 91 ft **WIDTH** 40.2 ft

CONSTRUCTION DT 1896 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT PA RR BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries a local 2-lane street over one active track of the former Delaware River Railroad & Bridge Co. line built in 1896 from the Delair Bridge to the PA RR's main line in West Haddonfield. The residential area to the north is early 20th century while that to the south is post-WW II. Most of the overpass bridges on the short line are original structures.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 3-span shallow thru girder overpass is supported on ashlar abutments and built-up steel bents on ashlar plinths. A welded column has been added to the center of each bent bay. The bridge retains its original floor system with I-section floor beams riveted to shallow built-up girders which support a plank deck. The wearing surface is asphalt. The iron railing is original. This is one of the two the best preserved of the 4 DRRR&B Co. overpasses in the county.

INFOR MATION

Bibliography:
Cook, W. George and William J. Coxey. Atlantic City Railroad. 1980.
Condit, Carl. American Building Art 19th Century. New York: Oxford University Press, 1960.
Gladulich, Richard. By Rail to the Boardwalk. Glendale, CA: Trans-Anglo Books, 1986.

Physical Description: The 3-span bridge is a shallow built-up multi girders supported on steel bents and ashlar abutments with wing walls. The bents, set on ashlar plinths, were originally toe-out angles joined by lacing. The bents have been strengthened by additional columns with batten plates rather than lacing. The flooring system composed of built-up floor beams carrying wood stringers carrying the plank wearing surface is an inkind replacement of the original wood elements. This is the only one of the four original DRRR & B Co. highway overpass bridges to retain its original flooring system. The sidewalk on both sides of the 2-lane roadway is enclosed by a wrought-iron fence-like railing that if not original to this bridge is original to those on the line. The sidewalks also have plank paving.

Historical and Technological Significance: The 3-span road-over-rail bridge is one of the best preserved of four surviving original overpasses built in 1896 as part of the original development of the Delaware River Railroad and Bridge Company (DRRR & B Co.) line that linked the 1896 Delran Bridge, the first railroad bridge over the Delaware River, with the existing rail lines in and around Camden. The DRRR & B Company was a wholly owned subsidiary of the Pennsylvania Railroad, and it built the bridge to expedite service on its lucrative route between Philadelphia and Atlantic City. The Pennsylvania Railroad developed the Delaware River Railroad and Bridge Company line as circumferential route to link the bridge with its existing lines in the area. The bridge was the first span to cross the river south of Trenton.

The DRRR & B Company line passed through congested residential areas which meant that rail and vehicular traffic would have to be separated. The railroad built the line between Pennsauken and Haddonfield in a manmade cut and carried vehicular roads over the cut on deck and thru plate girder bridges designed by and built at the expense of the Pennsylvania Railroad. Although the built-up plate girder developed in 1847, the Maple Avenue bridge in Pennsauken is a relatively early example of the bridge type in New Jersey. The deck and thru plate girders went on to become the only bridge type to compete with the steel truss for use on rail lines in the 20th century. This example, complete with its original type of flooring system that incorporates wood members, is an extremely well preserved example of this important bridge type. It is also significant for its historical association with the rail line and bridge that contributed directly to the development of both the Camden area and the southern counties of the state (criterion A, C).

Boundary Justification and Description: The bridge is evaluated as individually significant because it is a (1) well preserved example of a once-common bridge type and (2) a well-preserved artifact from the halcyon days of railroading in the area. While the surroundings have not maintained their integrity of setting, the bridge is complete. The boundary is thus limited to the span itself, the substructure and superstructure. 0466160 has also been evaluated as significant because there is no marked difference in the two spans.0466152

Bibliography:
Cook, W. George and William J. Coxey. Atlantic City Railroad. 1980.
Condit, Carl. American Building Art 19th Century. New York: Oxford University Press, 1960.
Gladulich, Richard. By Rail to the Boardwalk. Glendale, CA: Trans-Anglo Books, 1986.

Physical Description: The 3-span bridge is a shallow built-up multi girders supported on steel bents and ashlar abutments with wing walls. The bents, set on ashlar plinths, were originally toe-out angles joined by lacing. The bents have been strengthened by additional columns with batten plates rather than lacing. The flooring system composed of built-up floor beams carrying wood stringers carrying the plank wearing surface is an inkind replacement of the original wood elements. This is the only one of the four original DRRR & B Co. highway overpass bridges to retain its original flooring system. The sidewalk on both sides of the 2-lane roadway is enclosed by a wrought-iron fence-like railing that if not original to this bridge is original to those on the line. The sidewalks also have plank paving.

Historical and Technological Significance: The 3-span road-over-rail bridge is one of the best preserved of four surviving original overpasses built in 1896 as part of the original development of the Delaware River Railroad and Bridge Company (DRRR & B Co.) line

that linked the 1896 Delran Bridge, the first railroad bridge over the Delaware River, with the existing rail lines in and around Camden. The DRRR & B Company was a wholly owned subsidiary of the Pennsylvania Railroad, and it built the bridge to expedite service on its lucrative route between Philadelphia and Atlantic City. The Pennsylvania Railroad developed the Delaware River Railroad and Bridge Company line as circumferential route to link the bridge with its existing lines in the area. The bridge was the first span to cross the river south of Trenton.

The DRRR & B Company line passed through congested residential areas which meant that rail and vehicular traffic would have to be separated. The railroad built the line between Pennsauken and Haddonfield in a manmade cut and carried vehicular roads over the cut on deck and thru plate girder bridges designed by and built at the expense of the Pennsylvania Railroad. Although the built-up plate girder developed in 1847, the Maple Avenue bridge in Pennsauken is a relatively early example of the bridge type in New Jersey. The deck and thru plate girders went on to become the only bridge type to compete with the steel truss for use on rail lines in the 20th century. This example, complete with its original type of flooring system that incorporates wood members, is an extremely well preserved example of this important bridge type. It is also significant for its historical association with the rail line and bridge that contributed directly to the development of both the Camden area and the southern counties of the state (criterion A, C).

Boundary Justification and Description: The bridge is evaluated as individually significant because it is a (1) well preserved example of a once-common bridge type and (2) a well-preserved artifact from the halcyon days of railroading in the area. While the surroundings have not maintained their integrity of setting, the bridge is complete. The boundary is thus limited to the span itself, the substructure and superstructure. 0466160 has also been evaluated as significant because there is no marked difference in the two spans.

PHOTO: 33:3,105:16-17 (05/01/91) REVISED BY (DATE): QUAD: Camden

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0466153 **CO** CAMDEN **OWNER** STATE AGENCY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CHAPEL AVE (CR 626) OVER DRRR&B COMPANY BRANCH **FACILITY** CHAPEL AVENUE (CR 626)

TOWNSHIP CHERRY HILL TOWNSHIP

TYPE THRU GIRDER **DESIGN** BUILT UP **MATERIAL** Steel

 # SPANS 3 **LENGTH** 110 ft **WIDTH** 29.7 ft

CONSTRUCTION DT 1896 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge carries a 2-lane local street over the single active track of the former Delaware River Railroad and Bridge Company line that was built in 1896 to link the Delair Bridge with the PA RR's main line in West Haddonfield. The neighborhood through which the rail line passes is an eclectic mis of early- to mid-20th century middle class and workers housing. It does not have historic district potential.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed 3-span built-up thru girder bridge rests on ashlar abutments and built-up steel bents has its original floor beams and stringer floor supports, but the original wood deck has been replaced by a corrugated asphalt pan, and the stringers are now bolted to the floor beams. The railings are composed of 3 different types, probably salvaged material. One of 4 similar bridges built for the DRRR&B Co. line, it is not as complete as others, like 0466152 that has been evaluated as eligible.

INFOR MATION

PHOTO: 32:33-37 (05/01/91) REVISED BY (DATE): QUAD: Camden

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0466160 **CO** CAMDEN **OWNER** STATE AGENCY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MAPLE AVE OVER DRRR & BRIDGE COMPANY BRANCH **FACILITY** MAPLE AVENUE

TOWNSHIP HADDONFIELD BOROUGH

TYPE DECK GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 3 **LENGTH** 90 ft **WIDTH** 20.5 ft

CONSTRUCTION DT 1896 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT PA RR BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge crosses 1 track in a predominantly mid-20th century residential area with too many alterations to the houses to have historic district potential. There are also some commercial establishments. The Delaware River Railroad & Bridge Co. line was developed by the PA RR in 1896 to link the Delran bridge with the main line in West Haddonfield. It is now used by Amtrak.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY Set on a substructure of ashlar abutments and built-up steel bents on ashlar plinths, the span is nearly identical to the other 4 DRRR&B Co. overpasses, but it appears that the deck has been raised so that the span is now a multi deck girder rather than a shallow thru girder bridge. The lattice railing is original. The span is a well-preserved example of its type and is thus historically and technologically significant reflecting the development of an important rail line and bridge type.

INFOR MATION

Bibliography:
Cook, W. George and William J. Coxey. Atlantic City Railroad. 1980.
Condit, Carl. American Building Art 19th Century. New York: Oxford University Press, 1960.
Gladulich, Richard. By Rail to the Boardwalk. Glendale, CA: Trans-Anglo Books, 1986.

Physical Description: The 3-span bridge is a shallow built-up multi girders supported on steel bents and ashlar abutments with wing walls. The bents, set on ashlar plinths, have laced channel legs and sway bracing. The bases of the columns are encased in concrete. The flooring system composed of built-up floor beams carrying a corrugated asphalt pan. The cantilevered plank sidewalk on both sides of the 2-lane roadway is enclosed by original handsome iron railing with a lattice web and cast square end posts and a molded hand rail. The original plans for the bridge survive.

Historical and Technological Significance: The 3-span road-over-rail bridge is one of the best preserved of four surviving original overpasses built in 1896 as part of the original development of the Delaware River Railroad and Bridge Company (DRRR & B Co.) line that linked the 1896 Delran Bridge, the first railroad bridge over the Delaware River, with the existing rail lines in and around Camden. The DRRR & B Company was a wholly owned subsidiary of the Pennsylvania Railroad, and it built the bridge to expedite service on its lucrative route between Philadelphia and Atlantic City. The Pennsylvania Railroad developed the Delaware River Railroad and Bridge Company line as circumferential route to link the bridge with its existing lines in the area. The bridge was the first span to cross the river south of Trenton.

The DRRR & B Company line passed through congested residential areas which meant that rail and vehicular traffic would have to be separated. The railroad built the line between Pennsauken and Haddonfield in a manmade cut and carried vehicular roads over the cut on deck and thru plate girder bridges designed by and built at the expense of the Pennsylvania Railroad. Although the built-up plate girder developed in 1847, the Maple Avenue bridge in Pennsauken is a relatively early example of the bridge type in New Jersey. The deck and thru plate girders went on to become the only bridge type to compete with the steel truss for use on rail lines in the 20th century. This example, complete with its original iron railings, is a well preserved example of this important bridge type. It is also significant for its historical association with the rail line and bridge that contributed directly to the development of both the Camden area and the southern counties of the state (criterion A, C).

Boundary Justification and Description: The bridge is evaluated as individually significant because it is a well-preserved example of a once-common bridge type is an artifact from the halcyon days of railroading in the area. The boundary is thus limited to the span itself, the substructure and superstructure. 0466152 has also been evaluated as significant because there is no marked difference in the two spans.

PHOTO: 300:12-13,105:33-35 (06/01/91) REVISED BY (DATE): QUAD: Camden

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 046C021 **CO** CAMDEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED SOMERDALE ROAD OVER NORTH BRANCH BIG TIMBER CREEK **FACILITY** SOMERDALE ROAD

TOWNSHIP GLOUCESTER TOWNSHIP

TYPE RIGID FRAME **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 24 ft **WIDTH** No Data

CONSTRUCTION DT 1936 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT B. SCHMUCKER, CO. ENGINEER **BUILDER** EUGENE T. VERGA

SETTING / CONTEXT Located in an undistinguished mid-20th century residential section of Gloucester Township, the structure carries a two lane secondary road over a small branch of the Big Timber Creek. When this structure was built in 1936, most of the surrounding land was used for agriculture.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The short rigid frame bridge with a concrete balustrade was constructed in 1936 and is one of about 11 rigid frame spans built by the county ca. 1940. The bridge is not technologically or historically distinguished and is a representative example of a locally common type.

INFOR MATION

PHOTO: 34:1-2 (06/01/91) REVISED BY (DATE): QUAD: Runnemede

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 046D023 **CO** CAMDEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED SOMERDALE ROAD OVER COOPER RIVER **FACILITY** SOMERDALE ROAD

TOWNSHIP SOMERDALE BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 31 ft **WIDTH** 36 ft

CONSTRUCTION DT 1925 **ALTERATION DT** 1956, 1967 **SOURCE** PLAQUE

DESIGNER/PATENT CO. ENGINEER OFFICE **BUILDER** UNKNOWN

SETTING / CONTEXT Located in a small residential community developed primarily in the 1970s, this structure carries a two-lane secondary road over the Cooper River. When it was built in 1925, most of the surrounding land was undeveloped or used for agricultural purposes.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 02/08/90

SUMMARY Built in 1925 as a 20'-wide encased stringer bridge, it was widened twice with prestressed box beams in 1956 and again in 1967. The original bridge is the center section. The bridge has little integrity of original design. The modern concrete parapet dates from the 1967 widening.

INFOR MATION

PHOTO: 34:43-44 (06/01/91) REVISED BY (DATE): QUAD: Runnemede

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 047D009 **CO** CAMDEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED LAUREL MILL ROAD OVER LAUREL LAKE **FACILITY** LAUREL MILL ROAD

TOWNSHIP LAUREL SPRINGS BOROUGH

TYPE RIGID FRAME **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 35 ft **WIDTH** 34 ft

CONSTRUCTION DT 1941 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT S. HERBERT TAYLOR, CO ENGINEER **BUILDER** EISENBERG CONSTR. CO

SETTING / CONTEXT The bridge carries a 2-lane street over a stream that is dammed to create a small lake. The lake is circled by undistinguished mid-20th century houses. The bridge is outside the area of older historic structures in the borough of Laurel Springs, one of many small residential communities southeast of Camden.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY One of over 11 short rigid frame bridges built by the county ca. 1940, this example is 35' long and has a concrete railing. It is a representative example of a style and type that is well represented in the county. The rigid frame structural type came into common usage in the 1920s. It is noted for its economy of material in construction. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 34:37-38 (06/01/91) REVISED BY (DATE): QUAD: Runnemede

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 047D013 **CO** CAMDEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED LAUREL MILL ROAD OVER NORTH BRANCH TIMBER CREEK **FACILITY** LAUREL MILL ROAD

TOWNSHIP LINDENWOLD BOROUGH

TYPE RIGID FRAME **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 25 ft **WIDTH** 46.3 ft

CONSTRUCTION DT 1941 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT S. HERBERT TAYLOR, CO ENGINEER **BUILDER**

SETTING / CONTEXT The bridge carries a 2-lane road over a small stream in an undistinguished mid-20th century residential area. The setting is not historic.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 25' long rigid frame bridge with a concrete railing is one of over 11 rigid frame spans built by the county ca. 1940. It, like the others, is a plain representative example of a structural type that is well represented in the county. None are eligible. Rigid frame bridges came into common usage in the 1920s. This example is unaltered, but it is not technologically or historically distinguished.

INFOR MATION

PHOTO: 34:39-40 (06/01/91) REVISED BY (DATE): QUAD: Runnemede

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US
November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 047D021 **CO** CAMDEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PARK AVE OVER NO BRANCH TIMBER CREEK **FACILITY** PARK AVENUE

TOWNSHIP LINDENWOLD BOROUGH

TYPE ARCH **DESIGN** BARREL **MATERIAL** Reinforced Concrete

 # SPANS 2 **LENGTH** 32 ft **WIDTH** 30.3 ft

CONSTRUCTION DT 1937 **ALTERATION DT** 1940 **SOURCE** PLANS

DESIGNER/PATENT CO. ENGINEER OFFICE **BUILDER** MOREHOUSE COMPANY

SETTING / CONTEXT The bridge is located in a wooded setting in an undistinguished mid-20th century residential section of Lindenwold Borough. It crosses a wide, shallow stream.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The plain, double-arched reinforced concrete bridge was built in 1937 as a single span and enlarged to two spans by the addition of an identical arch in 1940. The concrete railing dates from the 1940 enlargement. The bridge is a late example of a reinforced concrete arch bridge which was more common in the 1910s and 1920s than the late 1930s. The bridge is not technologically innovative, but it is interesting that the type and style of the original span with duplicated in the lengthening.

INFOR MATION

PHOTO: 33:37-38 (06/01/91) REVISED BY (DATE): QUAD: Runnemede

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 048B002 **CO** CAMDEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CHURCH STREET (CR 534) OVER SOUTH BRANCH TIMBER CREEK **FACILITY** CHURCH STREET (CR 534)

TOWNSHIP GLOUCESTER TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 3 **LENGTH** 24 ft **WIDTH** 30 ft

CONSTRUCTION DT 1922 **ALTERATION DT** 1940ca **SOURCE** PLAQUE

DESIGNER/PATENT WILLIAM CATTELL, GLO CO ENG **BUILDER** KOLYN CONSTRUCTION

SETTING / CONTEXT Located in a wooded setting over the creek that serves as the boundary between Camden and Gloucester counties, the bridge is adjacent to several undistinguished mid-20th century residences built around Blackwood Lake which was created by damming the stream. The dam is on the west side of the bridge.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The simple slab bridge built below a small concrete dam was constructed in 1922 and at a later time (undetermined from county records) widened on the south side. Two piers on the dam side make it a 3-span continuous bridge. The original paneled parapet remains on the north side while the south has a ca. 1940 concrete railing found on other bridges in the county. The modest bridge, which has been substantially altered, is not historically or technologically distinguished.

INFOR MATION

PHOTO: 300:44,1 (06/01/91) REVISED BY (DATE): QUAD: Runnemede

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 048C011 **CO** CAMDEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED LAKELAND ROAD OVER SOUTH BRANCH TIMBER CREEK **FACILITY** LAKELAND ROAD

TOWNSHIP GLOUCESTER TOWNSHIP

TYPE RIGID FRAME **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 35 ft **WIDTH** 34.3 ft

CONSTRUCTION DT 1941 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT COUNTY ENGINEER DEPT **BUILDER** F. CANUSO & SON

SETTING / CONTEXT Crossing the small creek that serves as the boundary between Gloucester and Camden counties, the bridge is located in a flat, sparsely developed area with scattered mid-20th century housing. The setting is not historic.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY A representative example of a rigid frame bridge, the structure is not historically or technologically distinguished. It is 35' long and has a concrete railing found on similar county-designed bridges from the ca. 1940 period. Neither the bridge or its setting are historic. Rigid frame bridges were developed in the 1910s and came into common usage in the 1920s. They were noted for being economical to build.

INFOR MATION

PHOTO: 300:2-3 (06/01/91) REVISED BY (DATE): QUAD: Runnemede

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 048D003 **CO** CAMDEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BLACKWOOD CLEMENTON ROAD OVER NORTH BRANCH TIMBER CREEK **FACILITY** BLACKWOOD CLEMENTON ROAD

TOWNSHIP LINDENWOLD BOROUGH

TYPE RIGID FRAME **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 25 ft **WIDTH** 40 ft

CONSTRUCTION DT 1941 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT S. HERBERT TAYLOR, CO ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane road over a stream through a post-WW II residential neighborhood on the line between the communities of Blackwood and Clementon. The setting is not historic.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 25' long rigid frame bridge with a concrete railing is one of over 11 examples of its type built by the county ca. 1940. It, like the other examples, is not technologically or historically distinguished. None are eligible. The rigid frame bridge came into common usage in the 1920s. This is one of over ten built by the county prior to WW II.

INFOR MATION

PHOTO: 34:41-42 (06/01/91) REVISED BY (DATE): QUAD: Runnemede

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 048E005 **CO** CAMDEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CLEMENTON-GIBBS ROAD OVER NORTH BRANCH TIMBER CREEK **FACILITY** CLEMENTON-GIBBS ROAD

TOWNSHIP CLEMENTON BOROUGH

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 33 ft **WIDTH** 46.2 ft

CONSTRUCTION DT 1922 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT This structure is located in the center of Clementon Borough which is dominated by undistinguished mid-20th century structures. The setting is not historic.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The short reinforced concrete slab bridge with nicely detailed paneled parapets and wingwalls is one of several of its structural type built in the county in the 1920s. Representative of a type commonly used for short spans, the bridge is neither technologically nor historically distinguished.

INFOR MATION

PHOTO: 33:27-28 (05/01/91) REVISED BY (DATE): QUAD: Clementon

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 048E006 **CO** CAMDEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CLEMENTON BERLIN ROAD OVER NORTH BRANCH TIMBER CREEK **FACILITY** CLEMENTON-BERLIN ROAD

TOWNSHIP CLEMENTON BOROUGH

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 24 ft **WIDTH** 46.2 ft

CONSTRUCTION DT 1929 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT B.M. SCHUMUCKER, CO ENGINEER **BUILDER** HILL CONSTRUCTION COMPANY

SETTING / CONTEXT Located in the center of Clementon Borough over a branch of the Timber Creek, the bridge is surrounded by undistinguished mid-20th century structures with mixed uses. It crosses a small stream.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge with a pipe railing is one of several slab structures built by local construction companies for the county in the 1920s. A sidewalk carried on T beams was added to the north side, and it has no railing. The modest span is neither historically or technologically distinguished.

INFOR MATION

PHOTO: 33:29-30 (06/01/91) REVISED BY (DATE): QUAD: Clementon

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 048E036 **CO** CAMDEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED GARFIELD AVE OVER NORTH BR TIMBER CREEK **FACILITY** GARFIELD AVENUE

TOWNSHIP CLEMENTON BOROUGH

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 2 **LENGTH** 58 ft **WIDTH** 34 ft

CONSTRUCTION DT 1939 **ALTERATION DT** 1957 **SOURCE** PLANS

DESIGNER/PATENT S. HERBERT TAYLOR, CO ENGINEER **BUILDER**

SETTING / CONTEXT The bridge carries a 2-lane road over a small stream in an undistinguished mid-20th century mixed use area in Clementon Borough.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed stringer bridge on concrete abutments and pier is finished with a concrete railing that is common on county-designed bridges from the late 1930s. The west side sidewalk is original while that on the east side, carried on T beams, was added in 1957. The bridge is neither historically nor technologically distinguished.

INFOR MATION

PHOTO: 33:33-34 (06/01/91) REVISED BY (DATE): QUAD: Clementon

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 048F012 **CO** CAMDEN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WATSONT NORTH FREEDOM ROAD OVER GREAT EGG HARBOR **FACILITY** WATSONT-FREEDOM ROAD

TOWNSHIP BERLIN BOROUGH

TYPE RIGID FRAME **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 24 ft **WIDTH** 30.5 ft

CONSTRUCTION DT 1941 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT S. HERBERT TAYLOR, CO ENGINEER **BUILDER**

SETTING / CONTEXT Located adjacent to the Camden County Park, the bridge carries a 2-lane road over a small stream. The park is surrounded by an undistinguished mix of post-WWII residential and commercial properties.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The tapered rigid frame concrete bridge has a concrete railing similar to that found on several other rigid frame spans built by the county in the decade before WW II. The rigid frame bridge was developed in the 1910s and came into common usage in the 1920s. There are over 10 examples of the bridge type in Camden County. All are short and undistinguished, and none were evaluated as eligible.

INFOR MATION

PHOTO: 33:25-26 (05/01/91) REVISED BY (DATE): QUAD: Clementon

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0500006 **CO** CAPE MAY **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED STONE HARBOR BOULEVARD OVER GREAT CHANNEL **FACILITY** STONE HARBOR BOULEVARD

TOWNSHIP STONE HARBOR BOROUGH

TYPE DOUBLE LEAF BASCULE **DESIGN** RALL **MATERIAL** Steel

 # SPANS 11 **LENGTH** 905 ft **WIDTH** 22.3 ft

CONSTRUCTION DT 1930 **ALTERATION DT** 1984 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT STROBEL STEEL BRIDGE COMPANY **BUILDER**

SETTING / CONTEXT The bridge carries 2-lanes of traffic and a single sidewalk over Great Channel. To the east is downtown Stone Harbor with a mixture of modern and early 20th-century residential and commercial buildings. To the west are a motel, restaurant, marina and housing development. The bridge is part of the causeway that connects Stone Harbor with the mainland. Great Channel is a part of the Intercoastal Waterway.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 03/08/83, Letter 6/30/95.

SUMMARY The bridge is a 1930 Rall double-leaf bascule with ten prestressed concrete box beam approach spans (1984). It is New Jersey's only known example of a Rall-type bascule, a rare and technologically distinguished movable bridge type. The bascule moves both vertically and horizontally by means of pinions that engage pivoted racks, trunnions nested in rollers, and pinned swing struts. The bascule retains its integrity, and in 1983 was found eligible for its technological significance.

INFOR MATION

PHOTO: 189:22-27 (10/04/92) REVISED BY (DATE): QUAD: Stone Harbor

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0500007 **CO** CAPE MAY **OWNER** COUNTY **MILEPOINT** 1.3

NAME & FEATURE INTERSECTED LAFAYETTE STREET (NJ 109) OVER CAPE ISLAND CREEK **FACILITY** LAFAYETTE STREET (NJ 109)

TOWNSHIP CAPE MAY CITY

TYPE DECK GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 107 ft **WIDTH** 27 ft

CONSTRUCTION DT 1927 **ALTERATION DT** 1974 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge carries 2 lanes of traffic and 2 sidewalks over Cape Island Creek. The creek forms the northern boundary of the Cape May Historic District, a Victorian era residential and resort community. No historic structures are adjacent the bridge. To the south are condominiums and a gas station. To the northeast is a marina. The bridge was built outside the period of significance of the historic district.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 11/29/90

SUMMARY In 1927 the bridge was originally constructed as a double-leaf trunnion bascule with haunched deck girder superstructure and concrete substructure. In 1974 the bascule was fixed in the closed position with welded plates, and the operating machinery and houses were removed. Sidewalks with metal railings were added, and the approaches rebuilt. The altered bridge is not a contributing resource to the historic district, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 189:17-18 (10/04/92) REVISED BY (DATE): QUAD: Cape May

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0500013 **CO** CAPE MAY **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 557 (WOODBINE ROAD) OVER BURNT MILL CREEK **FACILITY** CR 557 (WOODBINE ROAD)

TOWNSHIP UPPER TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 13 ft **WIDTH** 29.7 ft

CONSTRUCTION DT 1924 **ALTERATION DT** 1950ca **SOURCE** INSCRIPTION

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge carries two lanes of traffic with shoulders over a creek. The surrounding area is undeveloped with woods and open fields. The bridge is upstream from a small pond.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span encased steel stringer bridge has paneled concrete parapets, concrete abutments, and concrete wingwalls with pipe railings. The bridge originally had a 27' clear span, but the span was symmetrically reduced to 13' and buttressed with poured concrete ca. 1950. The altered bridge is an example of a common type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 428:35a-38a (01/19/93) REVISED BY (DATE): QUAD: Tuckahoe

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0500017 **CO** CAPE MAY **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED STONE HARBOR BOULEVARD OVER SCOTCH BONNET **FACILITY** STONE HARBOR BOULEVARD

TOWNSHIP MIDDLE TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 26 **LENGTH** 324 ft **WIDTH** 22.3 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT **BUILDER** ATLANTIC CONSTRUCTION CO

SETTING / CONTEXT The bridge carries two lanes of traffic over Scotch Bonnet, a tidal estuary. Running along the north side, parallel to, but not abutting the bridge, is a timber stringer pedestrian bridge. The pedestrian walkway is built on the substructure of the former Stone Harbor Terminal Railroad bridge originally constructed in 1912. On either side of the bridge are undistinguished twentieth-century summer homes.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 7/9/90

SUMMARY The 26-span bridge has a single 25'-long steel stringer span at mid-bridge, and 25 timber stringer spans, 12 to the west and 13 to the east. The steel stringer spans a shallow navigable waterway. The bridge has braced timber piles with timber cap beam bents, sheet pile abutments, a timber deck with an asphalt wearing surface, and pipe railings. Beam guide rails have been added. The bridge is a common type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 189:19-21 (10/04/92) REVISED BY (DATE): QUAD: Stone Harbor

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0500019 **CO** CAPE MAY **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MARSHALLVILLE ROAD OVER MILL CREEK **FACILITY** MARSHALLVILLE ROAD

TOWNSHIP UPPER TOWNSHIP

TYPE PONY TRUSS **DESIGN** WARREN **MATERIAL** Steel

 # SPANS 1 **LENGTH** 33 ft **WIDTH** 14.8 ft

CONSTRUCTION DT 1901 **ALTERATION DT** 1990ca **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a single-lane of traffic over Mill Creek near the creek's confluence with the Tuckahoe River. The bridge is located within the boundaries of the Marshallville Historic District, a nineteenth and early-twentieth century community. Well-preserved brick and wood-frame residential structures line Marshallville Road on both sides of the bridge.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible. Listed. Marshallville Historic District. 11/28/1989. Contributing.

CONSULT DOCUMENTS SHPO Letter 03/12/01

SUMMARY The 1-span bridge is a three-panel, rivet-connected Warren pony truss composed of standard steel sections. The bridge has masonry abutments and wingwalls, pipe railings, and a plank deck. Minor alterations include reinforcing the bearings and lower chords with bolted plates and angles (c.1990), steel stringers paired with timber stringers, concrete toe walls, and beam guide rails. The truss bridge is the only example of its type in the county. Thus the bridge is individually eligible for listing in the National Register of Historic Places under Criterion C and is a contributing element of the Marshallville Historic District under Criteria A.

INFOR MATION

PHOTO: 428:30a-34a (01/19/93 JPH (5/96)) REVISED BY (DATE): QUAD: Tuckahoe

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0500026 **CO** CAPE MAY **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED TYLER ROAD OVER SLUICE CREEK **FACILITY** TYLER ROAD

TOWNSHIP UPPER TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Wood

 # SPANS 3 **LENGTH** 35 ft **WIDTH** 22.6 ft

CONSTRUCTION DT 1940 **ALTERATION DT** Unknown **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The two-lane bridge with two safety sidewalks spans a tidal creek in an undeveloped wetlands area. The creek is a tributary of the Tuckahoe River.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 7/9/90

SUMMARY The three-span timber stringer bridge has sheet pile abutments, timber pile bents with timber cap beams, and a timber deck with an asphalt wearing surface. Beam guide rails and timber stringer safety sidewalks with timber railings have been added. Built in 1940, the bridge has been repaired/rebuilt in-kind. It is a common bridge type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 428:26a-27a (12/29/92) REVISED BY (DATE): QUAD: Marmora

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0500028 **CO** CAPE MAY **OWNER** PRIVATE **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED OCEAN HIGHWAY OVER GREAT CHANNEL **FACILITY** OCEAN HIGHWAY

TOWNSHIP STONE HARBOR BOROUGH

TYPE SINGLE LEAF BASCULE **DESIGN** TRUNNION **MATERIAL** Steel

 # SPANS 32 **LENGTH** 1535 ft **WIDTH** 19.7 ft

CONSTRUCTION DT 1939 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT ASH, HOWARD, NEEDLES & TAMMEN **BUILDER** BETHLEHEM STEEL COMPANY

SETTING / CONTEXT The bridge carries two lanes of traffic and two sidewalks over a navigable channel south of Stone Harbor. North of the bridge are late-20th century summer residences. South of the bridge is a small undeveloped island and salt marshes. The bridge is privately-operated by the Cape May County Bridge Commission.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 32 span bridge has a 57' single-leaf haunched deck girder trunnion bascule main span and 31 deck girder and stringer approach spans. The bridge is finished with metal railings. It is one of 4 well preserved Ash Howard Needles & Tammen-designed bascule bridges built 1938-1940 on the Ocean Highway for the Cape May County Bridge Comm. with WPA funding. The group represents a major civic improvement, and all the bridges are historically and technologically distinguished.

INFOR MATION

Bibliography:
Brown, Kathi Ann. Design By Diversity. Kansas City, Missouri: The Lowell Press, 1989.
Cape May County Bridge Commission. Minutes 1934-1940.
New Jersey Laws, Session of 1910.
Seely, Bruce. Building the American Highway System. Philadelphia: Temple University Press, 1989.

Physical Description: The main span of the 32-span bridge is a 57'-long haunched deck girder with floor beams single-leaf trunnion bascule with a steel grid deck. The concrete counterweight is affixed to the underside of the tail end of the movable span. The approach spans are stringers and built-up deck girders supported on concrete pier bents with concrete cap beams for the stringers and braced concrete columns for the girders and movable leaf. A metal railing and safety sidewalks flank the roadway of the entire span. The cantilevered flat-roofed concrete Moderne-style operator's house on the inland side of the movable leaf is matched by a corresponding lookout with a bench on the ocean side. The bridge opens seasonally.

With the exception of the operator's control panel, which was placed in 1991, The operating mechanisms are primarily original or in kind replacements. The bridge operates by means of a pinion that engages a rack fixed to the outside of the girder near the trunnion. The enclosed primary and open secondary reducers and open drive gear sets are original as are the trunnions and supporting columns. The bridge is powered by an electrical motor. The machinery brake is original.

Historical and Technological Significance: The bridge over Great Channel is one of four nearly identical trunnion movable bridges designed by Ash Howard Needles & Tammen that were built under one contract for the Cape May County Bridge Commission in 1938-1940. The bridges were opened to the traveling public June 1940. The span is a well preserved representative example of what is the most common movable bridge type in the Jersey Shore region. Technologically it represents mid-1920s refinements in the important trunnion bascule bridge design developed in the early years of the 20th century. It is one of over a dozen of the same patented design built in the area between 1928 and 1940. Another was built on the Ocean Highway over Corsons Inlet for the Cape May Bridge Commission in 1947-48. Historically the bridges are monuments to the effectiveness of Depression-era New Deal programs to improve America's infrastructure (criteria A, C).

The Cape May County Bridge Commission was established by the county in 1934 for the purpose of having a means to apply for Federal Emergency Administration of Public Works funds to build movable bridges over navigable channels and two fixed bridges on the Ocean Highway in the county. A quasi-public commission, the original members were George N. Smith from Wildwood Crest, Luther C. Ogden, a former county Freeholder, of Cape May City, and G. W. Bergner, mayor of Avalon. The purpose of the commission was to "finance, construct, maintain, and operate self-liquidating toll bridges within the county." Having the private commission meant that the bridges could be constructed without cost to the county. Improving vehicular access to the Shore resort communities was viewed as a means of balancing the decline of train service to the tourist and seasonal-resident oriented area.

Ocean Highway was a route designation enacted by the 1910 New Jersey Senate and General Assembly (Chapter 220). The highway was to stretch from Atlantic Highlands in Monmouth County to Cape May City in Cape May County along, "as far as possible," improved existing roads near the ocean. The Commissioner of Public Roads was authorized to make route improvements where necessary with a $50,000. appropriation from the vehicle license fund. The improvements were made to the roadway over the next four years, but bridges were not a part of that work.

Ocean Highway was an element in the promotion of the Jersey Shore as a tourist and seasonal residence area. The route, which incorporates local and county streets, does not possess the integrity of setting nor technological significance to be evaluated as a potential historic district. It is merely a route designation that in Cape May County was promoted as the shortest route from Atlantic City to Cape May City.

The consulting engineer firm of Ash Howard Needles & Tammen (AHNT) from New York City played a pivotal role in the history of the bridge commission. By 1934, the firm, founded in Kansas City, Missouri in 1914 as the successor to one started by J.A.L. Waddell, had

established itself nationally as one of the leading designers of movable bridges, especially vertical lift bridges. Waddell was associated with the firm until he and John Harrington went their separate ways in 1914. The company opened its New City office in 1922 under the leadership of Harrington, Howard, and Ash. Work-relief program funded projects were an important source of work for AHNT, as it was for most engineering firms during the Depression, and the Cape May Ocean Highway bridges were a sustaining project for the New York office. The AHNT patent associated with the design of this particular bridge relates to the trunnion tower, and it was granted in 1926.

It was reported at the May 22, 1935 annual meeting of the Cape May County Bridge Commission that AHNT attended the meeting, and that they had prepared, on behalf of the commission, the actual application, complete with plans and specifications, to the Federal Administration of Public Works for $1,650,000 to build the Ocean Highway bridges. The application was not approved until June 14, 1938, at which time $744,545 was a grant and $910,000 was a loan. Work on the bridges began immediately.

The funding from the Federal Administration of Public Works met several objectives of various federal programs. It provided work for the unemployed. It was anticipated that between 350 and 500 local men would be put to work in addition to many "outside men," (CMCBC Minutes, 7/1/38). The bridges would improve traffic and focus on efficiency, as defined in engineering terms, which was a goal of the Bureau of Public Roads. Work relief-funded projects like the Cape May County Ocean Highway bridges kept the golden age of highway development alive during the Depression, when the lack of state and local funds would otherwise have stopped the effort (Seely, p. 88-91).

The four AHNT-designed movable bridges built on the Ocean Highway (3100003, 0500028, 3100005, 3100006) are all evaluated as significant because all are in a nearly complete state of preservation. The fact that they were built with funds made available through the federal government in an effort to create work is not sufficiently significant enough to meet National Register criteria because so many public works projects during the mid- to late-1930s were funded exactly the same way. The bridges were also not built with federally funded work crews such as the Civilian Conservation Corps (CCC).

Boundary Description and Justification: The bridge is evaluated as individually distinguished. While its immediate setting remains unchanged, the route of which it is a part does not possess the integrity or historical significance to be a potential historic district. Therefore, the bridge including the approach spans and structures related to its operation are evaluated as the limit of the historic resource. It is one of four movable bridges of similar design and date built under one contract for the Cape May County Bridge Commission.

PHOTO: 427:28-34 (10/04/93) REVISED BY (DATE): QUAD: Stone Harbor

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0500029 **CO** CAPE MAY **OWNER** PRIVATE **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED OCEAN HIGHWAY OVER MILL CREEK **FACILITY** OCEAN HIGHWAY

TOWNSHIP LOWER TOWNSHIP

TYPE T BEAM **DESIGN** CONTINUOUS **MATERIAL** Reinforced Concrete

 # SPANS 12 **LENGTH** 305 ft **WIDTH** 19.7 ft

CONSTRUCTION DT 1940 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT ASH, HOWARD, NEEDLES & TAMMEN **BUILDER** BRANN & STUART CO.

SETTING / CONTEXT The bridge carries two lanes of traffic over Mill Creek north of Cape May. The area to the north is a broad salt meadow within the NJDEP's Cape May Coastal Wetlands Wildlife Management Area. South of the bridge is the Mill Creek Marina. The bridge is on the Cape May portion of the Ocean Highway that was established by the legislature in 1910 between Atlantic Highlands and Cape May City on existing roads "near the ocean." It is not a historic corridor or memorial highway.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 12-span continuous reinforced-concrete T-beam bridge has metal railings, concrete curbs, concrete bents with concrete caps, and concrete abutments. Several of the concrete piles have sheet metal or fiberglass jackets. The bridge is a representative example of a common type. It is historically associated with the WPA-funded Cape May County Bridge Comm. project that erected 2 fixed and 4 movable bridges 1938-1940. The route itself does not have historic district potential.

INFOR MATION

PHOTO: 189:10-13 (10/04/92) REVISED BY (DATE): QUAD: Cape May

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0500030 **CO** CAPE MAY **OWNER** PRIVATE **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED OCEAN HIGHWAY OVER UPPER THOROFARE **FACILITY** OCEAN HIGHWAY

TOWNSHIP LOWER TOWNSHIP

TYPE T BEAM **DESIGN** CONTINUOUS **MATERIAL** Reinforced Concrete

 # SPANS 14 **LENGTH** 355 ft **WIDTH** 19.7 ft

CONSTRUCTION DT 1940 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT ASH, HOWARD, NEEDLES & TAMMEN **BUILDER** BRANN & STUART

SETTING / CONTEXT The bridge carries two lanes of traffic over the Upper Thorofare, a tidal estuary in the salt meadows north of Cape May. The area north of the bridge is undeveloped wetlands within NJDEPE's Cape May Coastal Wetlands Wildlife Management Area. East of the bridge is a fish processing plant, marina, and a restaurant. It was built as part of the 6-bridge WPA-funded project undertaken by the Cape May County Bridge Comm. along the Cape May portion of the Ocean Highway, a scenic state route.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 14 span continuous reinforced-concrete T-beam bridge has metal railings with concrete endposts, concrete curbs, concrete abutments, and concrete bents with concrete caps. Each span of the bridge is skewed to accommodate the curved roadway. Some concrete pile bents have been repaired with metal or fiberglass jackets. The span is not technologically distinguished. Although part of the WPA-funded improvements on Ocean Hwy., the route does not have historic district potential.

INFOR MATION

PHOTO: 189:9,14-16 (10/04/92) REVISED BY (DATE): QUAD: Cape May

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0507153 **CO** CAPE MAY **OWNER** NJDOT **MILEPOINT** 15.94

NAME & FEATURE INTERSECTED NJ 47 OVER SLUICE CREEK **FACILITY** NJ 47

TOWNSHIP DENNIS TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 35 ft **WIDTH** 40 ft

CONSTRUCTION DT 1935 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries two lanes with shoulders over a tidal creek. Next to the bridge is an undeveloped salt meadow. The surrounding area is rural with fields, forests, and scattered 18th, 19th, and 20th century residences.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single span bridge is an encased steel stringer structure with concrete balustrades and substructure. Beam guide rails have been added. In 1935 the bridge was constructed as part of the New Jersey Route South 49 improvements. The route was later designated New Jersey Route 47. The bridge is a common New Jersey State Highway Department bridge type and design. It is not historically or technologically distinguished.

INFOR MATION

PHOTO: 428:9a-10a (10/04/92) REVISED BY (DATE): QUAD: Woodbine

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0508150 **CO** CAPE MAY **OWNER** NJDOT **MILEPOINT** 17.68

NAME & FEATURE INTERSECTED NJ 47 OVER DENNIS CREEK **FACILITY** NJ 47

TOWNSHIP DENNIS TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 45 ft **WIDTH** 30 ft

CONSTRUCTION DT 1928 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries two-lanes of traffic and a single sidewalk over a tidal creek that meanders through a large salt meadow. Nearby are a seafood restaurant and small marina. The bridge is about 1/2 mile south of Dennisville. At one time the bridge was within the geographic boundaries of the Dennisville State Register District, but the district's boundaries were amended in 1987 to match the smaller boundaries of the National Register District. The bridge is no longer within the district.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span encased steel stringer bridge has concrete balustrades and substructure. Beam guide rails have been added. In 1928 the bridge was constructed as part of the New Jersey Route 49 improvements. The highway was later redesignated Route 47. The bridge is a representative example of the common pre-World War II New Jersey State Highway Department bridge type and design in the state. It is not historically or technologically distinguished.

INFOR MATION

PHOTO: 185:2-3 (10/03/92) REVISED BY (DATE): QUAD: Woodbine

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0508151 **CO** CAPE MAY **OWNER** NJDOT **MILEPOINT** 18.44

NAME & FEATURE INTERSECTED NJ 47 OVER BRANCH OF DENNIS CREEK **FACILITY** NJ 47

TOWNSHIP DENNIS TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 22 ft **WIDTH** 30.1 ft

CONSTRUCTION DT 1928 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The 2-lane bridge spans the spillway from Johnson's Mill Pond. Extending between the bridge's downstream abutments is the spillway's 2-bay wood gate frame with wood gates. The bridge is within the boundaries of the Dennisville Historic District, a 18th- and 19th-century maritime related village. The main block of the historic village is located 300' northeast of the bridge. No historic structures are immediately adjacent to the bridge.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Listed. Dennisville Historic District. 11/24/1987. Noncontributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span reinforced-concrete slab bridge has concrete balustrades and substructure. Beam guide rails have been added. In 1928 the bridge was constructed as part of the New Jersey Route 49 improvements. It is a representative example of a common NJ State Highway Department bridge type. It is not within the period of significance of the Dennisville Historic District, and does not contribute to the district. It is not historically or technologically distinguished.

INFOR MATION

PHOTO: 185:1,44 (10/03/92) REVISED BY (DATE): QUAD: Woodbine

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0508154 **CO** CAPE MAY **OWNER** NJDOT **MILEPOINT** 24.45

NAME & FEATURE INTERSECTED NJ 47 OVER WEST CREEK **FACILITY** NJ 47

TOWNSHIP DENNIS TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 37 ft **WIDTH** 30 ft

CONSTRUCTION DT 1925 **ALTERATION DT** Demolished **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The two-lane bridge spans West Creek, which forms the border between Cape May and Cumberland Counties. The creek meanders through a salt meadow. The surrounding area borders the Delaware Bay, and is undeveloped with woods and wetlands.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Bridge was Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 6/6/91

SUMMARY The single-span encased steel stringer bridge has concrete balustrades on the clear span and paneled parapets on the approaches. The concrete abutments are scored. The encasement has been removed from the fascia stringers. In 1925 the bridge was constructed as part of improvement to NJ Route 15, later redesignated NJ Route 47. It is a representative example of a common NJ State Highway Department bridge type and design, and it is not historically or technologically distinguished.

INFOR MATION

PHOTO: 185:41-43 (10/03/92) REVISED BY (DATE): QUAD: Heislerville

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0509150 **CO** CAPE MAY **OWNER** NJDOT **MILEPOINT** 52.56

NAME & FEATURE INTERSECTED NJ 49 OVER MILL CREEK **FACILITY** NJ 49

TOWNSHIP UPPER TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 34 ft **WIDTH** 40 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries two lanes with shoulders over a tidal tributary of the Tuckahoe River. The bridge is located in a residential area with a mixture of mid- and late-twentieth century houses lining the highway. To the north is the Marshallville Historic District that includes a number of distinguished nineteenth and early-twentieth century residential structures and a 1901 metal truss bridge (0500019). The NJ 49 bridge is not within the boundaries of the district.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span encased steel stringer bridge has concrete balustrades, abutments, and wingwalls. In 1930 it was built as part of the NJ Route 47 improvements. The highway was later redesignated NJ Route 49. The bridge is a representative example of a common New Jersey State Highway Department bridge type. It is not historically or technologically distinguished.

INFOR MATION

PHOTO: 428:28a-29a (01/19/93) REVISED BY (DATE): QUAD: Tuckahoe

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0509151 **CO** CAPE MAY **OWNER** NJDOT **MILEPOINT** 53.25

NAME & FEATURE INTERSECTED NJ 49 OVER CAPE MAY BRANCH **FACILITY** NJ 49

TOWNSHIP UPPER TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 5 **LENGTH** 170 ft **WIDTH** 40.1 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The 2-lane bridge spans a single track of the former Pennsylvania and Reading Seashore Line Railroad's Cape May Branch. The line was initially developed by the Philadelphia & Atlantic City Railroad Co. in the 1850s. It became part of the Reading system in 1877. The bridge is about .25 miles north of Tuckahoe Junction and its ca. 1910 railroad-related structures. The surrounding area is residential with a mix of late-19th and 20th-century dwellings.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed five-span encased steel stringer bridge has concrete balustrades, and concrete abutments and bents with open arched spandrels. In 1930 the bridge was constructed as part of NJ Route 47 improvements. The highway was later redesignated NJ Route 49. The bridge is similar to several other railroad overpasses in the area, including NJ 50 over the PRSLRR (0510151). It is a common bridge type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 428:39a-41a (09/30/91) REVISED BY (DATE): QUAD: Tuckahoe

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0510151 **CO** CAPE MAY **OWNER** NJDOT **MILEPOINT** 4.59

NAME & FEATURE INTERSECTED NJ 50 OVER PENNSYLVANIA-READING SEASHORE LINE RR **FACILITY** NJ 50

TOWNSHIP UPPER TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 5 **LENGTH** 163 ft **WIDTH** 30.3 ft

CONSTRUCTION DT 1925 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT PHILADELPHIA & READING RR **BUILDER** UNKNOWN

SETTING / CONTEXT The 2-lane bridge spans a single track of the former Pennsylvania-Reading Seashore Line Railroad's Ocean City Branch. The right-of-way was originally developed by the Ocean City Railroad in the late 1890s. The Reading Railroad operated the line until 1933, when it consolidated its South Jersey operations with the Pennsylvania Railroad to form the Pennsylvania-Reading Seashore Line Railroad. The surrounding area has scattered 20th-century residential development.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 01/10/92

SUMMARY The 5-span multibeam encased steel stringer bridge has concrete abutments, concrete bents with open arched spandrels and crash walls, and concrete parapets. It is one of more than half-a-dozen encased steel stringer overpasses in South Jersey. The bridge was constructed in 1925 by the Reading Railroad, and is not associated with a significant period of railway development in the county. It is a representative example of a common type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 101:38-42 (09/30/91) REVISED BY (DATE): QUAD: Marmora

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0510152 **CO** CAPE MAY **OWNER** NJDOT **MILEPOINT** 6.9

NAME & FEATURE INTERSECTED NJ 50 OVER TUCKAHOE RIVER **FACILITY** NJ 50

TOWNSHIP UPPER TOWNSHIP

TYPE SINGLE LEAF BASCULE **DESIGN** STRAUSS UNDERNEATH **MATERIAL** Steel

 # SPANS 3 **LENGTH** 160 ft **WIDTH** 30 ft

CONSTRUCTION DT 1926 **ALTERATION DT** 1961 **SOURCE** PLANS

DESIGNER/PATENT STRAUSS BASCULE BRIDGE COMPANY **BUILDER** S. S. THOMPSON, RED BANK

SETTING / CONTEXT The bridge carries two lanes of traffic over the Tuckahoe River, the border between Cape May and Atlantic Counties. The village of Tuckahoe, located south of the bridge on NJ 50, has several well-preserved buildings but has too many modern intrusions to merit historic district status. To the north are wetlands with a scattering of late-20th century residential development. The river's southern bank is lined with boat docks. The bridge opens to navigation with 24 hours notice.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The main span of the 3 span bridge is a single-leaf Strauss underneath articulated counterweight deck girder movable span flanked by encased deck girder approach spans. The bridge appears to survive in a good state of preservation with its original gear sets, gasoline engine, operator's house, locks, and safety gates. A steel grid deck was added in 1961. The bridge is a complete example of a historically and technologically significant patented movable bridge type.

INFOR MATION

Bibliography:
Hool & Kinne. Movable and Long Span Bridges. 1943. "J.B. Strauss Dies at Los Angeles." Engineering News-Record. 120 (May 19,1938). NJDOT: Bridge File: 0510152. Waddell, J.A.L. Bridge Engineering. 1925.

Physical Description: The main span of the 3-span 160'-long bridge is a single-leaf deck girder Strauss articulated underneath counterweight movable span. The approach spans are built-up deck girders. The substructure is concrete. With the exception of the replacement of the original gasoline engine with an electric motor (gasoline engine is the current auxiliary power source) and the steel grid deck placed in 1961, the bridge appears to survive in a nearly complete state of preservation. Both the movable leaf and the approach spans are enclosed by metal railings. The operator's house is located on a braced metal frame on the upstream outside of the movable leaf. It is a simple galvanized-metal clad gable-roofed structure. The interior was not inspected. The safety gates are original as are the manually activated toe locks.

The shafting, open gear sets, and racks and pinions appear to be original as does the gearing for manual operation. Because of the need to protect the electrical from water damage, the reduction of torque is accomplished through a series of shafts and bevel gear sets rather than straight shafts. This design is not uncommon when field conditions mandate that the power source be elevated to protect it. The trunnions are supported by built-up trunnion columns that bear on a concrete pier.

Historical and Technological Significance: The 1926 Strauss articulated underneath counterweight bridge over the Tuckahoe River is a complete example of the patented design that represents a milestone in the development of movable spans technology (criterion C). Although built near the end of the period of popularity of the design, the bridge documents the design that made J.B. Strauss (1869-1937) the most prominent engineer of movable span bridges in the early 20th century.

Strauss's patented bascule bridges were based upon an innovation on traditional bascule bridge construction. He reasoned if, unlike earlier bascule bridge designs that used a fixed counterweight and operated like a seesaw, he designed a bascule where the entire weight of the counterweight was concentrated at the tail end of the movable leaf, it would then be possible to use a lighter counterweight. Strauss was able to achieve this end through a linkage, or arms, that ensured that the counterweight moved in a series of parallel positions at all times when the span was in operation, and thus constantly maintained the position of the weight at the tail end of the leaf. Variations on the linkage could place the counterweight either overhead or underneath of the leaf. The design also held the advantage that less power was needed to start or stop the bascule's motion and the tail end was shorter thus reducing or eliminating the counterweight pit. In 1905 the first of Strauss's bridges was built in Cleveland, and in the same year he applied for a patent (995,813), granted in 1911. Strauss designed and marketed the immensely successful bridge through the Strauss Bascule Bridge Company of Chicago. Mainly through the efforts of Strauss, the bascule replaced the swing span bridge as the most popular movable span highway bridge type. In spite of the many movable bridges in this country for which Strauss was responsible, he is more often remembered as the chief engineer of the Golden Gate Bridge (1937) in San Francisco, California.

The technological significance of the NJ 50 over Tuckahoe River bridge is enhanced by its state of preservation and nearly complete original operating mechanical systems. It was built in 1926 on New Jersey Route 14, one of the original 15 state highway routes, and replaced a preexisting swing span bridge. The general contractor of the span was S. S. Thompson of Red Bank, Monmouth County, a company that was active in the construction of bridges throughout the state. When the electric motor was installed to replace the original gasoline engine is unknown. In 1961 a steel grid deck replaced original timber flooring. The bridge opens on 24 hours notice. In New Jersey there are at least eight other examples of Strauss bascule highway bridges including in Cape May County NJ 147 over Grassy Sound (0517151, Middle Township), a double leaf bascule with underneath counterweight constructed in 1922.

Boundary Description and Justification: The bridge is evaluated as individually significant. The boundary is limited to the span itself, superstructure and substructure. The surrounding area does not have historic district potential.

PHOTO: 427:10-21 (01/19/93) REVISED BY (DATE): QUAD: Tuckahoe

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0511150 **CO** CAPE MAY **OWNER** NJDOT **MILEPOINT** 0.13

NAME & FEATURE INTERSECTED NJ 52 OVER BEACH THOROFARE **FACILITY** NJ 52

TOWNSHIP OCEAN CITY

TYPE SINGLE LEAF BASCULE **DESIGN** TRUNNION **MATERIAL** Steel

 # SPANS 37 **LENGTH** 1025 ft **WIDTH** 40 ft

CONSTRUCTION DT 1933 **ALTERATION DT** 1988 **SOURCE** PLANS

DESIGNER/PATENT ASH, HOWARD, NEEDLES & TAMMEN **BUILDER** MERRITT, CHAPMAN & SCOTT

SETTING / CONTEXT The 4-lane wide bridge with one safety sidewalk spans Beach Thorofare, a navigable channel at the mouth of the Great Egg Harbor. The bridge is the southernmost span that is part of a causeway with 4 bridges (2 movable, 2 fixed) spanning between Somers Point on the north and Ocean City to the south. South of the bridge is a densely developed late-twentieth century summer residential community with marina.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 35-span bridge is composed of a single-leaf trunnion bascule main span and 32 reinforced-concrete T-beam approach spans. The 70'-long haunched deck girder with floor beams movable span has a fixed counterweight and metal railing. It was rehabilitated in 1988 with new enclosed primary reducer gears, electrical systems, controls, and a third story added to the operator's house. The bridge is an altered example of a locally common type, and the alterations reduce its technological significance.

INFOR MATION

PHOTO: 188:36-44, 1-3 (10/03/92) REVISED BY (DATE): QUAD: Ocean City

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0511151 **CO** CAPE MAY **OWNER** NJDOT **MILEPOINT** 0.76

NAME & FEATURE INTERSECTED NJ 52 OVER RAINBOW THOROFARE **FACILITY** NJ 52

TOWNSHIP OCEAN CITY

TYPE T BEAM **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 91 **LENGTH** 1820 ft **WIDTH** 40 ft

CONSTRUCTION DT 1933 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER** EASTERN ENGINEERING CO.

SETTING / CONTEXT The bridge carries four lanes of traffic over Rainbow Thorofare, a channel at the mouth of the Great Egg Harbor River. The bridge is the second from the south of a 4-bridge causeway (2 movable, 2 fixed) spanning between Somers Point and Ocean City to the south. The manmade island to the north of the Rainbow Thorofare bridge is undeveloped. The island to the south has a trailer that houses a tourist information center.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 91-span reinforced-concrete T-beam bridge has concrete abutments, concrete pile bents with cap beams, and concrete railings. Beam guide rails have been added. In 1933 the bridge and causeway were constructed as part of a NJ State Highway Department improvement project that replaced a previous bridge. The Rainbow Thorofare bridge is a multi-span example of a common 20th-century bridge type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 185:23-27 (10/03/92) REVISED BY (DATE): QUAD: Ocean City

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0511152 **CO** CAPE MAY **OWNER** NJDOT **MILEPOINT** 1.53

NAME & FEATURE INTERSECTED NJ 52 OVER ELBOW THOROFARE **FACILITY** NJ 52

TOWNSHIP OCEAN CITY

TYPE T BEAM **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 22 **LENGTH** 440 ft **WIDTH** 40 ft

CONSTRUCTION DT 1933 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER** EASTERN ENGINEERING CO.

SETTING / CONTEXT The four-lane bridge spans Elbow Thorofare, a channel at the mouth of the Great Egg Harbor River. The bridge is the second from the north of a causeway with 4 bridges (2 movable, 2 fixed) spanning between Somers Point to the north and Ocean City to the south. The Elbow Thorofare bridge spans the channel between two undeveloped manmade islands.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 22-span reinforced-concrete T-beam bridge has concrete abutments with wingwalls, concrete pile bents with concrete caps, and concrete railings. Beam guide rails have been added. In 1933 the bridge and causeway were constructed as part of a NJ State Highway Department improvement project that replaced a previous bridge. It is a multi-span example of a common 20th-century bridge type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 185:20-22 (10/03/92) REVISED BY (DATE): QUAD: Ocean City

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0511153 **CO** CAPE MAY **OWNER** NJDOT **MILEPOINT** 1.91

NAME & FEATURE INTERSECTED NJ 52 OVER SHIP CHANNEL **FACILITY** NJ 52

TOWNSHIP OCEAN CITY

TYPE SINGLE LEAF BASCULE **DESIGN** TRUNNION **MATERIAL** Steel

 # SPANS 47 **LENGTH** 1442 ft **WIDTH** 40.3 ft

CONSTRUCTION DT 1933 **ALTERATION DT** 1988 **SOURCE** PLANS

DESIGNER/PATENT ASH, HOWARD, NEEDLES & TAMMEN **BUILDER** EASTERN ENGINEERING CO

SETTING / CONTEXT The 4-lane bridge with one safety sidewalk spans Ship Channel, a navigable channel at the mouth of the Great Egg Harbor River. The bridge is the northernmost of 4 bridges (2 movable, 2 fixed) that are part of a causeway between Ocean City to the south and Somers Point to the north. North of the Ship Channel bridge is the Somers Point traffic circle, and south of the bridge is an undeveloped island. The traffic circle is surrounded by modern commercial development.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible. Potential Somers Point Traffic Signal Historic District. May contribute.

CONSULT DOCUMENTS SHPO Letter 03/12/01

SUMMARY The 47-span bridge has a 50' single-leaf trunnion bascule main span, 8 deck girder spans, and 38 reinforced-concrete T-beam approach spans. The bascule is a haunched deck girder with floor beams and a fixed counterweight. The span was rehabilitated in 1988 with new electric systems and controls and a third story added to the concrete operator's house. Despite the updated equipment, the span retains most of its original fabric and is a technologically significant example of the bridge type. It is individually eligible for listing in the National Register of Historic Places under Criterion C. It may also be a contributing element of a Somers Point traffic circle historic district should such a district be identified in the future.

INFOR MATION

Bibliography:
Brown, Kathi Ann. Design by Diversity. Kansas City, Missouri: The Lowell Press, 1989; NJDOT. Bridge File: 0511153.

Physical Description: The main span of the 1442'-long bridge with a vertical profile is a single-leaf trunnion bascule with a clear span of 50'. There are 46 approach spans. The span immediately south of the bascule leaf is a haunched deck girder with floor beams that visually matches and balances the movable span. The other seven deck girder approach spans are composed of three deck girders with truss lateral bracing that are supported on braced concrete columns. The other approach spans are reinforced concrete T beams on concrete pile bents with cap beams. The entire bridge is enclosed by 2-rail high concrete railings except on the movable leaf which is finished with a metal balustrade-type railing. Concrete pylons inscribed with the date and route mark the approaches to the long bridge. Any original luminaries affixed to the pylons have been replaced by modern lighting.

The movable leaf is a haunched deck girder with floor beams and an open steel grid deck. It is a simple trunnion with a concrete counterweight set underneath the tail end. There is no counterweight pit. The span is operated by means of a rack and pinion drive activated by a series of reduction gears that transform the high rpm torque generated by the electric motors to the low rpm needed to lift the leaf. The open gear sets and other operating machinery appears to be original or in kind replacement. The electrical systems and controls, however, are modern, and were placed in 1988. At that time a third level was added to the operators house to improve visibility of the channel. The addition was designed to match the original styling of the structure. The windows and doors were also replaced in 1988. The signals and crash and safety barriers are new as well.

Historical and Technological Significance: NJ 52 over Ships Channel is one of six Ash Howard Needles & Tammen-designed standard or simple trunnion bridges in Cape May County, and it is technologically significant as a fairy well preserved example of its type. It still operates as originally designed, and it survives with its original or in kind replacement open sets of reduction gears, rack-and-pinion drives, and built-up deck girder leaf. As such, it is a good example of late-1920s and 1930s movable bridge technology (Criterion C).

The bridge design was successfully marketed by Ash Howard Needles & Tammen to counties, private bridge commissions, and the state after 1927, when members of the firm were issued a patent for an improved span support to resist the various stresses when the bridge is in operation as well as when it was at rest (#1,633,565). The standard trunnion bascule bridge had been in use since the early days of the 20th century, but the AHNT design came to the fore in New Jersey for locations on high piers or with a low water level after 1927. The need to cross active navigable bodies of water coupled with the boon in road improvement programs in the southern part of the state in response to increased traffic volume resulted in over a dozen of AHNT's movable bridges being erected in the four county Jersey Shore region between 1928 and 1948. Some of the popularity of the design may be attributable to the success of the firm's New York City office that was opened in 1922. Movable bridges that retain their original machinery arrangement are evaluated as significant because they are technologically distinguished engineering solutions to a complex problem.

Despite the 1988 modifications to the structure, such as the addition of a third floor to the operator's house and the removal of the original doors and windows, the span retains enough of its original fabric to maintain the integrity of original design.

Ash Howard Needles and Tammen, as the firm of Howard Needles Tammen and Bergendoff was styled in 1933, in large part made its early reputation as a nationally recognized consulting engineer firm through its movable span bridges, especially the vertical lift bridge. The firm's history goes back to 1892 when the noted engineer and author J.A.L. Waddell established his own consulting engineer firm at Kansas City, Missouri. Waddell was well known as the engineer of the 1893 South Halsted Street Bridge in Chicago, the first large-scale, high clearance vertical lift bridge in the country. Waddell was associated with several partners until 1914, when he and John Harrington dissolved the firm, divided the projects, many of which were vertical lift spans, and went their separate ways. Harrington took on new partners, and the firm was styled Harrington, Howard, and Ash. Henry C. Tammen was made a principal in 1928 as was Enoch R. Needles. The patent represented by the NJ 52 bridge was granted to Louis Ash, Henry Tammen, and Harry G. Hunter. The work of the firm is well represented throughout the country, and today it is one of the leading transportation planning concerns in the nation.

Boundary Description and Justification: The bridge, including the approach spans and substructure, is evaluated as individually significant. The boundary is thus limited to the right-of-way of the span itself.

PHOTO: 185:9-19 (10/03/92) REVISED BY (DATE): QUAD: Ocean City

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0512150 **CO** CAPE MAY **OWNER** NJDOT **MILEPOINT** 0.11

NAME & FEATURE INTERSECTED NJ 83 OVER PENNSYLVANIA-READING SEASHORE LINE RR **FACILITY** NJ 83

TOWNSHIP DENNIS TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 156 ft **WIDTH** 54 ft

CONSTRUCTION DT 1940 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries four lanes of traffic over a single track of the Pennsylvania-Reading Seashore Line Railroad's Cape May Branch. The railroad right-of-way was originally developed in the 1890s by the Philadelphia and Reading Railroad. The bridge is located in the unincorporated village of South Dennis. The lots adjacent to the bridge are wooded.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed three-span encased steel stringer bridge has reinforced concrete abutments and bents, and balustrades. In 1940 it was constructed by the NJ State Highway Department as a grade elimination. The bridge is identical in type to two other encased steel stringer overpasses in Cape May County (0510151 & 0509151). The bridge is not associated with an important period of railroad development in Cape May County. It is not historically or technologically distinguished.

INFOR MATION

PHOTO: 101:2-3 (09/30/91) REVISED BY (DATE): QUAD: Woodbine

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0517150 **CO** CAPE MAY **OWNER** NJDOT **MILEPOINT** 1.0

NAME & FEATURE INTERSECTED NJ 147 OVER MILL TAIL CREEK **FACILITY** NJ 147

TOWNSHIP MIDDLE TOWNSHIP

TYPE BAILEY TRUSS **DESIGN** **MATERIAL** Steel

 # SPANS 5 **LENGTH** 61 ft **WIDTH** 28.4 ft

CONSTRUCTION DT 1929 **ALTERATION DT** 1990ca **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The 2-lane bridge spans a tidal creek in a salt meadow. The area is undeveloped.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 5-span timber stringer bridge with timber pile bents and timber sheet pile back walls has had a structurally separate Bailey truss bridge built placed on top of it (ca.1990). The timber stringer bridge was originally constructed in 1929, and it appears to have been rebuilt or repaired inkind several times. In 1970 the State Highway Department assumed jurisdiction over the bridge. The bridge is not historically or technologically distinguished based on the age of the superstructure.

INFOR MATION

PHOTO: 429:15a-17a (10/04/92) REVISED BY (DATE): QUAD: Stone Harbor

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0517151 **CO** CAPE MAY **OWNER** NJDOT **MILEPOINT** 2.5
NAME & FEATURE INTERSECTED NJ 147 OVER GRASSY SOUND **FACILITY** NJ 147
TOWNSHIP MIDDLE TOWNSHIP
TYPE DOUBLE LEAF BASCULE **DESIGN** STRAUSS UNDERNEATH **MATERIAL** Steel
 # SPANS 54 **LENGTH** 712 ft **WIDTH** 22 ft

CONSTRUCTION DT 1922 **ALTERATION DT** Demolished: 1995 **SOURCE** NJDOT
DESIGNER/PATENT STRAUSS BASCULE BRIDGE COMPANY **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries two lanes of traffic over Grassy Sound, a part of the Intercoastal Waterway. The area is a salt marsh and meadow with numerous seasonal homes on timber piles lining the highway. South of the bridge is a small marina and seafood restaurant. A new fixed high-rise bridge is being built approximately 500 feet south of the current movable bridge.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No
CONSULT STATUS Bridge was Individually Eligible.
CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge is a haunched deck girder double-leaf Strauss bascule with 53 timber stringer approach spans. The 1922 bascule articulated underneath counterweights is the earliest surviving example of its type in the county, but it has some alterations. Much of the original fabric remains, including the operating equipment, but it is worn. The west leaf is a 1972 welded replacement of the original lost in an accident. It still remains a noteworthy example of an important and increasingly rare type.

INFOR MATION

Bibliography:
Hool & Kinne. Movable and Long Span Bridges. 1943; "J.B. Strauss Dies at Los Angeles." Engineering News-Record. 120 (May 19,1938); NJDOT: Bridge File: 0517151; Waddell, J.A.L. Bridge Engineering. 1925.

Physical Description: The main span of the 54-span 712'-long bridge is a 50'-span double-leaf haunched deck girder Strauss articulated underneath counterweight movable span. The trunnions are supported by built-up trunnion columns that bear on concrete piers. The approach spans, 38 to the east and 15 to the west of the main span, are timber stringers supported on timber pile bents. Both the movable leaves and the approach spans are enclosed by metal pipe railings. The operator's house is located on a braced metal frame on the northwesterly outside of the moveable leaf. It is a simple frame gable-roofed structure with composition siding. The shafting, open gear sets, racks and drive pinions, coffee grinder-type winched manual operation, and electric motors and controls appear to be original. Many elements are worn, and the concrete counterweight is deteriorating. There are no toe locks in use.

The bridge survives in a nearly complete state of preservation with the exception that in 1972 the original western built-up girder leaf with timber deck was replaced with one of welded construction with steel grid deck. The western leaf was lost in an accident when it opened beyond its limits. Other alterations include an extension to the operator's shanty and in 1979 the rebuilding of the eastern timber approach spans after fire damage.

Historical and Technological Significance: The 1922 Strauss articulated underneath counterweight bridge over Grassy Sound is a complete example of the patented design that represents a milestone in the development of movable spans technology (criterion C). Although built near the end of the period of popularity of the design, the bridge documents the design that made J.B. Strauss (1869-1937) the most prominent engineer of movable span bridges in the early 20th century.

Strauss's patented bascule bridges were based upon an innovation on traditional bascule bridge construction. He reasoned if, unlike earlier bascule bridge designs that used a fixed counterweight and operated like a seesaw, he designed a bascule where the entire weight of the counterweight was concentrated at the tail end of the movable leaf, it would then be possible to use a lighter counterweight. Strauss was able to achieve this end through a linkage, or arms, that ensured that the counterweight moved in a series of parallel positions at all times when the span was in operation, and thus constantly maintained the position of the weight at the tail end of the leaf. Variations on the linkage could place the counterweight either overhead or underneath of the leaf. The design also held the advantage that less power was needed to start or stop the bascule's motion and the tail end was shorter thus reducing or eliminating the counterweight pit. In 1905 the first of Strauss's bridges was built in Cleveland, and in the same year he applied for a patent (995,813), granted in 1911. Strauss designed and marketed the immensely successful bridge through the Strauss Bascule Bridge Company of Chicago. Mainly through the efforts of Strauss, the bascule replaced the swing span bridge as the most popular movable span highway bridge type. In spite of the many movable bridges in this country for which Strauss was responsible, he is more often remembered as the chief engineer of the Golden Gate Bridge (1937) in San Francisco, California.

The technological significance of the NJ 147 over Grassy Sound bridge is enhanced by its state of preservation and nearly complete original operating mechanical systems. It was built in 1922 for the county, and jurisdiction was transferred to the state in 1970 when the road became part of the state highway system. In New Jersey there are at least eight other examples of Strauss bascule highway bridges including in Cape May County NJ 50 over the Tuckahoe River (0510152, Upper Township), a single leaf bascule with underneath counterweight constructed in 1926.

Boundary Description and Justification: The bridge is evaluated as individually significant. The boundary is limited to the span itself, superstructure and substructure. Upstream from the bridge is the HPO's identified potential historic district of Grassy Sound that developed along the old railroad right-of-way. The potential district has not been finalized.

PHOTO: 429:2a-13a (10/04/92) REVISED BY (DATE): QUAD: Stone Harbor

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US
November 12, 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0517152 **CO** CAPE MAY **OWNER** NJDOT **MILEPOINT** 3.17

NAME & FEATURE INTERSECTED NJ 147 OVER BEACH CREEK **FACILITY** NJ 147

TOWNSHIP NORTH WILDWOOD CITY

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 45 **LENGTH** 558 ft **WIDTH** 22.4 ft

CONSTRUCTION DT 1919 **ALTERATION DT** 1940 **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge carries two lanes of traffic over Beach Creek, a tidal creek in the broad salt meadows and wetlands northwest of Wildwood City. The area to the east of the bridge borders the beach and is developed with late twentieth-century summer homes. A new four-lane divided highway with a fixed high-rise bridge is currently being constructed to the north.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge has one steel stringer span over the waterway's navigable channel, and 44 timber stringer spans, 8 to the south and 36 to the north of the steel stringer span. The bridge has timber pile bents with timber caps, sheet pile abutments, timber deck and wheel guards, and pipe railings. Originally built in 1919, the bridge was rebuilt in 1940 with two timber stringer spans replaced with the single steel stringer span. It is not historically or technologically distinguished.

INFOR MATION

PHOTO: 429:43a-44a,1a (10/04/92) REVISED BY (DATE): QUAD: Stone Harbor

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0564150 **CO** CAPE MAY **OWNER** STATE AGENCY **MILEPOINT** 60.13

NAME & FEATURE INTERSECTED OCEAN CITY BRANCH RR OVER LOTS CREEK **FACILITY** OCEAN CITY BRANCH RAILROAD

TOWNSHIP UPPER TOWNSHIP

TYPE DECK GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 20 ft **WIDTH** 12 ft

CONSTRUCTION DT 1909 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT PHILADELPHIA & READING RR **BUILDER**

SETTING / CONTEXT The bridge carries an abandoned single railroad track over an estuary in the undeveloped salt meadows west of Ocean City and east of the Garden State Parkway. The railroad right-of-way was originally developed in 1896-97 by the Ocean City Railroad Company. In 1898 the Philadelphia and Reading Railroad's Atlantic City Railroad Company acquired the line as a competitor to the Pennsylvania Railroad's branch line to Ocean City. In 1981 the last passenger train traveled the line.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 20'-long open-deck steel deck girder with floorbeams bridge rests on timber pile bents with timber sheet pile backwalls. In 1909 the Philadelphia and Reading Railroad constructed the bridge as an improvement to an already existing branch line. It is a common early twentieth century bridge type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 427:22-24 (01/17/93) REVISED BY (DATE): QUAD: Sea Isle City

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0564151 **CO** CAPE MAY **OWNER** STATE AGENCY **MILEPOINT** 60.91

NAME & FEATURE INTERSECTED OCEAN CITY BRANCH RR OVER EDWARDS CREEK **FACILITY** OCEAN CITY BRANCH RAILROAD

TOWNSHIP UPPER TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Wood

 # SPANS 19 **LENGTH** 219 ft **WIDTH** 4.7 ft

CONSTRUCTION DT 20th Century **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge carries an abandoned single railroad track over an estuary in the broad salt meadows west of Ocean City and east of the Garden State Parkway. The railroad right-of-way was originally developed in 1896-97 by the Ocean City Railroad Company. In 1898 the Philadelphia and Reading Railroad's Atlantic City Railroad Company acquired the line as a competitor to the Pennsylvania Railroad. In 1981 the last passenger train traveled the line.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 19-span open-deck timber stringer bridge burned. The remains rests on timber pile bents with timber caps, timber crossbeams, and sheet pile backwalls. The 10 easternmost spans are the most heavily damaged. The bridge has lost its structural integrity and function. Records were not located, however the bridge timbers appear relatively new, suggesting inkind reconstruction within the past 20 years. The bridge was a common type. It is no longer historically or technologically distinguished.

INFOR MATION

PHOTO: 427:25-27 (01/17/93) REVISED BY (DATE): QUAD: Sea Isle City

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0564152 **CO** CAPE MAY **OWNER** STATE AGENCY **MILEPOINT** 61.08

NAME & FEATURE INTERSECTED OCEAN CITY BRANCH RR OVER CROOK HORN CREEK **FACILITY** OCEAN CITY BRANCH RAILROAD

TOWNSHIP OCEAN CITY

TYPE SWING SPAN **DESIGN** CENTER BEARING **MATERIAL** Steel

 # SPANS 2 **LENGTH** 192 ft **WIDTH** 16 ft

CONSTRUCTION DT 1910 **ALTERATION DT** Demolished: 1992 **SOURCE** NJDOT

DESIGNER/PATENT PHILADELPHIA & READING RR ENG. **BUILDER**

SETTING / CONTEXT The bridge carried a single track of the former Philadelphia and Reading Railroad's Ocean City Branch. In 1896-97 the right-of-way was originally developed by the Ocean City Railroad Company. In 1898 the line was acquired by the Reading Road's Atlantic City Railroad Company. The bridge was located in the undeveloped salt marshes west of Ocean City. The bridge was demolished in 1992. The rail line has been abandoned.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The riveted center-bearing thru truss swing span bridge had a deck girder approach span to the north. The bridge is currently being demolished and the operators shed, controls, motors, and shafting have already been removed. The 1910 bridge was one of the few remaining railroad swing span bridges on the Jersey Shore. In 1981 passenger trains ceased operations to Ocean City, after the swing span suffered a mechanical failure. The bridge remained in the open position from then until demolition.

INFOR MATION

PHOTO: 188:14-22 (10/03/92) REVISED BY (DATE): QUAD: Sea Isle City

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0600004 **CO** CUMBERLAND **OWNER** COUNTY **MILEPOINT** 5.73

NAME & FEATURE INTERSECTED CHESTNUT ROAD OVER CHESTNUT RUN **FACILITY** CHESTNUT ROAD (CR 623)

TOWNSHIP STOW CREEK TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 3 **LENGTH** 24 ft **WIDTH** 15.5 ft

CONSTRUCTION DT 1900ca **ALTERATION DT** **SOURCE** STYLE

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The single-lane wide bridge spans a small creek in a rural section of northern Cumberland County. Nearby are open fields and wooded lots. Records confirming the bridge's date of construction could not be located at the county engineer's office.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY Originally a single-span, the bridge has been significantly altered by the addition of timber-piling piers that make it a three-span bridge, by concrete reinforcing of the stone abutments and wing walls, by the addition of a second steel I-beam on top of the original stringers, and by the addition of a steel guide rail. The bridge is an older example of a common bridge type, but due to alterations it is not historically or technologically distinguished.

INFOR MATION

PHOTO: 400:36-37, 401:2 (09/91) REVISED BY (DATE): QUAD: Shilon

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0600005 **CO** CUMBERLAND **OWNER** COUNTY **MILEPOINT** 13.01

NAME & FEATURE INTERSECTED PORT NORRIS-BRIDGETON ROAD (CR 553) OVER BLEWS RUN **FACILITY** PORT NORRIS BRIDGETON ROAD (CR 553)

TOWNSHIP LAWRENCE TOWNSHIP

TYPE BOX CULVERT **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 2 **LENGTH** 23 ft **WIDTH** 40 ft

CONSTRUCTION DT 1936 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT WALTER M. SHARP, CO. ENG. **BUILDER** UNKNOWN

SETTING / CONTEXT The box culvert carries a two-lane road over a small ditch in a residential neighborhood (c. 1900-1960) northwest of the village of Cedarville. The ditch is at the headwaters of Blews Run and channels run off from the lawns and driveways of the near by residences.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-cell, reinforced-concrete box culvert with wing walls is a common structure for short-span crossings. A steel beam guard rail has been added. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 401:19-20 (09/91) REVISED BY (DATE): QUAD: Cedarville

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0600014 **CO** CUMBERLAND **OWNER** COUNTY **MILEPOINT** 31.62

NAME & FEATURE INTERSECTED ALMOND ROAD OVER MAURICE RIVER **FACILITY** ALMOND ROAD (CR 540)

TOWNSHIP VINELAND CITY

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 3 **LENGTH** 78 ft **WIDTH** 30 ft

CONSTRUCTION DT 1933 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** HILL CONSTRUCTION COMPANY

SETTING / CONTEXT The two-lane wide bridge spans the Maurice River on the Salem and Cumberland County border. On the Cumberland County side of the bridge is Vineland City's West Side Park (c. 1980), a municipal picnic area and beach. On the Salem County side is the state's Union Lake Wildlife Management Area with new-growth forest and dense undergrowth. Downstream from the bridge is a small concrete dam.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The three-span, steel stringer bridge has concrete-encased fascia stringers, reinforced-concrete substructure, balustrade, and sidewalks. Approximately one-third of all the pre-1946 bridges in Cumberland County are steel stringers. The bridge has a design similar to many bridges designed and built by county engineers' offices in the 1920s and 1930s. Contractors from Mount Holly, NJ, built the bridge. It is not historically or technologically distinguished.

INFOR MATION

PHOTO: 402:3-5 (09/91) REVISED BY (DATE): QUAD: Millville

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0600015 **CO** CUMBERLAND **OWNER** COUNTY **MILEPOINT** 13.31

NAME & FEATURE INTERSECTED BUCKSHUTEM ROAD (CR 670) OVER LAUREL LAKE **FACILITY** BUCKSHUTEM ROAD (CR 670)

TOWNSHIP COMMERCIAL TOWNSHIP

TYPE T BEAM **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 3 **LENGTH** 78 ft **WIDTH** 26 ft

CONSTRUCTION DT 1937 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT WALTER SHARP, CO. ENG. **BUILDER** FRANK J. HILL

SETTING / CONTEXT The two-lane wide bridge and its approaches cross the eastern tip of Laurel Lake about 50 yards above the earthwork dam that creates the lake. Laurel Lake is a private development with lakefront summer homes and cottages (c. 1920-90). South of the bridge is the development's main crossroads with a convenience store, realtor's office, and clubhouse.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The three-span bridge is a representative example of T-beam construction with balustrades and reinforced-concrete abutments and piers. A steel guard rail has been added to the bridge. The T-beam was a popular bridge design from the mid-1910s to the 1930s and was promoted by some highway engineers as an alternative to concrete slab construction. T-beams are common in New Jersey, and the bridge is not historically or technologically significant.

INFOR MATION

PHOTO: 401:29-30 (09/91) REVISED BY (DATE): QUAD: Dividing Creek

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0600016 **CO** CUMBERLAND **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WASHINGTON STREET OVER COHANSEY RIVER **FACILITY** WASHINGTON STREET

TOWNSHIP BRIDGETON CITY

TYPE RIGID FRAME **DESIGN** CONTINUOUS **MATERIAL** Reinforced Concrete

 # SPANS 3 **LENGTH** 131 ft **WIDTH** 30 ft

CONSTRUCTION DT 1941 **ALTERATION DT** 1997 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** C. FISKE CAMPBELL

SETTING / CONTEXT The bridge crosses the Cohansey River near the old brick Waterworks (1877), used as a maintenance building for Bridgeton City Park located on the west side of the river. The bridge spans the river between the park and downtown Bridgeton with its well-preserved 19th-century industrial, commercial, and residential sites. The bridge is in the Bridgeton Historic District that also includes the waterworks. The park does not have a historically significant landscape.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Listed. Bridgeton Historic District. 10/29/1982. Contributing.

CONSULT DOCUMENTS SHPO Letter 03/12/01

SUMMARY The 3-span rigid-frame bridge built in 1941 is finished with balustrades and decorative scallops on the fascia above the cutwater piers. There are over 35 concrete rigid frame bridges in the survey population; about 22 were built before 1941. The bridge profile is predicated on its structural type, and the detailing is in keeping with the park setting. The bridge is eligible for listing in the National Register of Historic Places as a contributing element to the Bridgeton Historic District under Criterion C.

INFOR MATION

PHOTO: 400:13-14 (09/91) REVISED BY (DATE): QUAD: Bridgeton

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0600017 **CO** CUMBERLAND **OWNER** COUNTY **MILEPOINT** 2.16

NAME & FEATURE INTERSECTED WEST PARK DRIVE (CR 621) OVER SUNSET LAKE RACEWAY **FACILITY** WEST PARK DRIVE (CR 621)

TOWNSHIP BRIDGETON CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 76 ft **WIDTH** 30 ft

CONSTRUCTION DT 1935 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** C. FISKE CAMPBELL

SETTING / CONTEXT The two-lane wide bridge spans an old mill raceway flowing south from Sunset Lake. The bridge lies within Bridgeton City Park, an old industrial site converted into a park in the early 1900s. To the west of the bridge is a picnic ground; and to the south, the city zoo and a recreated Swedish settlers' cabin.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The three-span, encased, steel-stringer bridge with balustrades and reinforced-concrete piers and abutments is representative of many bridges designed and built by county engineering offices in the 1920s and 1930s. The bridge is not historically associated with the original layout of Bridgeton City Park and does not lie within the Bridgeton Historic District. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 400:20-21 (09/91) REVISED BY (DATE): QUAD: Bridgeton

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0600018 **CO** CUMBERLAND **OWNER** COUNTY **MILEPOINT** 2.35

NAME & FEATURE INTERSECTED WEST PARK DRIVE (CR 621) OVER COHANSEY RIVER **FACILITY** WEST PARK DRIVE (CR 621)

TOWNSHIP BRIDGETON CITY

TYPE BOX CULVERT **DESIGN** SIPHON SPILLWAY **MATERIAL** Reinforced Concrete

 # SPANS 11 **LENGTH** 107 ft **WIDTH** 43.5 ft

CONSTRUCTION DT 1938 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT WALTER M. SHARP, CO. ENG. **BUILDER**

SETTING / CONTEXT The two-lane, 11-span culvert and dam is located at the northeast corner of Bridgeton City Park (c. 1900-20). Sunset Lake, above the dam, is used for boating and fishing, and is one of the park's central features. To the east is a residential development (c. 1920-60). The lake and dam were originally a part of the waterpower system of the Cumberland Nail and Iron Co. In 1903, Bridgeton purchased the land for a city park.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The roadway is carried on an 11-span concrete box culvert that is an earth-filled dam/spillway. The well-preserved bridge/dam has a concrete headwall with balustrade and is a siphon spillway design, drawing water off the bottom of the lake through a series of siphon-shaped inlets. The dam was built in 1938 after a previous dam collapsed in a 1934 flood. Inverted siphons are not a common structural type, and thus it is eligible because of its technological significance.

INFOR MATION

SOURCES:
Cumberland County Engineer Records. File Cards. Bridge No. 0600018, CR 621, MM 2.35.
Logue, William A. "Parks." Bridgeton History. 1936.
"Sunset Residents Unhappy, June 21, 1977." Vertical File. Bridgeton Public Library, Bridgeton, NJ.
Williams, George Bansby. Storage Reservoirs. London: Chapman and Hall, 1937.

PHYSICAL DESCRIPTION: The dam and bridge is a design known as a siphon spillway. The spillway draws water off the bottom of the lake through a series of siphon-shaped inlets and discharges the water downstream through the eleven reinforced-concrete box culverts. The dam is earth-filled with a concrete headwall with pierced balustrade. The spillway has not been significantly altered, although newspaper records indicate that at some time past a flow box was added to the bridge to provide for enough surface current to remove scum and stagnant surface water near the dam.

HISTORICAL AND TECHNOLOGICAL SIGNIFICANCE: The bridge/dam, located in Bridgeton City Park, is a well-preserved example of an uncommon structural type. Dams with siphon spillways came into general use in the United States and Europe in about 1905, but were not a frequently used type. It appears that in this application the type was selected so that the structure could perform two functions; (1) serve as the superstructure for the roadway over the dam and (2) control the water level to a create a small lake which is a feature in the park and a source of fresh water. No other inverted siphon dam bridges have been identified in southern New Jersey.

The dam and lake in Bridgeton City Park were originally a part of the waterpower system of the Cumberland Nail and Iron Company. In the early 1900s the foundry and factory went into bankruptcy and in 1903 Bridgeton City bought the lake and the surrounding land with the intention of maintaining it as a public playground and park. In 1934, the old dam constructed by the Cumberland Nail and Iron Company went out in a flood. In 1938, the county completed construction of the present dam, bridge, and spillway.

PHOTO: 400:17-19 (09/91) REVISED BY (DATE): QUAD: Bridgeton

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0600020 **CO** CUMBERLAND **OWNER** COUNTY **MILEPOINT** 7.36

NAME & FEATURE INTERSECTED WEST AVENUE (CR 607) OVER IRELANDS MILL RUN **FACILITY** WEST AVENUE (CR 607)

TOWNSHIP BRIDGETON CITY

TYPE ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 69 ft **WIDTH** 25.6 ft

CONSTRUCTION DT 1923 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The two-lane wide bridge spans a creek at the northern edge of Bridgeton City Park (c. 1903). Upstream from the bridge is a modern dam (c. 1970) and Mary Elmer Lake. Downstream the creek flows through a wooded area before entering Sunset Lake and the Cohansey River. To the north, West Avenue enters a residential area (c. 1920-1970). The bridge does not lie within the Bridgeton Historic District.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The elliptical, earth-filled, reinforced-concrete arch is in deteriorating condition. Modern corrugated-metal sheathing has been added around the abutments, and a steel guard rail has been bolted to the crumbling curb. In 1903 Bridgeton City bought the area east of West Avenue as a park, and in 1914 the lake and woods to the west were deeded as a park extension. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 400:22-23 (09/91) REVISED BY (DATE): QUAD: Bridgeton

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0600021 **CO** CUMBERLAND **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED EAST AVENUE OVER MILL CREEK **FACILITY** EAST AVENUE

TOWNSHIP BRIDGETON CITY

TYPE CULVERT **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 2 **LENGTH** 25 ft **WIDTH** 36 ft

CONSTRUCTION DT 1936 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT WALTER M. SHARP, CO. ENG. **BUILDER** C. FISKE CAMPBELL

SETTING / CONTEXT The two-lane wide culvert spans a mill raceway on the east side of Bridgeton City near the intersection of NJ 49 and East Avenue. East of the bridge is a warehouse/mill complex (c. 1890-1920) and a parking lot built over the mill raceway. Downstream trees line the river banks. To the north is a working-class neighborhood (c. 1850-1950) and an urban housing development (c. 1960).

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-cell box culvert has balustrades, reinforced-concrete abutments and wing walls, and sidewalks. C. Fiske Campbell, a contractor from Bridgeton, constructed at least four existing pre-1946 bridges in Cumberland County. Box culverts are a common highway structure. The culvert is not historically or technologically distinguished.

INFOR MATION

PHOTO: 401:21-22 (09/91) REVISED BY (DATE): QUAD: Bridgeton

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0600023 **CO** CUMBERLAND **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MAYOR AITKEN DRIVE OVER SUNSET LAKE RACEWAY **FACILITY** MAYOR AITKEN DRIVE

TOWNSHIP BRIDGETON CITY

TYPE ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 42 ft **WIDTH** 25.8 ft

CONSTRUCTION DT 1923 **ALTERATION DT** 1980ca **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The narrow two-lane bridge spans a former mill raceway within Bridgeton City Park (c. 1903). Mayor Aitken Drive forms the major north-south artery through the park and the raceway is a popular spot with canoeists and hikers. North of the bridge is a recreated Indian village and the city zoo. South are tennis courts and the old city waterworks (1877). A landfill to the east detracts from the bridge's setting.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The city built the arch bridge with a paneled concrete parapet shortly after it developed the park at a former industrial site in the early 1900s. Historic photographs indicate the parapets were originally paneled and decoratively detailed, but have since been altered and covered with gunite (c.1980). Although aesthetically appropriate to the park setting, the bridge is in poor condition with spalling, and is not an early or technologically significant example of the bridge type.

INFOR MATION

PHOTO: 400:24-25 (09/91) REVISED BY (DATE): QUAD: Bridgeton

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0600026 **CO** CUMBERLAND **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED TOMS BRIDGE ROAD OVER REUBENS BRANCH **FACILITY** TOMS BRIDGE ROAD

TOWNSHIP DOWNE TOWNSHIP

TYPE STRINGER **DESIGN** CONTINUOUS **MATERIAL** Steel

 # SPANS 2 **LENGTH** 27 ft **WIDTH** 14.4 ft

CONSTRUCTION DT 1942 **ALTERATION DT** 1954 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The single-lane wide bridge spans a tidal estuary in an undeveloped wetlands area near the Delaware Bay.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge is one of at least four existing, short-span, steel-stringer bridges with timber-pile bents built by Cumberland County between 1930 and 1942. In 1954 the county drove new timber piles and in 1990 added the steel guide rail. The masonry abutments and approaches could date from an earlier bridge. Steel stringers are a very common bridge type. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 401:3-6 (09/91) REVISED BY (DATE): QUAD: Dividing Creek

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0600029 **CO** CUMBERLAND **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BAYVIEW ROAD OVER DIVISION GUT **FACILITY** BAYVIEW ROAD

TOWNSHIP DOWNE TOWNSHIP

TYPE STRINGER **DESIGN** CONTINUOUS **MATERIAL** Steel

 # SPANS 3 **LENGTH** 30 ft **WIDTH** 12.9 ft

CONSTRUCTION DT 1930 **ALTERATION DT** 1951 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The single-lane wide bridge spans a tidal estuary of the Nantuxent River near its confluence with Delaware Bay at Money Island. Money Island is a fishing and summer-home community of small cottages and mobile homes (c. 1930-1990) reached by Newportneck Road, a two-lane causeway over undeveloped wetlands.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The plank-decked bridge is one of at least four existing, short-span, steel-stringer bridges with timber pile bents built by the county between 1930 and 1942. In 1951 and 1978 the county replaced the timber pile piers, and in 1978 also replaced at least some of the steel stringers. A beam guide rail has been added. Due to deterioration and replacement it is unlikely that much original bridge fabric survives. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 401:15-16 (09/91) REVISED BY (DATE): QUAD: Cedarville

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0600031 **CO** CUMBERLAND **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED NEW JERSEY AVENUE OVER OYSTER CREEK **FACILITY** NEW JERSEY AVENUE

TOWNSHIP DOWNE TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Wood

 # SPANS 5 **LENGTH** 63 ft **WIDTH** 15.1 ft

CONSTRUCTION DT 1940 **ALTERATION DT** 1983 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The single-lane wide bridge spans a tidal estuary at the southern end of Fortescue Beach on the Delaware Bay. Fortescue Beach is a fishing and summer-home community of cottages and mobile homes (c. 1930-1990).

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The five-span, timber-stringer bridge has timber-pile piers and timber-pile abutments with wood sheathing. In 1983, the county replaced some of the built-up timber stringers and drove new timber piles and bulkheads. Such replacement is similar to other timber-stringer bridges built in the county between 1930 and 1940 (Nos. 0600032, 0600039, 0600040 & 0600045). A steel guard rail has been added. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 401:13-14 (09/91) REVISED BY (DATE): QUAD: Fotesque

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0600032 **CO** CUMBERLAND **OWNER** COUNTY **MILEPOINT** 0.59

NAME & FEATURE INTERSECTED BEALS MILL ROAD (CR 733) OVER COHANSEY RIVER **FACILITY** BEALS MILL ROAD (CR 733)

TOWNSHIP UPPER DEERFIELD TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Wood

 # SPANS 4 **LENGTH** 61 ft **WIDTH** 23 ft

CONSTRUCTION DT 1931 **ALTERATION DT** 1948 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The narrow two-lane wide bridge spans the upper Cohansey River north of Bridgeton. The surrounding area is rural with pasture, fields, and forested lots.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The four-span, plank-decked, timber-stringer bridge has timber pile bents and abutments with cross bracing. In 1948, 1953, and 1971, the county replaced timber piles, stringers, and deck. The wood railing is also a modern replacement. Such replacement is similar to other timber-stringer bridges built in the county between 1930 and 1940 (Nos. 0600031, 0600039, 0600040, & 0600045). The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 400:32-33 (09/91) REVISED BY (DATE): QUAD: Alloway

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0600033 **CO** CUMBERLAND **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED SILVER LAKE ROAD (CR 704) OVER COHANSEY RIVER **FACILITY** SILVER LAKE ROAD (CR 704)

TOWNSHIP UPPER DEERFIELD TOWNSHIP

TYPE STRINGER **DESIGN** CONTINUOUS **MATERIAL** Steel

 # SPANS 5 **LENGTH** 43 ft **WIDTH** 16.8 ft

CONSTRUCTION DT 1930 **ALTERATION DT** 1981 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The single-lane wide bridge with two safety sidewalks spans the upper Cohansey River north of Bridgeton. The surrounding area is rural with fields, pastures, and wooded lots.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The five-span, continuous steel-stringer bridge with wood railing and beam guard rail has timber-pile piers and concrete abutments. In 1981 the county widened the bridge with safety sidewalks supported by timber stringers, and replaced the timber pile bents. The bridge is one of at least four similar bridges built by the county between 1930 and 1942. Steel stringers are a common pre-1946 bridge type in New Jersey, and the bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 400:26-27 (09/91) REVISED BY (DATE): QUAD: Shilon

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0600036 **CO** CUMBERLAND **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MILL ROAD OVER LITTLE ROBIN BROOK **FACILITY** MILL ROAD

TOWNSHIP VINELAND CITY

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 26 ft **WIDTH** 29.8 ft

CONSTRUCTION DT 1941 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** HILL AND FOX

SETTING / CONTEXT The two-lane wide, skewed bridge spans a small creek in a suburban residential area of eastern Vineland City. The homes are small cottages and ranch homes (c. 1930-1960) on large wooded lots. Trees and heavy undergrowth line the shallow creek. The bridge is near the intersection of Mill Road and NJ 56.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span, skewed concrete-slab bridge has balustrades and concrete abutments. It is one of three existing pre-1946 concrete-slab bridges in the county. It replaced an earlier brick arch and was built by local contractors from Bridgeton. Concrete-slab construction became popular in the 1920s as a simple and inexpensive technique for short-span bridges. The bridge is not historically distinguished, and better examples, such as #0809L02, exist.

INFOR MATION

PHOTO: 402:2 (09/91) REVISED BY (DATE): QUAD: Millville

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0600038 **CO** CUMBERLAND **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MILL ROAD OVER BLACKWATER BRANCH **FACILITY** MILL ROAD

TOWNSHIP VINELAND CITY

TYPE STRINGER **DESIGN** CONTINUOUS **MATERIAL** Steel

 # SPANS 3 **LENGTH** 30 ft **WIDTH** 21.1 ft

CONSTRUCTION DT 1936 **ALTERATION DT** 1978 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The two-lane wide bridge spans a small creek in a low-lying marsh with a dead-tree stand. Nearby are a sandpit, a commercial warehouse, and ranch homes (c. 1960-1980).

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 11/22/91

SUMMARY The bridge is one of at least four existing, short-span, steel-stringer bridges with timber-pile bents and abutments built by Cumberland County between 1930 and 1942. In 1978 the county replaced the timber piles, deck and railing. The bridge has timber fascia stringers that support the beam guide rail. Little original bridge fabric remains. Steel stringers are the most common pre-1946 bridge type in New Jersey. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 402:8-9 (09/91) REVISED BY (DATE): QUAD: Newfield

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0600039 **CO** CUMBERLAND **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MAURICE RIVER PARKWAY OVER BLACKWATER BRANCH **FACILITY** MAURICE RIVER PARKWAY

TOWNSHIP VINELAND CITY

TYPE STRINGER **DESIGN** **MATERIAL** Wood

 # SPANS 3 **LENGTH** 46 ft **WIDTH** 21.4 ft

CONSTRUCTION DT 1938 **ALTERATION DT** 1971 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The two-lane wide bridge spans a small creek in a wetlands area to the east of the Maurice River and the state's Union Lake Wildlife Management Area. A few residences (c. 1960-1980) line the Maurice River Parkway to the south, but the surrounding area is predominately marshy and forested.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 7/24/90

SUMMARY The three-span, planked-deck, timber-stringer bridge has timber-pile bents and timber-pile abutments with wood sheathing. In 1971 and 1978, the county replaced timber pilings and stringers. Such inkind replacement is characteristic of other timber stringers built in the county between 1930 and 1940 (Nos. 0600031, 0600032, 0600040, & 0600045). A steel-beam guard rail has been added. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 402:6-7 (09/91) REVISED BY (DATE): QUAD: Newfield

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0600040 **CO** CUMBERLAND **OWNER** COUNTY **MILEPOINT** 1.73

NAME & FEATURE INTERSECTED BOWERS CREEK ROAD OVER CEDAR CREEK **FACILITY** BOWERS CREEK ROAD (IRON BRIDGE ROAD)

TOWNSHIP LAWRENCE TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Wood

 # SPANS 2 **LENGTH** 42 ft **WIDTH** 15.2 ft

CONSTRUCTION DT 1940 **ALTERATION DT** 1969 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** C. FISKE CAMPBELL

SETTING / CONTEXT The single-lane wide bridge spans a tidal estuary at the western end of the small village of Cedar Creek. In 1940 the timber-stringer bridge replaced an earlier iron truss, hence the former name Iron Bridge Road. Cedar Creek has some good examples of nineteenth-century domestic architecture but generally the town displays the usual collection of nineteenth and twentieth-century structures.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 11/14/91

SUMMARY The two-span, plank-decked, timber-stringer bridge has timber-pile abutments. Masonry wing walls probably date to an earlier bridge. In 1969, the county replaced the piles and stringers. Such inkind replacement is similar to other timber-stringer bridges built in the county between 1930 and 1940 (Nos. 0600031, 0600032, 0600039, & 0600045). A steel guard rail has been added. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 401:17-18 (09/91) REVISED BY (DATE): QUAD: Cedarville

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
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November 12, 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0600045 **CO** CUMBERLAND **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BUCKHORN ROAD OVER HORSE RUN **FACILITY** BUCKHORN ROAD

TOWNSHIP STOW CREEK TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Wood

 # SPANS 3 **LENGTH** 46 ft **WIDTH** 23.1 ft

CONSTRUCTION DT 1936 **ALTERATION DT** 1965 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** F. SMITH

SETTING / CONTEXT The narrow two-lane wide bridge spans a small creek on the border between Cumberland and Salem Counties. The surrounding area is rural with fields and wooded lots. Buckhorn Road is infrequently traveled and changes from blacktop to dirt once it enters Salem County.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The three-span, plank-decked, timber-stringer bridge has timber pile bents and abutments with wood sheathing. In 1965 the county replaced "700 feet of timber piles and other timber" in the bridge. The wood railing is also a modern replacement. Such replacement is similar to other timber-stringer bridge built in the county between 1930 and 1940 (Nos. 0600031, 0600032, 0600039, & 0600040). The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 400:34-35 (09/91) REVISED BY (DATE): QUAD: Shilon

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0600047 **CO** CUMBERLAND **OWNER** COUNTY **MILEPOINT** 20.66

NAME & FEATURE INTERSECTED COHANSEY-DEERFIELD ROAD OVER COHANSEY RIVER **FACILITY** COHANSEY DEERFIELD ROAD (CR 540)

TOWNSHIP UPPER DEERFIELD TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 2 **LENGTH** 31 ft **WIDTH** 24.2 ft

CONSTRUCTION DT 1924 **ALTERATION DT** 1985 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** SAMUEL CAMPBELL

SETTING / CONTEXT The two-lane wide bridge spans the Cohansey River above Bridgeton City. The surrounding area is rural with fields, pastures, and wooded lots.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span continuous slab bridge on concrete abutments and piers has been extensively altered. In 1985 the county widened the bridge with a concrete-slab addition, and added a modern concrete barrier curb. The bridge is not historically or technologically distinguished and better examples, such as 0809L02, exist. The bridge is one of three pre-1946 concrete-slab bridges in the county.

INFOR MATION

PHOTO: 400:30-31 (09/91) REVISED BY (DATE): QUAD: Alloway

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0600048 **CO** CUMBERLAND **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED HARMONY-DEERFIELD ROAD OVER COHANSEY RIVER **FACILITY** HARMONY DEERFIELD ROAD (CR 689)

TOWNSHIP UPPER DEERFIELD TOWNSHIP

TYPE T BEAM **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 3 **LENGTH** 79 ft **WIDTH** 30 ft

CONSTRUCTION DT 1941 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** JOSEPH W. ROGERS

SETTING / CONTEXT The two-lane wide bridge spans the tree-lined Cohansey River north of Bridgeton City. The surrounding area is rural with fields, pastures, and wooded lots.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The three-span T-beam bridge has balustrade, concrete-pile piers, and concrete abutments. It is the newest of two similar T-beams built in the county in 1937 and 1941 (#0600015). Joseph W. Rogers, a contractor from Succasunna, NJ, constructed the bridge. T-beam bridges are common in New Jersey, and the bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 400:28-29 (09/91) REVISED BY (DATE): QUAD: Alloway

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0600049 **CO** CUMBERLAND **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED SHERMAN AVENUE (CR 552) OVER LEBANON BRANCH **FACILITY** SHERMAN AVENUE (CR 552)

TOWNSHIP DEERFIELD TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 30 ft **WIDTH** 41.3 ft

CONSTRUCTION DT 1936 **ALTERATION DT** 1982 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT WALTER M. SHARP, CO. ENG. **BUILDER** BONHAM ENGINEERING

SETTING / CONTEXT The two-lane wide bridge spans a shallow creek along a rural, tree-lined stretch of country road. The surrounding area is undeveloped with scattered residences (c. 1900-1960), fallow fields, and lots covered with scrub brush and trees.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span, concrete-slab bridge with reinforced-concrete abutments has been highly altered. In 1982, the county widened the bridge with three prestressed concrete beams, and replaced the balustrades with a beam guide rail. The bridge is one of three pre-1946 concrete-slab bridges in the county. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 401:35-36 (09/91) REVISED BY (DATE): QUAD: Millville

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0600054 **CO** CUMBERLAND **OWNER** COUNTY **MILEPOINT** 0.23

NAME & FEATURE INTERSECTED LOWER SHARP STREET OVER MAURICE RIVER **FACILITY** LOWER SHARP STREET

TOWNSHIP MILLVILLE CITY

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 4 **LENGTH** 102 ft **WIDTH** 30 ft

CONSTRUCTION DT 1936 **ALTERATION DT** 1976 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** OLE HANSEN

SETTING / CONTEXT The two-lane wide bridge spans the Cohansey River on the outskirts of Bridgeton City. The bridge is just downstream from the NJDEP's Union Lake, a large reservoir and massive earthwork dam (c. 1936) with concrete spillway and fish ladder. Below the bridge is a modern metal boat dock. Downstream the river flows through a wooded area before entering downtown Bridgeton. Nearby is the DEP's Green Acres playground and baseball field.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The four-span steel-stringer bridge on concrete piers and abutments was built in 1936 by a contractor from Ventnor City, NJ. In 1976 the county widened the bridge and rebuilt the reinforced-concrete piers, abutments, wing walls, and deck, and added modern concrete parapets and railings. The bridge is not historically or technologically distinguished because of the extensive alterations.

INFOR MATION

PHOTO: 401:27-28 (09/91) REVISED BY (DATE): QUAD: Millville

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0601151 **CO** CUMBERLAND **OWNER** NJDOT **MILEPOINT** 33.8

NAME & FEATURE INTERSECTED NJ 47 OVER MANUMUSKIN RIVER **FACILITY** NJ 47

TOWNSHIP MAURICE RIVER TOWNSHIP

TYPE THRU GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 4 **LENGTH** 201 ft **WIDTH** 40 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The two-lane wide bridge spans a tidal estuary near the Delaware Bay, north of the town of Port Elizabeth. Next to the bridge is a small boat launch and a marina with many decaying and unused wharf's. Port Elizabeth was once a thriving maritime community and has a few good examples of domestic architecture (c. 1800-1920). Upstream and downstream from the bridge the river meanders through broad, undeveloped wetlands.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The four-span encased thru girder and floor beam bridge has reinforced-concrete abutments and piers, and two cantilevered sidewalks with a decorative pipe railing. Alterations to the bridge include abutment repairs, redecking, and the addition of concrete barrier curbs along the roadway. The state highway department built numerous girder bridges in the 1920s and 1930s, and the bridge does not have any special technological or historical significance.

INFOR MATION

PHOTO: 401:31-32 (09/91) REVISED BY (DATE): QUAD: Port Elizabeth

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0601152 **CO** CUMBERLAND **OWNER** NJDOT **MILEPOINT** 36.07

NAME & FEATURE INTERSECTED NJ 47 OVER MANANTICO CREEK **FACILITY** NJ 47

TOWNSHIP MAURICE RIVER TOWNSHIP

TYPE SWING SPAN **DESIGN** CENTER BEARING **MATERIAL** Steel

 # SPANS 2 **LENGTH** 148 ft **WIDTH** 30 ft

CONSTRUCTION DT 1925 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The two-lane bridge spans a tidal estuary of the Maurice River south of Millville. Next to the bridge is a heavily altered two-story frame house (c. 1870). The surrounding area is rural with fallow fields and scrub brush. Downstream are the remains of an old stone abutment, probably the site of an earlier bridge. Rotted timber pilings, piers, and wharfs suggest a once active maritime community.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bobtail thru girder with floor beams swing span bridge with a steel stringer approach span has concrete abutments and piers. Electrical service has been removed from the swing span, and it was sealed to navigation in c.1968. Encasing has been removed from the fascia stringer of the approach span. The bridge is the least well-preserved and historically-documented of two similar 1920s swing spans in the region (1708151). The other swing span is recommended eligible.

INFORMATION

SOURCES:
Hool, George A. and W. S. Kinne. Movable and Long-Span Steel Bridges. New York: McGraw Hill, 1923.
New Jersey State Highway Department Bridge Division. Bridge Plans File No. 0601152. 1925.
Waddell, J. A. L. Bridge Engineering. New York: John Wiley & Sons, 1916.

PHYSICAL DESCRIPTION: The bridge is a center-bearing, bobtail, riveted thru girder swing span with an encased stringer approach span to the south. The swing span superstructure consists of two riveted plate girders, floor beams and stringers, lateral bracing, and steel-grid deck. A concrete counterweight supported in a steel framework is underneath the deck on the shorter, bobtail end of the span. Above the center pier is a box-shaped cross girder designed to support and balance bridge upon the center bearing when in the open position. Four balance wheels are attached to the cross girder and floor-beam system and roll on a circular track mounted on the center pier. The bridge was operated by a single pinion turning against a rack of approximately 10'-radius. A set of six wedges, two at each end of the bridge and two at the center pier, lifted the end of the bridge in the closed position. The rack and pinion and wedges were operated by an electric motor and a system of direct-drive line shafting and beveled gears, all of which are extant. The operator's shanty and all electrical service and controls have, however, been removed. The bobtail swing span has an overall length of 89' with a 30' roadway.

The 51'-long, steel-stringer approach span is concrete-encased with balustrades. The concrete encasing has been removed from the fascia stringers. The abutments and piers are reinforced-concrete founded on timber piles. Repairs have been made to the piers with new concrete caps underneath the wedge lifts. The center pier is badly spalled. The bridge has timber-pile fenders. Since 1968, it has been closed to navigation, and traffic control equipment has been removed.

HISTORICAL AND TECHNOLOGICAL SIGNIFICANCE: The swing span bridge is 1 of 2 nearly-identical swing spans designed in the mid-1920s by the NJ State Highway Department for state highways in South Jersey. The other bridge (1708151), NJ 49 over Alloways Creek in Quinton, Salem County, is the better preserved and documented of the two bridges, and has been recommended eligible as a rare surviving example of a technologically significant movable bridge type.

The swing span is a type of movable bridge, a special structural type combining both civil and mechanical engineering technologies. Swing spans were one of the most prevalent types of movable bridges during the 19th and early-20th centuries. The NJ 47 over Manantico Creek Bridge is a late example of movable-bridge technology employing girder superstructure, wedge end lifts, and electrification, all of which were improvements in swing span design during the period between 1890 and 1920. Constructed in 1925, the bridge was built as part of the NJ State Highway Route 15 improvements. It replaced a bobtail truss swing span that once stood slightly downstream from the existing bridge. No documentation has been located to identify the builder.

PHOTO: 401:23-26 (09/91) REVISED BY (DATE): QUAD: Dividing Creek

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NJDOT updated data 03-01-2001.
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0604152 **CO** CUMBERLAND **OWNER** NJDOT **MILEPOINT** 25.5

NAME & FEATURE INTERSECTED NJ 49 (WAR MEMORIAL BRIDGE) OVER COHANSEY RIVER **FACILITY** NJ 49

TOWNSHIP BRIDGETON CITY

TYPE SINGLE LEAF BASCULE **DESIGN** TRUNNION **MATERIAL** Steel

 # SPANS 2 **LENGTH** 156 ft **WIDTH** 40 ft

CONSTRUCTION DT 1936 **ALTERATION DT** **SOURCE** NEWSPAPER

DESIGNER/PATENT ASH, HOWARD, NEEDLES & TAMMEN **BUILDER** MERRIT, CHAPMAN, & MCLEAN

SETTING / CONTEXT The four-lane bridge spans a tidal estuary of the Delaware Bay in the center of downtown Bridgeton, a once thriving maritime community and industrial center. On the river's east bank is a diner (c. 1930) and a river walk development (c. 1980). On the west bank is a closed textile mill (c. 1890) and commercial buildings (c. 1870-1990). The bridge lies within the Bridgeton Historic District.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Listed. Bridgeton Historic District. 08/18/1982. Noncontributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The War Memorial Bridge is a 2-span, single-leaf trunnion bascule that was sealed about 1969. Some controls were removed at that time, but the drive mechanism remains. It was constructed in 1936 and is outside the Bridgeton Historic District's period of significance (c. 1790-1900). One of over 12 examples of the design in southern New Jersey, the bridge is not significant due to alterations. More complete examples survive.

INFOR MATION

SOURCES:
Cushing, Thomas, and Charles E. Sheppard, eds. History of the Counties of Gloucester, Salem, and Cumberland, New Jersey. Philadelphia: Everts & Peck, 1883.
Hool, George A. and W. S. Kinne. Editors. Movable and Long-Span Steel Bridges. New York: McGraw-Hill, 1923.
New Jersey Department of Transportation. Bridge Files and Plans, 0604152, 1935.
Waddell, J. A. L. Bridge Engineering. New York: John Wiley, 1916.

PHYSICAL DESCRIPTION: The western span of the two-span bridge is a non-operative single-leaf trunnion bascule of the underneath counterweight type. The eastern span, although similar to the northern span in outward appearance, is a fixed, segmental-shape deck plate girder. Overall the bridge is 156'-long with 40'-roadway.

The western bascule span is constructed of two girders that span a distance of 72' from toe bearing to trunnion. The girders are tapered from approximately 9' depth at the trunnion to 4' depth at the center of the span, to 6'6" depth at the toe. In addition, there are steel angle cross braces which act as stiffening members for the bascule span. Floor beams frame into the girders at approximately 14' intervals. The floor beams support steel stringers and a steel grid deck with asphalt roadway. Two 8' wide sidewalks with steel balustrades are supported by steel brackets on either side of the span.

The counterweight and operating machinery are concealed in a watertight pit below the roadway at the northern end of the bridge. The counterweight is concrete in a steel frame attached to the short arm of the bascule girders. The bascule leaf is opened by pinion gears engaging cast-steel racks of 7'6" radius about the trunnions of either girder. The pinion gears are operated by a single electric motor attached to trunnion shafts and gears. The bridge also has a motor brake and a speed change for hand operation.

The movable span provides navigational clearance of 40' with a minimum vertical clearance of 6' at mean high water. The bridge has timber pile fenders. A one-story concrete operator's house with concrete-slab hipped roof stands next to the bascule on the southwest corner.

The eastern span is a 72'-long plate girder. The two girders are made of web plates and angles and taper from 6'8" depth at the toes to 4' depth at the center of the span. Floor beams frame into the girders and there are steel cross braces which act as stiffening members. The floor beams support steel stringers and a concrete slab deck.

The bridge foundations are reinforced concrete and consist of two abutment and a pier.

HISTORY AND SIGNIFICANCE: The Broad Street Bridge is an example of a technologically significant bridge type that is becoming increasingly rare in New Jersey and the United States. The bridge is the best preserved, and perhaps the only, bascule highway bridge of the underneath counterweight type remaining in the state. Constructed in 1935-36, it utilizes details found on most other simple trunnion bascule bridges of the underneath counterweight type. The bridge is a local landmark on one of the primary highway routes in Bridgeton, and is dedicated as a memorial to the veterans of WWI. It is within the boundaries of the Bridgeton Historic District but was not built during the district's period of significance (ca. 1790-1900).

The bascule is a type of movable bridge, a special structural type combining both civil and mechanical engineering technologies. They are erected where navigation demands vertical clearance and the surrounding landscape does not permit elevated approaches. Thus, they are commonly found in low lying coastal areas, like South Jersey. The modern type of bascule bridge developed in the United States during the 1890s in Chicago. The most prevalent patented types of bascule bridges were the Scherzer and Rall rolling lift bridge, the Chicago City, and the Strauss Trunnion Bascule types. Construction of bascule highway bridges probably reached a peak in the period between 1900 and 1930. The Broad Street Bridge is an example of the simple trunnion type and does not make use of the Strauss patented features.

Since 1869 a bridge has spanned the Cohansey River at the present site. The previous bridge was a wrought-iron swing span, 135'-long

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
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and 30'-wide, with arms of equal length. In 1934 a flood destroyed the old swing span. The New Jersey State Highway Department undertook to rebuild the bridge and chose the engineering firm of Ash, Howard, Needles, and Tammen of New York and Kansas City to prepare the bridge designs and specifications. The general contractors for the bridge were Merritt-Chapman and McClean Corporation of Baltimore, Maryland.

Bridgeton, the furthest navigable point on the Cohansey River, was once a thriving maritime city with regular ferry service to Philadelphia and New York City, glass factories, and a nail works. The maritime economy declined in the first part of the 20th century. In the mid-1960 it was determined to close the bridge to river navigation.

PHOTO: 400:9-12 (09/91) REVISED BY (DATE): QUAD: Bridgeton

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0606150 **CO** CUMBERLAND **OWNER** NJDOT **MILEPOINT** 39.07

NAME & FEATURE INTERSECTED NJ 49 OVER MANANTICO CREEK **FACILITY** NJ 49

TOWNSHIP MILLVILLE CITY

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 23 ft **WIDTH** 40 ft

CONSTRUCTION DT 1929 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The two-lane wide bridge spans a shallow, tree-lined creek east of Millville along a tree-lined stretch of state highway. The surrounding area is suburban with ranch-style housing (c. 1940-1960).

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span, concrete-slab bridge has reinforced-concrete abutments and wing walls. The bridge is representative of many bridges designed and built by the state highway department in the period between 1920 and 1950. Concrete-slab construction became popular in the 1920s as a simple and inexpensive technique for short-span bridges. A utility pipe has been added. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 401:33-34 (09/91) REVISED BY (DATE): QUAD: Five Points

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0607150 **CO** CUMBERLAND **OWNER** RAILROAD **MILEPOINT** 130.99

NAME & FEATURE INTERSECTED SOUTHERN DIVISION RR OVER NJ 77 **FACILITY** CENTRAL RAILROAD OF NEW JERSEY

TOWNSHIP BRIDGETON CITY

TYPE THRU GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 3 **LENGTH** 108 ft **WIDTH** 14 ft

CONSTRUCTION DT 1922 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT CENTRAL RAILROAD OF NEW JERSEY **BUILDER** PHOENIX BRIDGE COMPANY

SETTING / CONTEXT The railroad bridge crosses NJ 77 north of downtown Bridgeton. NJ 77 is Bridgeton's main north-south artery and is a busy commercial strip with small businesses, shopping centers, and gas stations. Next to the bridge is a heating-oil company and a ranch house (c. 1940-50). The single railroad is a spur near the crossing of the Central Railroad of New Jersey and the Pennsylvania-Reading Railroad.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The Southern Division overpass is a skewed steel thru girder and floor beam bridge with laced steel-column bents and concrete abutments. The bridge is one of the few overpasses in the region, but a representative example of a type frequently built by railroads in the first decades of the twentieth century. The Phoenix Bridge Company, Phoenixville, PA, was one of the most prolific girder manufacturers. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 400:7-8 (09/91) REVISED BY (DATE): QUAD: Bridgeton

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0700008 **CO** ESSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BLOOMFIELD AVENUE OVER PARK AVENUE **FACILITY** BLOOMFIELD AVENUE

TOWNSHIP NEWARK CITY

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 70 ft **WIDTH** 60.4 ft

CONSTRUCTION DT 1904 **ALTERATION DT** 1951 **SOURCE** INSCRIPTION/PLANS

DESIGNER/PATENT ESSEX COUNTY PARK COMMISSION **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 4-lane divided road over a 2-lane park road set in Branch Brook Park, one of the original parks in the country's first county park system. The Essex County Park Commission, established in 1895, began the park development in 1896. Designed by nationally prominent landscape architects the Olmsted Brothers, the park is listed in the National Register. The bridge dates to the development of the middle division of the park where it is located.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible. Listed. Branch Brook Park. 01/12/1981. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The elliptical reinforced concrete arch bridge supported on a concrete substructure was widened in kind to the north in 1951. Panelled parapets flank the concrete sidewalks. Raised concrete circular seals decorate the spandrel walls. A long and well-detailed example of its type, the span was constructed in the period of significance of Branch Brook Park. The span is one of 7 arch spans in the park, and it is a prominent and original park feature.

INFOR MATION

Bibliography:
Essex County Engineers Office.
ONJH National Register File: Essex County, Branch Brook Park, Newark, New Jersey.
Report of the Essex County Park Commission, 1901.

Physical Description: The elliptical reinforced concrete bridge spans 69'-8 1/4", and carries a 4-lane median divided county road and sidewalks over a park road with sidewalks. The bridge was widened in kind by 34' to the north in 1951. The panelled concrete parapets, the concrete median and sidewalks date to the widening. The original face of the spandrel walls has a raised concrete seal with the date of construction inscribed.

Historical and Technological Significance: The reinforced concrete deck arch bridge, constructed in 1904, is technologically significant because it is a relatively long and well-preserved concrete arch span, and it is historically distinguished because it is one of 4 arch bridges constructed between 1898 and 1930 as part of the development of the National Register-listed Branch Brook Historic District that consists of a Olmsted-designed park that is the centerpiece of the nation's first county park system. It is one of a total of seven significant arch spans located in Branch Brook Park (Criteria A and C).

The bridge was built for the Essex County Park Commission as part of the development of Branch Brook Park in Newark. The park is one of the original parks developed as part of the nation's first county park system. The Essex County Park Commission was formed in 1895, and they began plans for the development of two major parks, two reservations, and four smaller parks. Branch Brook Park was the most important and extensively developed of the original parks. The park was sectioned into three divisions. The southern division was the first section of the park to be developed, and construction began in 1896. John Bogart and N.F. Barrett, Landscape Architects and Engineers, provided the initial plans for the southern division. They were terminated in 1897 due to cut backs in funds.

In 1898, the Olmsted Brothers firm was hired, and they apparently revised Bogart & Barrett plans for the completion of the southern division and also developed plans for the middle and northern divisions. The Olmsted Brothers firm was established by Frederick Law Olmsted, Sr. (1822-1903) who is considered the founder of landscape architecture as a profession in this country. In 1857, he designed Central Park in New York, and he and/or his firm were responsible for many other noted landscape works in the country, such as the National Zoo in Washington, D.C., the United States Military Academy at West Point, the Capital Grounds in Washington, D.C., and the campuses at Harvard, Yale, Stanford universities and Amherst College, among others.

The southern division of Branch Brook Park was designed to be comparatively ornate. The northern division was designed to have a natural rustic style, and the middle division was designed to have an intermediate style transitioning between the other divisions. The span is located between the southern and middle divisions, and it was constructed to eliminate a grade crossing of a busy road with the park road, and to allow easy access between two park divisions. The bridge was designed to be simple in style in keeping to the less elaborate character of its surroundings.

Boundary Description and Justification: The bridge is located within a National Register-listed historic district. As a contributing resource to that district, both the span and its surroundings are evaluated as significant. For a detailed boundary description, refer to the National Register file at ONJH.

PHOTO: 707:38-39 (04/92) REVISED BY (DATE): QUAD: Orange, NJ

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0700011 **CO** ESSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BAY AVENUE OVER THIRD RIVER **FACILITY** BAY AVENUE

TOWNSHIP BLOOMFIELD TOWNSHIP

TYPE STONE ARCH **DESIGN** BARREL **MATERIAL** Stone

 # SPANS 2 **LENGTH** 41 ft **WIDTH** 37.5 ft

CONSTRUCTION DT 1875ca **ALTERATION DT** 1931 **SOURCE** STYLE (PLANS)

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane collector road with a turn-lane and sidewalks over a small stream adjacent to a town park and located between an area of post-WW II commercial structures and a neighborhood of single-family homes dating from the 1920s.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 2-span stone barrel arch bridge of coursed ashlar and finished with ringstones was widened on the upstream side with a reinforced concrete slab in 1931. A metal railing flanks the sidewalk at the downstream side, and a plain concrete parapet dating to the 1931 widening flanks the upstream sidewalk. As well, concrete scour protection has been added. One of over 7 stone arch bridges in the county, the span is not distinguished because its visual integrity has been compromised by alterations.

INFOR MATION

PHOTO: 705:4-5;423:41-42 (04/92) REVISED BY (DATE): QUAD: Orange, NJ

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0700012 **CO** ESSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BLOOMFIELD AVENUE OVER PECKMAN RIVER **FACILITY** BLOOMFIELD AVENUE

TOWNSHIP VERONA TOWNSHIP

TYPE STONE ARCH **DESIGN** BARREL **MATERIAL** Stone

 # SPANS 2 **LENGTH** 31 ft **WIDTH** 55 ft

CONSTRUCTION DT 1876 **ALTERATION DT** 1900, 1945 **SOURCE** CO. RECORDS/PLANS

DESIGNER/PATENT UNKNOWN **BUILDER** PHILIP H. HARRISON

SETTING / CONTEXT The bridge carries a 4-lane collector road and sidewalks over a small stream in a town center adjacent to a county park. The commercial buildings in the area date from the 1890s to the present. Verona Park, now part of the Essex County Park system, was the center of activity for a thriving resort town in the mid 1800s.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 2-span stone barrel arch bridge is of coursed ashlar and finished with ringstones. It was widened in 1900. In 1945 a freshet damaged the downstream side, and it was repaired and widened with encased stringers supported on concrete abutment extensions. A concrete balustrade was placed at one side and the original masonry parapet remains at the other. One of over 7 stone arch spans in the county, the bridge is not distinguished because of its loss of integrity.

INFOR MATION

PHOTO: 702:40-43 (04/92) REVISED BY (DATE): QUAD: Orange, NJ

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0700013 **CO** ESSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CENTRE STREET (CR 648) OVER THIRD RIVER **FACILITY** CENTRE STREET

TOWNSHIP NUTLEY TOWNSHIP

TYPE BRICK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Brick

 # SPANS 1 **LENGTH** 40 ft **WIDTH** 65 ft

CONSTRUCTION DT 1875ca **ALTERATION DT** 1929, 1965 **SOURCE** STYLE (PLANS)

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane collector road and sidewalks over a shallow stream adjacent to a county park and a residential area dating from the 1910s to the 1920s. Yanticaw Park, to the north of the bridge, was designed by the Olmsted firm.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The brick deck arch bridge with ashlar spandrel walls springs from ashlar subabutments. In 1929 reinforced concrete wingwalls were added, and the span was widened at the south to accommodate a concrete sidewalk. In 1965 the north spandrel wall failed and was repaired with a concrete backup wall. Scored concrete facing was added to the parapets. The span predates the Olmsted park, and its numerous alterations and condition of the brick arch mar its historical and technological significance.

INFOR MATION

PHOTO: 706:36-37,423:43-4 (04/92) REVISED BY (DATE): QUAD: Orange

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0700017 **CO** ESSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED FRANKLIN AVENUE OVER SECOND RIVER **FACILITY** FRANKLIN AVENUE

TOWNSHIP BELLEVILLE TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 29 ft **WIDTH** 44 ft

CONSTRUCTION DT 1939 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT W. A. STICKEL, CO. ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 4-lane collector road and sidewalks over a small channelized stream in a park-like setting adjacent to a restaurant built in the 1920s and a senior citizens center built in the 1960s.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The reinforced concrete slab bridge is supported on a concrete substructure that is part of a concrete flume bordering the stream. Standard design concrete balustrades flank the concrete sidewalks. The short span is an example of a common type, and it is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 706:23-24 (04/92) REVISED BY (DATE): QUAD: Orange, NJ

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0700021 **CO** ESSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED HIGH STREET OVER SECOND RIVER **FACILITY** HIGH STREET

TOWNSHIP ORANGE CITY

TYPE STRINGER **DESIGN** JACK ARCH (BRICK) **MATERIAL** Wrought Iron

 # SPANS 1 **LENGTH** 22 ft **WIDTH** 64 ft

CONSTRUCTION DT 1887 **ALTERATION DT** 1975 **SOURCE** FRHLD MINUTES(PLANS)

DESIGNER/PATENT J. OWENS, CO. ENGINEER **BUILDER** ALBERT SMITH,E.CODDINGTON

SETTING / CONTEXT The bridge carries a 2-lane city street over a small stream in a mixed-use urban community of altered multi-story commercial and residential buildings dating to the early 1900s. The Public Service Company of NJ's Orange electric sub station is located at the south east corner. The original brick building was constructed in 1900ca, and additions at the site date through the 1960s.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The short rolled stringer and brick jack arch bridge supported on ashlar abutments has metal railings flanking the sidewalks. Records state that the stringers are iron. In 1975 a shallow rolled stringer was welded to the bottom flange of 4 stringers. The bridge is a common type from the 1880s through the 1910s, and it is not technologically or historically distinguished. 0700088 and 0700065 are significant examples of the type, and each is located within a historic district.

INFOR MATION

Bibliography:
Essex County Engineers Office, (file 7-A-8A)
Essex County Board of Chosen Freeholders Minutes, 1886-1887.

Physical Description: The single span stringer with brick jack arch bridge is supported on cut stone masonry abutments that are continuous with concrete retaining walls along the stream channel. The Freeholders Minutes state that the span is to be built with iron stringers. The bridge spans 22', and it measures 39.5' wide curb-to-curb and 64' wide out-to-out. The bridge carries 2 sidewalks and it is flanked by metal picket railings. In 1975 the fascia and 1st interior stringers were strengthened at both sides of the bridge. W6 x 16 beams were added under the existing interior stringers and tie rods were welded to the fascia stringers. No plans were located.

Historical and Technological Significance: The 1887 stringer and brick jack arch bridge, reportedly built with iron stringers, is an example of a bridge type that was common for short spans in north eastern New Jersey in the late 1800s. In the 1890s the bridge type continued to be constructed but steel beams were used in place of iron. By 1910, with the development of the concrete deck, brick jack arch decks were no longer being used. The Essex County Freeholders Minutes for the year 1886-1887 indicates the masonry construction was performed by E. J. Coddington, and the iron work was performed by Albert Smith, both being local contractors. The span is one of only two known extant stringer bridges built with iron stringers that are documented as such in the county, and it is the better preserved example. It is thus significant as a rare and early example of what was once a common bridge type (Criterion C).

Boundary Description and Justification: It is the bridge and not its setting that are evaluated as significant. Therefore, the boundary is limited to the span (substructure and superstructure) itself.

PHOTO: 703:6-8 (04/92) REVISED BY (DATE): QUAD: Orange, NJ

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US
November 12, 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0700025 **CO** ESSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED LYONS AVENUE OVER ELIZABETH RIVER **FACILITY** LYONS AVENUE

TOWNSHIP IRVINGTON TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 30 ft **WIDTH** 48 ft

CONSTRUCTION DT 1940 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT C. COLWELL, COUNTY ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane collector road with sidewalks over a low-flow stream carried in a concrete channel. The area is mixed-use with commercial buildings and single-family homes dating to the early 1900s.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 1940 reinforced concrete slab bridge supported on concrete abutments that run continuous with the stream channel walls, has a pier supporting only part of the width of the bridge. Panelled parapets flank the concrete sidewalks. The short span is a late example of a common type and it is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 704:4-5 (04/92) REVISED BY (DATE): QUAD: Elizabeth

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0700027 **CO** ESSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MILLBURN AVENUE OVER WEST BRANCH RAHWAY RIVER **FACILITY** MILLBURN AVENUE

TOWNSHIP MILLBURN TOWNSHIP

TYPE STONE ARCH **DESIGN** ELLIPTICAL **MATERIAL** Stone

 # SPANS 4 **LENGTH** 69 ft **WIDTH** 50 ft

CONSTRUCTION DT 1869 **ALTERATION DT** 1975 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 4-lane one-way collector road and sidewalks over a minor stream in the center of town adjacent to a town park. The span is located in a commercial area dating from the turn-of-the century to the 1920s.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 4-span masonry deck arch bridge has ashlar parapets with granite capping stones. The 2-easternmost spans have been widened by 5' at the north side of the bridge to accommodate a cantilevered slab extension of the sidewalk. Gunite was applied to the intrados in 1975. An example of an early bridge type that has undergone only minor alterations, the span retains much of its original fabric, and it is a significant local example of the type.

INFOR MATION

Bibliography:
Essex County Engineers Office. Beginnings 1700-1800 The Colonial History and Architecture of Millburn, New Jersey.
Essex County Board of Chosen Freeholders Minutes.

Physical Description: The 4-span stone arch bridge is constructed of coursed ashlar masonry. Spanning 69' and measuring 50' wide, the bridge carries a 4- lane road flanked by concrete sidewalks and ashlar parapets with granite cap stones. The two easternmost spans were widened by 5' at the north side of the bridge to accommodate a cantilevered extension of the sidewalk. The modification is not intrusive. This was done to provide access to the building at that corner. In 1975, gunite was applied to the inside of the arch intrados, and the span was repointed. No other alterations to the span were noted. Plans were not located.

Historical and Technological Significance: The 1869 span is significant because it is the longest multi-span and one of the oldest stone arch bridge in the county, and it retains much of its original styling (Criterion C). The coursed ashlar stonework is typical of the 1868-1880 period in Essex County. Of the seven stone arch bridges identified in county as having been built between 1868 and ca. 1875, two are located in National Register-listed Branch Brook Park in Newark and are evaluated as contributing resources (0700068, 0700036), and the other four are not as complete as this example.

Located in the town center of Millburn, most of the buildings in the immediate area date to the late 1800s and early 1900s, and therefore its historic context has not been compromised. Because of the alterations to most of those buildings, however, the area does not appear to have the architectural integrity to be evaluated as a potential historic district. Historically, a span has crossed this location since before the Revolution. During the Revolution, the bridge at this crossing, named the Egbeson's Bridge, was a strategic site during the 1780 Battle of Springfield.

Boundary Description and Justification: Since the bridge is evaluated as individually distinguished, the significant boundary includes both the span itself and the slab addition added in 1955. It does not include the surrounding buildings, most of which are altered.

PHOTO: 702:23-25;1908:20-23 (04/92 JPH (5/9 REVISED BY (DATE): QUAD: Roselle

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0700028 **CO** ESSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED NORTHFIELD AVENUE OVER WEST BRANCH RAHWAY RIVER **FACILITY** NORTHFIELD AVENUE

TOWNSHIP WEST ORANGE TOWNSHIP

TYPE T BEAM **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 32 ft **WIDTH** 70 ft

CONSTRUCTION DT 1938 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT W. A. STICKEL, CO. ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 4-lane median-divided collector road and sidewalks over a small stream adjacent to the South Mountain Arena and Turtle Back Zoo. The area is post-WW II commercial businesses to one side of the bridge and residential to the other. The stream feeds into the Orange Reservoir just south of the bridge.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The reinforced concrete T-beam bridge supported on concrete abutments is on a slight skew. Concrete sidewalks are flanked by standard design concrete balustrades. A chain-link fence was attached to the outside face of the deteriorated balustrades. The span is a representative example of a common bridge type and is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 703:43-44 (04/92) REVISED BY (DATE): QUAD: Caldwell, NJ

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0700034 **CO** ESSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED NORTHFIELD ROAD OVER CANOE BROOK **FACILITY** NORTHFIELD ROAD

TOWNSHIP LIVINGSTON TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 34 ft **WIDTH** 71.5 ft

CONSTRUCTION DT 1923 **ALTERATION DT** 1937 **SOURCE** NJDOT/PLANS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 4-lane median-divided collector road and sidewalks over a small stream flowing in a concrete channel. The area is commercial, and structures date from the 1920s to the present.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased stringer bridge supported on concrete abutments that are continuous with the concrete walls of the stream channel, has standard design concrete balustrades bordering concrete sidewalks. In 1937 the span was widened by 10' to the south and by 40' to the north with encased stringers. One of over 22 pre-WW II stringer bridges in the county, the span is an extensively altered example of its type, and it is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 702:10-12 (04/92) REVISED BY (DATE): QUAD: Caldwell, NJ

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0700035 **CO** ESSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED UNION AVENUE (CR 647) OVER SECOND RIVER **FACILITY** UNION AVENUE (CR 647)

TOWNSHIP BELLEVILLE TOWSHIP

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 49 ft **WIDTH** 40 ft

CONSTRUCTION DT 1918 **ALTERATION DT** **SOURCE** PLANS/COUNTY RECORDS

DESIGNER/PATENT F. REIMER, COUNTY ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane county route and sidewalks over a minor stream through the extension of Branch Brook Park in Belleville. The area is composed of commercial and residential buildings dating from the 1910s to the 1920s. The park extension is a linear park bordering the Second River, and it was acquired in the mid-1920's. The original portion of Branch Brook Park was developed in 1896 as part of the nation's first county park system.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Listed. Branch Brook Park. 01/12/1981. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The reinforced concrete deck arch bridge supported on a concrete substructure has standard-design concrete balustrades. One of over 9 concrete deck arch bridges in the county, the span is a representative example of its type, but it is located in a National Register-listed district. A major element in the park design, it is a contributing resource that helps establish the character of the area. It is one of 7 bridges in the park.

INFOR MATION

Bibliography:
Essex County Parks Department (Plans)., ONJH National Register Files: Essex County, Branch Brook Park, Newark, New Jersey. The Running Brooks and Other Sketches of Early Newark, by Edward S. Rankin, C.E., The Unionist-Gazette, Somerville, NJ, 1930.

Physical Description: The elliptical reinforced concrete arch bridge carries a 2-lane road over a small river in a county park. The bridge spans 49' and measures 40' curb-to-curb. The arch has an 11' rise. Concrete sidewalks are flanked by standard-design concrete balustrades. The span appears unaltered.

Historical and Technological Significance: The 1918 reinforced concrete arch bridge is a representative example of its type, and individually it is not distinguished. However, it is located within the national Register-listed Branch Brook Park and it is a major element in the park design, and it is a contributing resource that helps establish the character of the area. It is one of 7 significant arch bridges in the park. (Criterion C).

Branch Brook Park is one of the original parks developed as part of the nation's first county park system. The Essex County Park Commission was formed in 1895, and they began plans for the development of two major parks, two reservations and four smaller parks. Branch Brook Park was the most important and extensively developed of the original parks. The park was sectioned into three divisions, the southern, middle and northern divisions, and John Bogart and N.F. Barrett, Landscape Architects and Engineers, provided the initial plans for the southern division of the park. They were terminated in 1897 due to cut backs in funds. In 1898, the Olmsted Brothers firm was hired, and they designed general plans for the completion of the southern division and new plans for the other divisions. The Olmsted Brothers firm was established by Frederick Law Olmsted, Sr. who is considered the founder of landscape architecture as a profession in this country. In 1857, he designed Central Park in New York, and he is responsible for many other noted landscape works in the country, such as the National Zoo in Washington, D.C., the United States Military Academy at West Point, the Capital Grounds in Washington, D.C., and the campuses of Harvard, Yale, and Stanford universities and Amherst College, among others.

In the mid-1920s the land along the Second River between Newark and Belleville occupied by Hendricks Copper Mills and which included this span was acquired by the Essex County Park Commission in order to extend Branch Brook Park. In 1927 Caroline Bamberger-Fuld donated over 2000 Japanese Cherry Blossom trees to the Essex County Park Commission, and the trees were planted in the park extension along the Second River. The Essex County Park Commission has added to the collection through the years and it is now the largest display and variety of such trees in the United States attracting visitors from all over the country during the spring season.

Boundary Description and Justification: The bridge is located within a National Register-listed historic district. As a contributing resource to that district, both the span and its surroundings are evaluated as significant. For a detailed boundary description, refer to the National Register file at ONJH.

PHOTO: 706:27-28 (04/92) REVISED BY (DATE): QUAD: Orange, NJ

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0700036 **CO** ESSEX **OWNER** COUNTY **MILEPOINT** 6.0

NAME & FEATURE INTERSECTED WASHINGTON AVENUE OVER SECOND RIVER **FACILITY** WASHINGTON AVENUE (NJ 7, CR 667)

TOWNSHIP BELLEVILLE TOWNSHIP

TYPE STONE ARCH **DESIGN** BARREL **MATERIAL** Stone

 # SPANS 3 **LENGTH** 73 ft **WIDTH** 59.7 ft

CONSTRUCTION DT 1868-69 **ALTERATION DT** **SOURCE** PLAQUE/CO. RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** ADAMS & PARSONS

SETTING / CONTEXT The bridge carries a 4-lane county route and sidewalks over a small stream at the terminus of the extension of Branch Brook Park in Belleville, listed on the National Register. The area opposite the park is the edge of the commercial center of Belleville. A ca. 1910 brick building that was a Public Service Electric power house is located at the south approach of the bridge.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible. Listed. Branch Brook Park. 01/12/1981. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The coursed ashlar 3-span stone arch bridge is detailed with voussoirs. The corresponding parapets have granite cap stones and metal railings. Undermining at the foundations has been repaired with concrete. The bridge is significant because it is a well-preserved and early example of a multi-span stone arch bridge. It predates the establishment of Branch Brook Park, but it contributes to its picturesque character. The span is individually significant and it contributes to the historic district.

INFOR MATION

Bibliography:
Essex County Engineers Office.
Essex County Board of Chosen Freeholders Minutes.
ONJH National Register File: Essex County, Branch Brook Park, Newark, New Jersey.

Physical Description: The 3-span stone arch bridge is built of rusticated coursed ashlar masonry and finished voussoirs and a keystone. Spanning 73' and measuring almost 60' wide, the bridge carries a 4-lane road flanked by concrete sidewalks and ashlar parapets with granite cap stones. A stone at the center of the east parapet is inscribed with the date, the names of the contractors and the names of the county freeholders. County records indicate that the bridge originally constructed in 1868 was shorter, but it caused flooding problems and damage to a local business. The bridge was lengthened in 1869 to alleviate this problem. A concrete invert slab was added, and the masonry was repointed at an unknown date. No other alterations to the span were noted. Plans were not located.

Historical and Technological Significance: The 1868-1869 3-span stone arch bridge is technologically significant because it is the earliest example of a multi span stone arch bridge in the county. Additionally, it is located in the extension division of Branch Brook Park, a National Register-listed historic district. The bridge contributes to the historic character of the park. It is one of seven significant arch spans in Branch Brook Park (Criteria A and C).

The bridge was constructed in 1868 by N.B. Adams and V.M. Parsons, local contractors, and it predates the park. The span is located at the terminus of the extension division of Branch Brook Park, one of the original parks established by the Essex County Park Commission as part of the development of the nation's first county park system. The Essex County Park Commission was formed in 1895, and they began plans for the development of two major parks, two reservations and four smaller parks. Branch Brook Park was the most important and extensively developed of the original parks. The park was divided into three divisions, the southern division was the first section of the park to be developed and construction began in 1896. John Bogart and N.F. Barrett, Landscape Architects and Engineers, provided the initial plans for the southern division of the park. They were terminated in 1897 due to cut backs in funds. In 1898, the Olmsted Brothers firm was hired, and they designed general plans for the completion of the southern division and new plans for the middle and northern divisions. The Olmsted Brothers firm was established by Frederick Law Olmsted, Sr. who is considered the founder of landscape architecture as a profession in this country. In 1857, he designed Central Park in New York, and he is responsible for many other noted landscape works in the country, such as the National Zoo in Washington, D.C., the United States Military Academy at West Point, the Capital Grounds in Washington, D.C., and the campuses of Harvard, Yale, Amherst, and Stanford.

In the mid-1920s the land along the Second River between Newark and Belleville occupied by Hendricks Copper Mills, and which included this bridge, was acquired by the Essex County Park Commission in order to extend Branch Brook Park. In 1927 Caroline Bamberger-Fuld donated over 2000 Japanese Cherry Blossom trees to the Essex County Park Commission to be planted in Branch Brook Park, and the trees were planted in the park extension along the Second River. The Essex County Park Commission has added to the collection through the years and it is now the largest display and variety of such trees in the United States attracting visitors from all over the country during the spring blooming season.

Boundary Description & Justification: The bridge is located on the northeast boundary of the Branch Brook Park Historic District. It appears from the verbal boundary description that the entire span (both elevations) is within the nominated acreage, but only the land adjacent to the west elevation is included. Thus the land adjacent to the east elevation is not evaluated as significant or contributing. For a more complete description of the district's boundaries, refer to the National Register files at ONJH.

PHOTO: 706:32-33 (04/92) REVISED BY (DATE): QUAD: Orange, NJ

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0700037 **CO** ESSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WASHINGTON STREET OVER SECOND RIVER **FACILITY** WASHINGTON STREET

TOWNSHIP ORANGE CITY

TYPE MULTI GIRDER **DESIGN** JACK ARCH (BRICK) **MATERIAL** Steel

 # SPANS 1 **LENGTH** 28 ft **WIDTH** 36 ft

CONSTRUCTION DT 1900ca **ALTERATION DT** 1940ca **SOURCE** STYLE

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane city street with sidewalks over a minor stream in an urban neighborhood of apartments constructed in the 1960s and houses dating to the 1920s. A brick storm sewer empties into the stream at one side of the bridge. The west elevation is hidden by a covered culvert. A building once stood where the channelized stream is. It is now an undeveloped lot.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The built-up multi girder and brick jack arch bridge is supported on ashlar abutments. A metal railing flanks the east sidewalk. The west elevation is hidden by a culvert that connects this span to 0700075 (500' to the west). Two of the jack arch bays have been replaced with concrete slabs. A brick storm sewer that has been strengthened with gunite is located through a wingwall. The altered span is not well preserved, and it is neither historically nor technologically distinguished.

INFOR MATION

Bibliography:
Essex County Engineers Office.

Physical Description: The single span multi-girder with brick jack arches bridge is supported on an ashlar substructure. The riveted girders are composed of two pairs of angles and a web plate. The bridge measures]' in length and carries a 36' wide road and two 12' sidewalks. Concrete encased utilities have been added and two of the jack arch bays have been replaced with concrete slabs. The original decorative metal railing remains at the east fascia. The west fascia is not visible because the span is adjacent to a covered culvert that connects with span 0700075. The stream channel is lined by masonry walls, and a small brick arch storm sewer is located through the southeast wingwall.

Historical and Technological Significance: The multi-girder with brick jack arch bridge is an altered example of what was a common bridge type in northern New Jersey from the late 1800s through about 1910. After 1910, with the development of the reinforced concrete deck, the brick jack arch deck became obsolete. Several examples of rolled beams with brick jack arches are extant in the county, but this span has built up beams. This example has been altered. Two of the bays have been filled with concrete, and the west elevation in hidden by a covered culvert placed ca. 1940.

A better example of the brick jack arch design is 0700063 built in 1898.

PHOTO: 703:9-10 (04/92) REVISED BY (DATE): QUAD: Orange, NJ

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US
November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0700039 **CO** ESSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED VALLEY STREET OVER ELIZABETH RIVER **FACILITY** VALLEY STREET

TOWNSHIP NEWARK CITY

TYPE CULVERT **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 2 **LENGTH** 25 ft **WIDTH** 40 ft

CONSTRUCTION DT 1920ca **ALTERATION DT** **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane city street and sidewalks over a small stream in an urban residential neighborhood of apartment buildings and 2-family homes dating from the 1920s to the 1950s.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 2-cell concrete culvert retains the original metal pipe railing along the east sidewalk. The west side of the span is not visible from Valley Road. According to county records, at the west side, the 2 cells split into 2 separate pipes and continue underground. The culvert, constructed as part of the flood control plan of the 1920s, is a common type. This span is not technologically innovative or historically distinguished.

INFOR MATION

PHOTO: 703:13-15 (04/92) REVISED BY (DATE): QUAD: Elizabeth

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0700040 **CO** ESSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED YALE AVENUE OVER ELIZABETH RIVER **FACILITY** YALE AVENUE

TOWNSHIP IRVINGTON TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 32 ft **WIDTH** 36.5 ft

CONSTRUCTION DT 1927 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT W. A. STICKEL, CO. ENGINEER **BUILDER** NORTHERN CONSTRUCTION COMPA

SETTING / CONTEXT The bridge carries a 2-lane collector road and sidewalks over a small watercourse carried in a concrete channel. The area is residential with single-family homes constructed from the 1910s to the 1940s.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 32' span encased stringer bridge supported on concrete abutments has standard design concrete balustrades. The short span is an example of a common type in the state. One of over 22 stringer bridges in the county from the pre-World War II era, the span is a representative example of a common bridge type and is not technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 704:6-7 (04/92) REVISED BY (DATE): QUAD: Elizabeth

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0700044 **CO** ESSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED ORTON ROAD OVER PINE BROOK **FACILITY** ORTON ROAD

TOWNSHIP WEST CALDWELL TOWNSHIP

TYPE STONE ARCH **DESIGN** BARREL **MATERIAL** Stone

 # SPANS 3 **LENGTH** 42 ft **WIDTH** 20.7 ft

CONSTRUCTION DT 1869 **ALTERATION DT** 1959, 1991 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane residential street and one sidewalk over a minor stream in a neighborhood of predominantly post-WW II era single family houses. Several early houses are contiguous to the bridge. The Samuel Orton Harrison House, built in 1793ca, is listed on the National Register 6/30/80. A house built in 1835ca is located across the street from the Harrison House. A 1900ca house is located at the other side of the span.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 3-span stone masonry arch bridge supported on an ashlar substructure has rubble coursed parapets and spandrel walls. A timber sidewalk flanked by a timber railing was added at the upstream side in 1959. In 1991 the intrados were lined with concrete and the stonework was repointed. An invert slab was added under the span, and it forms a small spillway. The bridge has been altered, and it is a technologically undistinguished example of a locally well-represented type.

INFOR MATION

PHOTO: 701:6-7 (04/92) REVISED BY (DATE): QUAD: Caldwell, NJ

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0700045 **CO** ESSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED OAKVIEW AVENUE OVER EAST BRANCH RAHWAY RIVER **FACILITY** OAKVIEW AVENUE

TOWNSHIP MAPLEWOOD TOWNSHIP

TYPE STRINGER **DESIGN** JACK ARCH (CONCRETE) **MATERIAL** Steel

 # SPANS 1 **LENGTH** 34 ft **WIDTH** 35.7 ft

CONSTRUCTION DT 1910ca **ALTERATION DT** 1991 **SOURCE** STYLE

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane collector road and sidewalks over a small stream bordered by rubble stone walls. The bridge is located adjacent to a town park.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 01/10/92

SUMMARY The encased stringer and concrete jack arch bridge is supported on concrete abutments. In 1991 a new concrete deck was placed at the end bays, the fascia stringers were encased in concrete, and concrete parapets were added. The tie rods are visible at the deck underside. An altered example of a common type, the bridge is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 703:39-40 (04/92) REVISED BY (DATE): QUAD: Roselle

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0700046 **CO** ESSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PIERSON ROAD OVER EAST BRANCH RAHWAY RIVER **FACILITY** PIERSON ROAD

TOWNSHIP MAPLEWOOD TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 32 ft **WIDTH** 30 ft

CONSTRUCTION DT 1916 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane collector road and sidewalks over a small branch of a river adjacent to the Maplewood Country Club. A nursery located to the northeast of the bridge occupies the buildings of the former Piersons Mill constructed in 1831.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 03/12/01

SUMMARY The 32'-long encased stringer bridge supported on concrete abutments has custom concrete parapets with diamond shaped cut-outs and diamond panels on the posts. The parapet design is common for the period in the county (see 0701565, 0701065) and its presence does not singularly make any bridge individually significant. The superstructure itself is a representative example of the most common pre-WW II bridge type in the state. There are over 15 pre-1930 examples in Essex County alone. The bridge post-dates the adjacent mill structures, and it is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 703:32-33 (04/92) REVISED BY (DATE): QUAD: Roselle

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0700047 **CO** ESSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED OAKLAND ROAD OVER EAST BRANCH RAHWAY RIVER **FACILITY** OAKLAND ROAD

TOWNSHIP MAPLEWOOD TOWNSHIP

TYPE STRINGER **DESIGN** JACK ARCH (BRICK) **MATERIAL** Steel

 # SPANS 1 **LENGTH** 45 ft **WIDTH** 26.6 ft

CONSTRUCTION DT 1900ca **ALTERATION DT** 1992 **SOURCE** STYLE

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane connector road with sidewalks over a small branch of a river bordered by masonry walls. A stone spillway is located about 20' downstream of the bridge. The area is predominantly residential dating from the 1910s to the 1920s.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The slightly skewed stringer and brick jack arch bridge supported on ashlar abutments carries the original decorative metal railings flanking the concrete sidewalks. In 1992 two end jack arch bays collapsed and were repaired with concrete-filled metal deck forms. One of over 8 brick jack arch spans in the county, the undocumented bridge has been altered, and it is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 703:36-38 (04/92) REVISED BY (DATE): QUAD: Roselle

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0700053 **CO** ESSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED GLEN AVENUE OVER WEST BRANCH RAHWAY RIVER **FACILITY** GLEN AVENUE

TOWNSHIP MILLBURN TOWNSHIP

TYPE DECK GIRDER **DESIGN** JACK ARCH (CONCRETE) **MATERIAL** Steel

 # SPANS 1 **LENGTH** 47 ft **WIDTH** 34 ft

CONSTRUCTION DT 1908 **ALTERATION DT** **SOURCE** COUNTY RECORDS

DESIGNER/PATENT J. OWENS, CO. ENGINEER **BUILDER** GOELLER IRON WORKS

SETTING / CONTEXT The bridge carries a 2-lane road and sidewalks over a small branch of a river in a wooded residential area of single-family homes dating from the 1910s to the 1920s. The road is closed to vehicular traffic at the bridge.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The riveted deck girder with floorbeams bridge supported on concrete abutments has concrete jack arches spanning between the floorbeams. Pipe railings flank the concrete sidewalks. The bridge is closed to traffic due to its deteriorated condition. A representative example of the over ten stringer with jack arch bridges in the county, the span is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 702:19-20 (04/92) REVISED BY (DATE): QUAD: Roselle

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0700054 **CO** ESSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED RIDGEWOOD ROAD OVER WEST BRANCH RAHWAY RIVER **FACILITY** RIDGEWOOD ROAD

TOWNSHIP MILLBURN TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 46 ft **WIDTH** 30.2 ft

CONSTRUCTION DT 1929 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT W. A. STICKEL, CO. ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane collector road and sidewalks over a small branch of a river bordered by masonry walls and is set at the southernmost terminus of a town park. The area is residential with single-family homes dating from the 1900s to the 1950s.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span encased stringer bridge supported on concrete abutments has standard-design concrete balustrades with nicely detailed end posts flanking the concrete sidewalks. One of over 22 pre-WW II stringer bridges in the county, the span is a representative example of the most common pre-World War II bridge type and design in the state, and it is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 702:26-27 (04/92) REVISED BY (DATE): QUAD: Roselle

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0700055 **CO** ESSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WEST STREET OVER SECOND RIVER **FACILITY** WEST STREET

TOWNSHIP BLOOMFIELD TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 48 ft **WIDTH** 30.2 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane collector road and sidewalks over a shallow stream bordered by masonry retaining walls in an area developed in the 1900s and consisting of single and 2-family homes and light industrial buildings.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased stringer bridge supported on concrete abutments has standard design concrete balustrades flanking the concrete sidewalks. The abutments are contiguous to a masonry retaining wall along the stream edges. One of over 22 pre-WW II stringer bridges in the county, the span is an example of a common bridge type in the state and it is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 706:16-17 (04/92) REVISED BY (DATE): QUAD: Orange, NJ

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0700057 **CO** ESSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BRIGHTON AVENUE OVER SECOND RIVER **FACILITY** BRIGHTON AVENUE

TOWNSHIP EAST ORANGE CITY

TYPE BRICK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Brick

 # SPANS 1 **LENGTH** 24 ft **WIDTH** 36 ft

CONSTRUCTION DT 1889 **ALTERATION DT** **SOURCE** COUNTY RECORDS

DESIGNER/PATENT J. OWENS, COUNTY ENGINEER **BUILDER** E. J. CODDINGTON

SETTING / CONTEXT The bridge carries a 2-lane collector road and sidewalks over a minor stream in a residential area consisting predominantly of altered single-family homes dating from the 1890s to the 1920s. The residential area is bordered by commercial buildings dating from the 1920s to the 1970s. The bridge is one of four brick arch spans in the county. The bridge type is not uncommon in northern New Jersey.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The shallow rise brick deck arch bridge springs from an ashlar substructure, and it has ashlar spandrel walls. Metal picket railings flank slate-paved sidewalks. The underside of the arch is deformed in places. The span is not well-preserved, and more complete examples (0700077) of the type are represented in the county. Its size (24' span) and loss of structural integrity make it technologically undistinguished.

INFOR MATION

PHOTO: 706:12-13 (04/92) REVISED BY (DATE): QUAD: Orange, NJ

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0700059 **CO** ESSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BERKELEY AVE OVER SECOND RIVER **FACILITY** BERKELEY AVENUE

TOWNSHIP BLOOMFIELD TOWNSHIP

TYPE THRU GIRDER **DESIGN** PARTIALLY ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 107 ft **WIDTH** 28 ft

CONSTRUCTION DT 1922 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane collector road and sidewalks over a shallow stream and the abandoned Morris Canal R-O-W in a residential area developed in the 1920s. A town park is contiguous to the bridge. The canal R-O-W was filled in the late-1920s, but it is listed in the National Register.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Historic District Status Unresolved.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 2-span thru girder bridge is supported on concrete abutments and steel pier bents. Metal railings flank the cantilevered concrete sidewalks. The floorbeams and stringers are encased. One of over 8 pre-WW II thru girder bridges in the county, the span is an altered example of a common type, and it is not technologically innovative. The span, constructed just prior to the abandonment of the Morris Canal, is not historically associated with the heyday of the canal era.

INFOR MATION

PHOTO: 706:18-20 (04/92) REVISED BY (DATE): QUAD: Orange, NJ

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0700060 **CO** ESSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MILL STREET OVER SECOND RIVER **FACILITY** MILL STREET

TOWNSHIP BELLEVILLE TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 40 ft **WIDTH** 30.2 ft

CONSTRUCTION DT 1942 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT C. COLWELL, COUNTY ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane collector road and sidewalks over a shallow watercourse in a residential area that includes multi-level apartments and condominiums. The area was developed from the 1940s to the present.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 1942 encased stringer bridge supported on concrete abutments has standard design concrete balustrades with paneled posts flanking the concrete sidewalks. One of over 22 pre-1945 stringer bridges in the county, the span is an example of a common type in the state, and it is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 706:21-22 (04/92) REVISED BY (DATE): QUAD: Orange, NJ

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0700063 **CO** ESSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED HARRISON STREET OVER THIRD RIVER **FACILITY** HARRISON STREET

TOWNSHIP NUTLEY TOWNSHIP

TYPE STRINGER **DESIGN** JACK ARCH (BRICK) **MATERIAL** Steel

 # SPANS 1 **LENGTH** 39 ft **WIDTH** 30.4 ft

CONSTRUCTION DT 1898 **ALTERATION DT** **SOURCE** COUNTY RECORDS

DESIGNER/PATENT J. OWENS, CO. ENGINEER **BUILDER** E. B. HEDDON, F.W. SHRUMP

SETTING / CONTEXT The bridge carries a 2-lane collector road and sidewalks over a small stream bordered by gabion retaining walls. The structures in the area are commercial and residential constructed from the 1920s to the 1950s.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 7/9/90

SUMMARY The skewed stringer and brick jack arch bridge supported on ashlar abutments has metal picket railings flanking the concrete sidewalks. The abutments are continuos with gabion and concrete retaining walls that line the watercourse in this section. The most complete of the over 8 stringer and brick jack arch bridges in the county, the span is an example of a common local type from the 1880s to the early 1900s. It was evaluated by the SHPO as not technologically nor historically distinguished.

INFOR MATION

PHOTO: 707:5-7 (04/92) REVISED BY (DATE): QUAD: Orange, NJ

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0700065 **CO** ESSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED VALLEY ROAD OVER TONEY'S BROOK **FACILITY** VALLEY ROAD

TOWNSHIP MONTCLAIR TOWNSHIP

TYPE STRINGER **DESIGN** JACK ARCH (BRICK) **MATERIAL** Steel

 # SPANS 1 **LENGTH** 23 ft **WIDTH** 95 ft

CONSTRUCTION DT 1899 **ALTERATION DT** **SOURCE** COUNTY RECORDS

DESIGNER/PATENT J. OWENS, CO. ENGINEER **BUILDER** E. B. HEDDON, J. YOST

SETTING / CONTEXT The bridge is flared to carry the intersection of two, 2-lane streets and sidewalks over a small brook, and it is located adjacent to a town park and the State Register-listed (NR pending) Erwin Park HD. The east side of Central Ave. is the district boundary, so the bridge is clearly excluded from the district. The area is an architecturally and historically significant mix of houses from 1880s Italianate through academic Colonial Revival houses.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Erwin Park Historic District (adjacent). Eligible 09/29/86. NJ Register Listed 09/29/86. Noncontributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The stringer and brick jack arch bridge supported on ashlar abutments is splayed to accommodate a road intersection. Metal picket railings flank a concrete sidewalk and a slate sidewalk. The bridge is a well-preserved example of a common type in the county from the 1885-1910, but it is not individually distinguished. It was not included in the Erwin Park HD which uses the east side of Central Ave. as its west boundary.

INFOR MATION

Bibliography:
Essex County Engineers Office.
Essex County Board of Chosen Freeholders Minutes 1899-1900.
NJ and National Registers of Historic Places as of December 31, 1988, by NJDEP

Physical Description: The single span steel stringer and brick jack arch bridge is supported on ashlar abutments. The bridge is flared to support the Y-intersection of Valley Road and Central Avenue, and the span carries 2 sidewalks flanked by metal picket railings. The bridge spans 23' and the flared width measures an average of 95'. Tie rods are visible at the deck underside. The railing at one side of the bridge is set in concrete that is not from the original construction. Concrete retaining walls support the stream channel to one side of the bridge. No plans were located.

Historical and Technological Significance: The steel stringer and brick jack arch bridge constructed in 1899 is technologically significant because it is a well-preserved example of its type. The span is historically significant because it abuts an historic district. The span was constructed during the period of significance and contributes to the historic character of the historic district's setting. The stringer and brick jack arch span is an example of a common bridge type in the county from the late 1800s through about 1910. After 1910, with the development of the reinforced concrete deck, the brick jack arch deck became obsolete. The span is flared and measures wider than most spans of its type. The Essex County Freeholders Minutes indicate the masonry work was performed by Jacob Yost and the steel work was performed by Eugene B. Heddon, both local NJ contractors.

The span abuts the Erwin Park Historic District (Montclair Multiple Resource Area) listed on the State Register 9/29/86, and it is a potential National Register district. It is an area of well-preserved architecturally significant single-family houses dating from 1870ca Italianate through academic Colonial Revival with picturesque Colonial Revival predominating. In the late 1800s, the railroad was constructed making this area easily accessible from New York City, and the development of Montclair was spurred and promoted by the railroad as a residential community for New York City businessmen. Most of the houses in the area are well-maintained and retain their turn-of-the century character.

PHOTO: 705:39-42 (04/92) REVISED BY (DATE): QUAD: Orange, NJ

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0700066 **CO** ESSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED OAK PLACE AND FOREST STREET OVER TONEY'S BROOK **FACILITY** OAK PLACE & FOREST STREET

TOWNSHIP MONTCLAIR TOWNSHIP

TYPE STRINGER **DESIGN** JACK ARCH (BRICK) **MATERIAL** Steel

 # SPANS 1 **LENGTH** 49 ft **WIDTH** 182 ft

CONSTRUCTION DT 1908 **ALTERATION DT** 1990 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT J. OWENS, CO. ENGINEER **BUILDER** DOVER BOILER WORKS

SETTING / CONTEXT The bridge carries a portion of a 4-way intersection of 2-lane streets and sidewalks over a small stream in a residential neighborhood developed in the 1920s. The bridge is skewed.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 6/6/91

SUMMARY The skewed stringer and brick jack arch bridge supported on ashlar abutments is flared with a steel thru girder at the long fascia. In 1990 two steel stringers were added adjacent to the deteriorated girder and many stringers were replaced. The span was built by Dover Boiler Works, a New Jersey firm active from 1901 through 1960. One of over 8 stringer and brick jack arch bridges in the county, the span has been altered, and it is not historically or technologically distinguished.

INFOR MATION

PHOTO: 705:43-44,1-3 (04/92) REVISED BY (DATE): QUAD: Orange, NJ

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0700068 **CO** ESSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BRIDGE STREET OVER SECOND RIVER **FACILITY** BRIDGE STREET

TOWNSHIP BELLEVILLE TOWNSHIP

TYPE STONE ARCH **DESIGN** BARREL **MATERIAL** Stone

 # SPANS 1 **LENGTH** 33 ft **WIDTH** 30.5 ft

CONSTRUCTION DT 1867 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane collector road over a small stream in the extension to Branch Brook Park in Belleville adjacent to a commercial and residential area with structures dating from the 1910s to the 1970s. Branch Brook Park is one of the original parks developed as part of the nation's first county park system. The Essex County Park Commission began development of the park in 1896. The extension of the park dates to the mid 1920s.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Individually Eligible. Listed. Branch Brook Park. 01/12/1981. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 1867 coursed ashlar stone arch bridge with ringstones has corresponding parapets with replacement concrete caps. The stone has a vermiculated finish. The west parapet is damaged. The single-span bridge is a large and complete example of the early bridge type, and it is the oldest documented bridge in the county. Significant in its own right, it predates the National Register-listed park in which it is located, but it contributes to the historic character of the area.

INFOR MATION

Bibliography:
Essex County Engineers Office.
Essex County Board of Chosen Freeholders Minutes.
ONJH National Register File: Essex County, Branch Brook Park, Newark, New Jersey.

Physical Description: The single-span stone arch bridge is constructed of vermiculated coursed ashlar and finished with ringstones. Spanning 33' and measuring almost 30'-6" wide, the bridge carries a 2-lane road flanked by a concrete sidewalk and ashlar parapets with granite cap stones. A keystone on the east elevation is inscribed with the date, 1867, and the county freeholder minutes confirm the date of construction. The west parapet has missing stones at the north corner. No alterations to the span were noted. Plans were not located.

Historical and Technological Significance: The 1867 stone arch bridge is technologically significant because it is the earliest example of a stone arch bridge in the county, and it is well-preserved. Additionally, it is located in the extension division of Branch Brook Park. The park is listed in the National Register as a historic district, and the span is historically distinguished because it contributes to the historic character of the park. It is one of seven significant arch spans in Branch Brook Park (Criteria A and C).

Branch Brook Park is one of the original parks established as part of the development of the nation's first county park system. The Essex County Park Commission was formed in 1895, and they began plans for the development of two major parks, two reservations and four smaller parks. Branch Brook Park was the most important and extensively developed of the original parks. The park was divided into three divisions, the southern division was the first section of the park to be developed and construction began in 1896. John Bogart and N.F. Barrett, Landscape Architects and Engineers, provided the initial plans for the southern division of the park. They were terminated in 1897 due to cut backs in funds. In 1898, the Olmsted Brothers firm was hired, and they designed general plans for the completion of the southern division and new plans for the middle and northern divisions. The Olmsted Brothers firm was established by Frederick Law Olmsted, Sr. who is considered the founder of landscape architecture as a profession in this country. In 1857, he designed Central Park in New York, and he is responsible for many other noted landscape works in the country, such as the National Zoo in Washington, D.C., the United States Military Academy at West Point, the Capital Grounds in Washington, D.C., and the campuses of Harvard, Yale, and Stanford universities and Amherst College among others.

In the mid-1920s the land along the Second River between Newark and Belleville occupied by Hendricks Copper Mills including this span, was acquired by the Essex County Park Commission in order to extend Branch Brook Park. In 1927 Caroline Bamberger-Fuld donated over 2000 Japanese Cherry Blossom trees to the Essex County Park Commission to be planted in Branch Brook Park, and the trees were planted in the park extension along the Second River. The Essex County Park Commission has added to the collection through the years and it is now the largest display and variety of such trees in the United States attracting visitors from all over the country during the spring blooming season.

Boundary Description and Justification: The bridge is located within the Branch Brook Park Historic District. The area on all sides of the span is included in the nomination. For a detailed description of the exact boundaries of the district, refer to the nomination file at ONJH.

PHOTO: 706:29-31 (04/92) REVISED BY (DATE): QUAD: Orange, NJ

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0700071 **CO** ESSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED FAIRFIELD AVENUE OVER KANE BROOK **FACILITY** FAIRFIELD AVENUE

TOWNSHIP WEST CALDWELL TOWNSHIP

TYPE STRINGER **DESIGN** JACK ARCH (CONCRETE) **MATERIAL** Steel

 # SPANS 1 **LENGTH** 28 ft **WIDTH** 27.3 ft

CONSTRUCTION DT 1910ca **ALTERATION DT** **SOURCE** STYLE

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane collector road over a small stream in an industrial park developed in the 1960s to 1970s.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The stringer and concrete jack arch bridge supported on stone abutments from an earlier span has plain concrete parapets. The tie rods are visible at the deck underside. A reinforced concrete culvert pipe with headwall is adjacent to the bridge at the downstream side. The span is an example of a common type, and it is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 701:39-41 (04/92) REVISED BY (DATE): QUAD: Caldwell, NJ

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0700072 **CO** ESSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED SPRINGFIELD AVENUE OVER ELIZABETH RIVER **FACILITY** SPRINGFIELD AVENUE

TOWNSHIP IRVINGTON TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 23 ft **WIDTH** 59 ft

CONSTRUCTION DT 1941 **ALTERATION DT** **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 4-lane collector road and sidewalks over a small low-flow stream carried by a concrete channel with masonry retaining walls. The bridge is set in a commercial district of structures dating from the early 1900s to the 1950s.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The reinforced concrete slab bridge supported on ashlar abutments from an earlier span has a standard design balustrade at the upstream side. The downstream side has been widened in kind to support a parking area, and the fascia is not visible. The span is an example of a common type, and it is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 703:16-17 (04/92) REVISED BY (DATE): QUAD: Elizabeth

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0700073 **CO** ESSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED OLD MILL ROAD OVER GREEN BROOK **FACILITY** OLD MILL ROAD

TOWNSHIP NORTH CALDWELL BOROUGH

TYPE BRICK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Brick

 # SPANS 1 **LENGTH** 29 ft **WIDTH** 27.3 ft

CONSTRUCTION DT 1875 **ALTERATION DT** **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge spans over a minor watercourse and carries a 2-lane residential street that dead ends at the Green Brook Country Club golf course. The homes along the short street were constructed in the post-WW II era. A historical marker notes that several mills were in operation during the 1800s along Green Brook including Sindle's Grist and Saw Mill, "the lower mill," near Old Mill Rd. operating from late 1700s to 1900.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The brick deck arch bridge springs from a stone substructure and has rubble-coursed stone spandrel walls and parapets. The intrados has been gunited, and the parapets have been repointed in a non-historic manner. A gabion wall was added in front of the west stone wingwall. The altered span is one of 4 brick arches in the county, and it is neither technologically innovative nor historically distinguished based on its appearance and alterations. A more distinguished example is 0700077.

INFOR MATION

PHOTO: 701:42-44 (04/92) REVISED BY (DATE): QUAD: Caldwell, NJ

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0700074 **CO** ESSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CLEVELAND STREET OVER SECOND RIVER **FACILITY** CLEVELAND STREET

TOWNSHIP ORANGE CITY

TYPE STRINGER **DESIGN** JACK ARCH (BRICK) **MATERIAL** Steel

 # SPANS 1 **LENGTH** 50 ft **WIDTH** 36 ft

CONSTRUCTION DT 1897 **ALTERATION DT** **SOURCE** FREEHOLDERS MINUTES

DESIGNER/PATENT J. OWENS, CO. ENGINEER **BUILDER** E. B. HEDDEN, F.W. SHRUMP

SETTING / CONTEXT The bridge carries a 2-lane collector road and sidewalks over a small stream carried in a concrete channel through an urban residential area of altered houses dating from 1900 through 1930. The Public Service Corporation of NJ Orange Sub Station is located at the south west corner. The original brick building was constructed in 1910ca, and additions at the site date to the 1960s.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span stringer and brick jack arch bridge supported on ashlar abutments has metal picket railings bordering concrete sidewalks. The span is an example of a common type in the county built from the mid-1880s through the 1910s, and it is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 1908:16-19 (04/92) REVISED BY (DATE): QUAD: Orange, NJ

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0700075 **CO** ESSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED NORTH DAY STREET OVER SECOND RIVER **FACILITY** NORTH DAY STREET

TOWNSHIP ORANGE CITY

TYPE MULTI GIRDER **DESIGN** JACK ARCH (BRICK) **MATERIAL** Steel

 # SPANS 1 **LENGTH** 24 ft **WIDTH** 36 ft

CONSTRUCTION DT 1900ca **ALTERATION DT** 1970ca **SOURCE** STYLE (STYLE)

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane collector road and sidewalks over a small low-flow stream carried by a concrete channel in an urban residential area of 2-family homes constructed in the 1910s and low-income apartments constructed in the 1960s.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The built-up girder and brick jack arch bridge is supported on ashlar abutments that are continuous with the concrete retaining walls on the west and a concrete culvert on the east which connects it to 0700037. The original railings were replaced with chain link fences. One of over 8 brick jack arch spans in the county, the bridge is not well-preserved, and it is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 703:11-12 (04/92) REVISED BY (DATE): QUAD: Orange, NJ

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0700076 **CO** ESSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MILL STREET & BRANCH BROOK PARK OVER SECOND RIVER **FACILITY** MILL STREET & BRANCH BROOK PARK

TOWNSHIP NEWARK CITY

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 69 ft **WIDTH** 58 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT A. BURTON COHEN, CONS. ENG. **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane collector road and sidewalks over a minor stream carried in a concrete channel through a picturesque park. Branch Brook Park was established in 1895 and landscaping began in 1896. The bridge lies in the area known as the extension division, which was acquired and developed in the mid 1920s, in the midst of a cherry tree collection that attracts visitors countrywide in the spring.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Individually Eligible. Listed. Branch Brook Park Historic District. 01/12/1981. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The handsome concrete deck arch bridge supported on concrete abutments has concrete parapets with decorative individual concrete cap stones and octagonal end posts. The bridge is technologically noteworthy because it is well-detailed. The span is one of 4 significant arch spans constructed in conjunction with the development of the nation's first county park system, and it contributes to the historic character of the park.

INFOR MATION

Bibliography:
Essex County Parks Department (Plans).
ONJH National Register Files: Essex County, Branch Brook Park, Newark, New Jersey. The Running Brooks and Other Sketches of Early Newark, by Edward S. Rankin, C.E., The Unionist-Gazette, Somerville, NJ, 1930.

Physical Description: The well-detailed elliptical reinforced concrete arch bridge carries a 2-lane road over a footpath and a small river in a county park. The bridge spans 66' and measures 58'-8" out-to-out. The arch measures 1'-6" at the crown and has an 8' rise. The sidewalks are flanked by concrete parapets with decorative cap stones. The spandrel walls, wingwalls and parapets are bush-hammered. Decorative concrete pilasters extend to concrete lampposts, but the original metal housings for the luminaries do not remain. The span is unaltered.

Historical and Technological Significance: The 1930 reinforced concrete arch bridge is technologically significant because it is a nicely detailed and well-preserved example of its type, and it was designed by a prominent civil engineer. The span is historically distinguished because it is a prominent feature in the National Register-listed Branch Brook Park. It is one of 4 arch bridges constructed between 1898 and 1930 as part of the development of the nation's first county park system, and it is one of seven total significant arch bridges in the park (Criteria A and C).

The bridge was designed by A. Burton Cohen (1883-1956), a consulting engineer based in New York City. He graduated from Purdue University with an engineering degree in 1910 and served as a bridge engineer for the Delaware Lackawanna & Western Railroad until 1920 when he established his own consulting firm. He was noted for his designs of concrete arch bridges, which include the 1926 open-spandrel ribbed concrete arch JFK Boulevard over PATH and Conrail span in Jersey City (0900008), and the Corning Concrete Arch Bridge in Corning, New York, which is the first bridge in the United States to be constructed with cast-in-place concrete piles.

Branch Brook Park is one of the original parks developed as part of the nation's first county park system, and it is listed on the National Register. The Essex County Park Commission was formed in 1895, and they began plans for the development of two major parks, two reservations and four smaller parks. Branch Brook Park was the most important and extensive of the original parks. The park was sectioned into three divisions, the southern, middle and northern divisions, and John Bogart and N.F. Barrett, Landscape Architects and Engineers, provided the initial plans for the southern division of the park. They were terminated in 1897 due to cut backs in funds. In 1898, the Olmsted Brothers firm was hired, and they designed general plans for the completion of the southern division and new plans for the middle and northern divisions. The Olmsted Brothers firm was established by Frederick Law Olmsted, Sr. who is considered the founder of landscape architecture as a profession in this country. In 1857, he designed Central Park in New York, and he is responsible for many other noted landscape works in the country, such as the National Zoo in Washington, D.C., the United States Military Academy at West Point, the Capital Grounds in Washington, D.C., and the campuses of Harvard, Yale, and Stanford universities and Amherst College, among others.

In the mid-1920s the land along the Second River between Newark and Belleville occupied by Hendricks Copper Mills was acquired by the Essex County Park Commission in order to extend Branch Brook Park. In 1927 Caroline Bamberger-Fuld donated over 2000 Japanese Cherry Blossom trees to the Essex County Park Commission to be planted in Branch Brook Park, and the trees were planted in the park extension along the Second River. In 1930 the park road paralleling the Second River known as Mill Street was realigned, and the bridge was constructed amidst the extensive cherry blossom tree collection. The Essex County Park Commission has added to the collection through the years and it is now the largest display and variety of such trees in the United States attracting visitors from all over the country during the spring blooming season.

Boundary Description and Justification: The bridge is located within a National Register-listed historic district. Therefore, the span and surroundings have been evaluated as significant. For a complete description of the boundaries, refer to the actual National Register nomination on file at ONJH.

PHOTO: 706:25-26 (04/92) REVISED BY (DATE): QUAD: Orange, NJ

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0700077 **CO** ESSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BRANCH BROOK PARK ROAD OVER FOOTPATH **FACILITY** BRANCH BROOK PARK ROAD

TOWNSHIP NEWARK CITY

TYPE BRICK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Brick

 # SPANS 1 **LENGTH** 28 ft **WIDTH** 40.7 ft

CONSTRUCTION DT 1898 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT ESSEX COUNTY PARK COMMISSION **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane park road and sidewalks over a footpath in a county park. Branch Brook Park, listed on the National Register, is one of the nation's first county parks. The Essex County Park Commission, established in 1895, began construction of the southernmost division of the park where the bridge is located in 1896.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Individually Eligible. Listed. Branch Brook Park Historic District. 01/12/1981. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 1898 brick elliptical arch span ranks as one of the most architectonic bridges in the region. It is detailed with oversized rusticated voussoirs and keystone and matching pilasters. The spandrel walls and wingwalls are blond brick. In addition to its technological significance, historically the span is significant because it was built as part of the development of the nation's first county park system, and it is a contributing resource.

INFORMATION

Bibliography:
Essex County Engineers Office (Plans).
ONJH National Register File: Essex County, Branch Brook Park, Newark, New Jersey. Report of the Essex County Park Commission, 1901.

Physical Description: The richly detailed elliptical brick arch bridge spans 28', and carries a park road and sidewalks over a footpath in a county park. The bridge is flanked by plain concrete parapets with plain concrete pylons. The spandrel walls are constructed of buff brick, and the voussoirs are of stone masonry. Stone masonry pilasters are located at the corner of the brick-faced wing walls. The bridge has not been altered.

Historical and Technological Significance: The handsome brick arch bridge, constructed in 1898, is technologically significant because it ranks as one of the most architectonic bridges in the region, and it is an uncommon type. It is historically distinguished because it is one of 4 bridges constructed between 1898 and 1930 in National Register-listed Branch Brook Park Historic District, a Olmsted Brothers-designed park. The Newark park was developed as the centerpiece of the nation's first county park system. It is one of a total of seven significant arch bridges in Branch Brook Park, and all are evaluated as contributing resources (Criteria A and C).

The Essex County Park Commission was formed in 1895, and they began plans for the development of two major parks, two reservations and four smaller parks. Branch Brook Park was the most important and extensively developed of the original parks. The park was sectioned into 3 divisions. The southern division, where this span is located, was the first section of the park to be developed, and construction began in 1896. John Bogart and N.F. Barrett, Landscape Architects and Engineers, provided the initial plans for the southern division. They were terminated in 1897 due to cut backs in funds.

In 1898, the Olmsted Brothers firm was hired, and it appears that the firm revised the Bogart and Barrett plans for the completion of the southern division and developed the plans for the middle and northern divisions. The bridge plans do not specify a designer, so it is not known for certain if Olmsted detailed the bridge, but it is in the style of their work. The plans do not match exactly the bridge as built. The Olmsted Brothers firm was established by Frederick Law Olmsted, Sr. (1822-1903) who is considered the founder of landscape architecture as a profession in this country. In 1857, he designed Central Park in New York, and he and his firm are responsible for many other noted landscape works in the country, such as the National Zoo in Washington, D.C., the United States Military Academy at West Point, the Capital Grounds in Washington, D.C., and the campuses of Harvard, Yale, Amherst, and Stanford.

The southern division of Branch Brook Park was designed to be comparatively contrived and ornate with special expensive architectural stone ornaments and extensive specimen plantings. The brick arch bridge is the larger of two such detailed masonry spans located in the southern division of the park. The other is not included in the survey because it is less than 20' in length and is therefore classified as a culvert.

Boundary Description and Justification: The bridge is a contributing resource in a National Register-listed historic district. Therefore, the span and its surroundings are evaluated as significant. For a precise description of the district boundaries, refer to the National Register file at NJHPO.

PHOTO: 706:40 707:37 (04/92) REVISED BY (DATE): QUAD: Orange, NJ

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0700079 **CO** ESSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WEEQUAHIC PARK ROAD OVER NEW JERSEY TRANSIT **FACILITY** WEEQUAHIC PARK ROAD

TOWNSHIP NEWARK CITY

TYPE OPEN SPANDREL RIBBED ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 222 ft **WIDTH** 40 ft

CONSTRUCTION DT 1931 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT A. B. COHEN, CONSULTING ENG **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane collector road and sidewalks over a slab bridge carrying NJ Transit tracks and US 22, which the slab bridge also crosses. The bridge is set in a county park, Weequahic Park. The park is one of the original county parks established in the late 1890s by the Essex County Park Commission, and was part of the nation's first county park system.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The open-spandrel ribbed concrete arch is composed of 4 ribs on a concrete substructure. The inner arches have spandrel columns while the outer ones are finished with continuous concrete spandrel walls. The deck is concrete. The Moderne-style parapets are finished with bush-hammered panels and chamfered caps. The concrete lampposts and luminaries remain in place. A good example of an uncommon bridge type, the span, part of an innovative 3-tier crossing, was designed by a noted engineer.

INFOR MATION

Bibliography:
Essex County Engineers Office (Plans).
Personal interview with A.G. Lichtenstein
A.G. Lichtenstein & Assoc. The New York Times. 2/12/1956. Obituary. Newark Public Library. Subject File: Weequahic Park.

Physical Description: The 1932 single-span ribbed open spandrel reinforced concrete arch bridge is composed of four ribs supporting a reinforced concrete slab deck. The interior ribs have spandrel columns while the outer ones are finished with continuous concrete spandrels. The arches are hinged at the abutments to allow the arches to rotate. The bridge spans 222' and measures 58' wide. The bridge is finished in the Moderne style. The parapets have bush-hammered panels with chamfered caps, and decorative concrete lampposts support luminaries. Constructed as part of a three-level crossing, the span was designed to carry a park road over 0718150, a slab bridge that originally carried 6 tracks of the Lehigh Valley Railroad over State Highway Route 29 (now US 22).

Historical and Technological Significance: The open spandrel ribbed arch bridge is technologically significant because it is a well-preserved example of an uncommon bridge type in the state. It is also part of an innovative three-level bridge crossing designed by a prominent civil engineer (Criterion C). It was constructed for the Essex County Park Commission and designed by A. Burton Cohen as part of a three-level crossing. 0718150, a 2-span slab bridge, was constructed under the same project, and it spans beneath this bridge. Mr. Cohen (1883-1956) was a consulting engineer in New York City. He graduated from Purdue University with a degree in engineering in 1910, and he served as Chief Engineer for the Delaware Lackawanna & Western Railroad until establishing his own firm in 1920. While with the railroad, Cohen worked almost exclusively in concrete, and he was awarded the American Concrete Institute's gold medal in 1927. Among his most distinguished projects are the Tuckhannock Viaduct on the DL&W's main line in Nicholson, PA and the grade crossing elimination projects for the railroad through Montclair, Orange and South Orange as well as Nassau County, New York. After leaving the railroad, he designed many other concrete arch bridges including the 1926 open-spandrel ribbed arch JFK Boulevard over PATH and Conrail in Jersey City (0900008) and the 1921 7-span Centerway Bridge over the Chemung River in Corning, New York, which is the first bridge in the United States to be constructed with cast-in-place concrete piles.

Weequahic Park was established as one of the original reservations in Essex County's ambitious county-wide park system established in 1895. Between 1896 and 1899 12 parcels in the what was then swampy land were acquired on the southern edge of Newark. The tract was upgraded to park status in 1910. A lake was created, and the west boundary of the park was extended. The extension included a race track for trotters that was retained. Other recreational facilities were added like the 1907 field house, the 1915 golf course, and the 1916 children's playground building, tennis courts, and comfort building. During World War II, Army barracks were built in the park, and after the war they were used as temporary quarters for military families to help ease the national housing crunch. The last of the barracks was removed in 1955.

Boundary Description and Justification: Although the bridge is located in a park setting, the span is evaluated as individually significant based on its technological distinction. It is part of a three-level structure, so the span under it (0718150) is also evaluated as significant. The boundaries include the two spans themselves and the retaining walls. The park does not appear to meet National Register criteria.

PHOTO: 704:16-18,22 (04/92) REVISED BY (DATE): QUAD: Elizabeth

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0700083 **CO** ESSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED TULIP SPRING BRIDGE OVER WEST BRANCH RAHWAY RIVER **FACILITY** TULIP SPRING BRIDGE

TOWNSHIP MILLBURN TOWNSHIP

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 20 ft **WIDTH** 40 ft

CONSTRUCTION DT 1928 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT H. C. BAIRD, ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane park road over a small stream in a wooded area located in the South Mountain Reservation, a county park. The Essex County Park Commission was established in 1895, and it developed the nation's first county park system which was designed by Olmsted.. South Mountain Reservation was one of the original tracts secured by the commission.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Not Individually Eligible. Potential South Mountain Reservation Historic District. Contributing.

CONSULT DOCUMENTS SHPO Letter 03/12/01

SUMMARY The concrete deck arch bridge supported on a concrete substructure has ashlar veneer spandrel walls. The arch is detailed with ring stones, and the parapets are ashlar with granite cap stones. The square wire mesh reinforcement is visible at the spalled areas of the intrados. One of over 6 concrete deck arch bridges in the county, the short span is nicely detailed. While the bridge is not individually eligible for listing in the National Register of Historic Places, it would be a contributing element to a South Mountain Reservation Historic District under Criteria A and C should one be identified.

INFOR MATION

PHOTO: 703:41-42 (04/92) REVISED BY (DATE): QUAD: Caldwell, NJ

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0700084 **CO** ESSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MOUNT PLEASANT PLACE OVER BRANCH RAHWAY RIVER **FACILITY** MOUNT PLEASANT PLACE

TOWNSHIP WEST ORANGE TOWNSHIP

TYPE STRINGER **DESIGN** JACK ARCH (BRICK) **MATERIAL** Wrought Iron

 # SPANS 1 **LENGTH** 22 ft **WIDTH** 39.4 ft

CONSTRUCTION DT 1882 **ALTERATION DT** 1970ca **SOURCE** FREEHOLDERS MINUTES

DESIGNER/PATENT J. OWENS **BUILDER** W.E. PIERCE, THOMAS BURNS

SETTING / CONTEXT The bridge carries a 2-lane collector road and sidewalks over a small stream separating a wooded residential area developed in the 1950s with a post-WW II light industrial building. The West Orange First Aid Squad, located contiguous to the span, is housed in a Moderne-style stone veneer building dated 1928.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The reportedly wrought iron stringer and brick jack arch bridge supported on stone abutments has metal picket railings flanking concrete sidewalks. Concrete toe walls were added and 3 deck bays were replaced with a reinforced concrete slab in ca.1970. It is one of over 8 stringer and brick jack arch bridges in the county. The span has been significantly altered and no longer retains its design integrity. 0700088 is a significant example of the type located within a historic district.

INFOR MATION

PHOTO: 703:3-5 (04/92) REVISED BY (DATE): QUAD: Caldwell, NJ

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US
November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0700086 **CO** ESSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED HOOVER AVENUE OVER THIRD RIVER **FACILITY** HOOVER AVENUE

TOWNSHIP BLOOMFIELD TOWNSHIP

TYPE STONE ARCH **DESIGN** ELLIPTICAL **MATERIAL** Stone

 # SPANS 1 **LENGTH** 20 ft **WIDTH** 30.2 ft

CONSTRUCTION DT 1875ca **ALTERATION DT** **SOURCE** STYLE

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane collector road and sidewalks over a small stream at the edge of a town park. The bridge separates a commercial area, dating from the early 1900s to the present, from a residential neighborhood of apartment buildings dating to the early 1960s.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 03/12/01

SUMMARY The 20'-long stone arch bridge has coursed ashlar spandrel walls and rusticated ring stones. Ashlar parapets with granite cap stones flank the concrete sidewalks. Metal picket railings are set atop granite cap stones on flared ashlar wingwalls. The ca. 1875 bridge is one of 7 in Essex County. The bridge maintains exemplary integrity; no known alterations have been made. It is eligible for listing in the National Register of Historic Places under Criterion C as an example of stone arch technology.

INFOR MATION

Bibliography:
Essex County Engineers Office. Bridge Files.

Physical Description: The single-span stone arch bridge has a 20' span. The bridge is composed of coursed ashlar spandrel walls, voussoirs, and parapets and flared wingwalls with granite cap stones. The pointing is well maintained. Metal picket railings remain atop the wingwalls but have been removed from the parapets.

Historical and Technological Description: The undocumented ca. 1875 stone arch bridge is neither historically or technologically distinguished. It is a short-span example of a bridge type that is well represented in the county. No plans for the bridge were located at the county engineer's office and the bridge is undocumented to builder and date of construction. The bridge's setting is not distinguished and includes numerous 20th century intrusions. The are seven stone arch bridges built between 1867 and ca. 1875 in the county. Other examples include the 1869 Millburn Avenue bridge (0700027, Millburn Twp.), the 1868-69 Washington Avenue bridge (0700036, Belleville Twp.), and the 1867 Bridge Street bridge (0700068, Belleville Twp.).

PHOTO: 705:6-7 (04/92) REVISED BY (DATE): QUAD: Orange, NJ

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0700087 **CO** ESSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BROOKDALE AVENUE OVER VERONA BROOK **FACILITY** BROOKDALE AVENUE

TOWNSHIP VERONA TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 23 ft **WIDTH** 36 ft

CONSTRUCTION DT 1917 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT W. A. STICKEL, CO. ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane residential street and sidewalks over a narrow stream bordered by a stone retaining wall in a neighborhood of single-family homes developed in the 1920s.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased stringer bridge supported on concrete abutments has concrete balustrades with paneled concrete posts. One of over 22 stringer bridges in the county, the slightly skewed span is an example of a common type in the state, and it is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 702:44,1 (04/92) REVISED BY (DATE): QUAD: Orange, NJ

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US
November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0700088 **CO** ESSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED HILLSIDE AVENUE OVER TONEY'S BROOK **FACILITY** HILLSIDE AVENUE

TOWNSHIP GLEN RIDGE BOROUGH TOWNSHIP

TYPE STRINGER **DESIGN** JACK ARCH (BRICK) **MATERIAL** Steel

 # SPANS 1 **LENGTH** 23 ft **WIDTH** 31 ft

CONSTRUCTION DT 1900ca **ALTERATION DT** **SOURCE** STYLE

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane collector road and sidewalks over a small stream in a residential area dating to the 1910s. The bridge is about 50' from Bloomfield Ave. which is lined with early 1900s commercial buildings. A small concrete spillway is located about 5' downstream of the bridge. The bridge is located within a historic district in Glen Ridge Borough.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible. Listed. Glen Ridge Historic District. 08/09/1982. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The stringer and brick jack arch bridge supported on ashlar abutments has metal picket railings flanking each sidewalk. The stringers are rolled and metal tie rods are visible from the underside. The unaltered bridge is a well-preserved example of a common local bridge type from the 1880s through about 1910. Located within a historic district noted for its late-18th through mid-20th century architecture, the span was built within the period of significance and is a contributing element.

INFORMATION

Bibliography:
Essex County Engineers Office.
ONJH National Register File: Essex County, Glen Ridge Historic District.

Physical Description: The stringer and brick jack arch bridge supported on ashlar abutments spans 23', and carries a 2-lane road measuring 31' wide and 2 concrete sidewalks flanked by metal picket railings. Tie rods are visible at the underside of the bridge. Utility pipes were added under the bridge superstructure. No plans were located, but the span appears to be unaltered.

Historical and Technological Significance: The stringer and brick jack arch bridge is technologically significant because it is a well-preserved example of its type. It is historically significant because it is located within the Glen Ridge Historic District, and it is a contributing element having been constructed within the period of significance of the district. (Criteria A and C).

The ca. 1900 stringer and brick jack arch bridge is an example of a bridge type that was common in the county from about 1885 through about 1905. After 1905, with the development of the reinforced concrete deck, the brick jack arch deck became obsolete. Although a date of construction for the bridge could not be confirmed, the design and appearance of the span is consistent with other brick jack arch spans built in the county around the turn-of-the century.

The Glen Ridge Historic District is a suburban residential community of large well-preserved single-family homes dating from the late-19th through the mid-20th centuries and with tree-lined streets. The area was developed as a residential community by several entrepreneurs after construction of the railroad in the late 1800s made the area easily accessible, and therefore a practical location for affluent businessmen from Newark and New York City wishing to set up residence in a country setting. Most of the architectural styles popular in the late 19th and early 20th century are represented with the Queen Anne, Shingle, and Colonial Revival predominating. Examples of the Tudor Revival, Spanish Colonial Revival, and the earlier High Victorian styles are present. Glen Ridge Borough seceded from Bloomfield in 1895, and from the beginning, Glen Ridge residents acted to protect and preserve the character of their community. The Glen Ridge Park Association was formed in the late 1880s to acquire mill tracts and other commercial properties along the borough waterways. In 1910, the Borough Council became one of the first municipal bodies in the state to adopt a building code, and in 1921 Glen Ridge was one of the first municipalities in the state to enact a zoning ordinance.

Boundary Description and Justification: The bridge is evaluated as a contributing resource in a National Register historic district. Therefore both the bridge and its surroundings are evaluated as significant. For a complete description of the district boundaries, refer to the Glen Ridge Historic District National Register nomination on file at NJOHP.

PHOTO: 705:8-10 (04/92) REVISED BY (DATE): QUAD: Orange, NJ

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0700101 **CO** ESSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PARK AVENUE OVER BRANCH BROOK PARK ROAD & LAKE **FACILITY** PARK AVENUE

TOWNSHIP NEWARK CITY

TYPE STEEL ARCH **DESIGN** ELLIPTICAL **MATERIAL** Steel

 # SPANS 1 **LENGTH** 132 ft **WIDTH** 40.4 ft

CONSTRUCTION DT 1905 **ALTERATION DT** Unknown **SOURCE** PLANS

DESIGNER/PATENT CONCRETE-STEEL ENGRG CO **BUILDER** CONCRETE-STEEL ENGRG CO

SETTING / CONTEXT The bridge carries a 2-lane collector road and sidewalks over a stream and a 2-lane park road set in a county park. Branch Brook Park is one of the nation's first county parks. The Essex County Park Commission, established in 1895, began construction of the southernmost division of the park in 1896. The bridge is located in the middle division of the park. Branch Brook Park is listed on the National Register.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Individually Eligible. Listed. Branch Brook Park Historic District. 01/12/1981. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The handsome and well-proportioned steel arch and concrete bridge has scored octagonal corner piers that extend to concrete lampposts. Metal railings replace the original urn-shaped balusters in the balustrades, and guide rails were added at the curbs. The well-detailed Melan-type arch bridge is the longest of its type in the county, and it is one of 4 significant arch spans built within the period of significance of the historic district. It contributes to the historic character of the park.

INFORMATION

Bibliography:
Essex County Engineers Office (Plans).
Plain and Reinforced Concrete Arches, by J. Melan, authorized translation by D.B. Steinman, John Wiley & Sons, Inc., NY, 1917.
Macmillan Encyclopedia of Architects, Volume 1, Adolf K. Placzek, editor in chief, The Free Press, NY, 1982.
Architects in Practice New York City 1840-1900, by Dennis Steadman Francis for the Committee for the Preservation of Architectural Records.
ONJH National Register File: Essex County, Branch Brook Park, Newark, New Jersey. Report of the Essex County Park Commission, 1901.
Henry F. Withey and Elsie Rathburn Withey, Biographical Dictionary of American Architects, New Age Publishing Co., Los Angeles, 1956.

Physical Description: The elaborately detailed Melan-type steel arch bridge with plain concrete encasement spans 132' with a 16' rise. The crown thickness is 3', the radius of the intrados at the crown is 252', and the radius of the extrados is 304'. The bridge carries a 2-lane road and sidewalks flanked by modern metal railings that span between the original concrete pylons. The metal railings replace the original vase-shaped concrete balustrades lost at an unknown date. The plans indicate that the Melan reinforcement consists of a series of equally spaced curved steel members composed of 2 pairs of angles measuring 3" x 3" x ½" separated by lattice bars measuring 2" x ¼". Engaged octagonal columns at the bridge corners continue as the fully articulated octagonal lampposts. The engaged columns are scored to give the appearance of ashlar. The only known alteration to the span is replacement of the railings.

Historical and Technological Significance: The 1905 steel arch bridge is technologically distinguished as an exceptionally well-detailed example of a span with the Melan-type reinforcing system, a patented design. It was designed and constructed by a prominent firm, the Concrete-Steel Engineering Company. The span is historically distinguished because it is one of 4 bridges built between 1898 and 1930 in the National Register-listed Branch Brook Park Historic District. The park was developed as part of the nation's first county park system, and it was done after plans prepared by the Olmsted firm. It is one of a total of seven significant arch spans in Branch Brook Park (Criteria C).

Joseph Melan, a Viennese engineer, developed the reinforcing system which consists of a series of parallel iron or steel I-beams curved to the profile of the soffit. He was granted an American patent for the invention in 1894, where it quickly became popular because the design combined two constructions familiar to American builders, the iron arch rib and the masonry arch. Fritz von Emperger, a German-born engineer, built the first Melan arch span in this country in Rock Rapids, Iowa, and he is credited with popularizing the technique in the United States. Emperger made additions to the Melan system, adding a beam in the deck and joining the deck and arch beams by means of bars set on radial lines. He was granted a patent for these changes in 1897.

Plans for the span indicate that it was designed for the Essex County Park Commission as a major landscape element of the Branch Brook Park by the Concrete-Steel Engineering Company, consultant. The Concrete-Steel Engineering Company was formed in 1901 by Edwin Thacher and William Mueser, and it was headquartered in the Park Row Building in New York City. The firm was responsible for the design of many important Melan-type arch bridges in this country including the 8 span Grand Avenue Viaduct, Milwaukee, Wis., built in 1907; a 7 span Melan arch in Wichita, Kansas, built in 1911; the 6 span Hudson River Bridge at Glen Falls, NY, built in 1914-15; the bridge over the Mississippi River at Minneapolis composed of 5-231' spans built in 1915-16; and the single span bridge at Scranton, PA. built in 1907.

Edwin Thacher was a prominent civil engineer having obtained patents for the "Thacher Cylindrical Slide-Rule"; "Thacher Steel Bridge Truss"; "System of Concrete Steel Arches" and "Thacher Combination Bridge Truss" among others. He held the positions of Chief Engineer for the Decatur Bridge and Construction Company of Decatur, Alabama, and the Keystone Bridge Company of Pittsburgh, Pennsylvania before opening his own Consulting Engineering Office in Louisville, Kentucky where he was responsible for the design of many truss spans including the 1891 Walnut Street Bridge crossing the Tennessee River in Chattanooga, and the 1892 Costilla Crossing Bridge across the Rio Grande in Colorado, an example of the Thacher truss patented in 1884 and designed to reduce the effect of temperature stresses on the truss members. Thacher formed a partnership in 1894 with Mr. W. H. Keepers and Mr. Wynkoop in Detroit, Michigan. Mr. Wynkoop dropped out of the partnership in 1895 and the partnership of Keepers and Thacher continued until it was

dissolved on October 5, 1899. The firm constructed the concrete steel arch bridge over the Kansas River at Topeka, Kansas, at that time the largest bridge of its kind in the United States, as well as many other bridge structures. The 1897 West Broadway Avenue Melan-arch bridge (1600017, Passaic County) and the 1899 Wyckoff Avenue Melan-arch bridge (020033E, Bergen County) are attributable to Thacher. Thacher remained with the Concrete-Steel Engineering Company until his retirement in 1912. The 1896 Grand Avenue bridge in Monmouth County (130MT50) is attributed to William Mueser.

The architectural detailing was done by Babb, Cook, and Willard Architects, a partnership between George Fletcher Babb, Walter Cook, and Daniel Willard. The firm was responsible for the design of many private homes and buildings in New York and New Jersey, and they also designed several buildings in other areas of the country. Their most important works include the 1899-1901 Andrew Carnegie House (now the Cooper Hewitt Museum), the 1885-86 De Vinne Press Building, New York, and the 1897-98 F.B. Pratt House, Brooklyn, NY. George Fletcher Babb was born in New York in 1836, and he moved to New Jersey early in his childhood. He designed several New Jersey homes while working in the office of T. R. Jackson in New York City. By 1868 he was the senior draftsman in the office of Russell Sturgis. In 1877, Babb went into partnership with Walter Cook, born in 1846 and an 1869 graduate of Harvard. Cook studied in Munich from 1871-1873 and in Paris under Joseph Auguste Emile Vaudremer from 1873-1876 before joining Babb in partnership. In 1884, Daniel W. Willard joined the partnership. By 1890 Cook was the principal designing partner.

The bridge spans a lake and park road through Branch Brook Park in Newark, and was termed the Midlake Bridge. Branch Brook Park is one of the original parks established by the Essex County Park Commission as part of the development of the nation's first county park system. The park is listed on the National Register as a historic district. The Essex County Park Commission was formed in 1895, and they began plans for the development of two major parks, two reservations and four smaller parks. Branch Brook Park was the most important and extensively developed of the original parks. The park was divided into three divisions, the southern division was the first section of the park to be developed and construction began in 1896. It was designed to be comparatively ornate with special expensive architectural stone constructions and specimen plantings. The northern division was designed to have a natural rustic style, and the middle division was designed to have an intermediate style transitioning between the ornate southern division and the natural style of the northern division. The bridge is located between the southern and middle divisions, and it was designed with elaborate detailing to be compatible with the style of the southern division. Park Avenue was known as Fifth Avenue in Newark at the time of construction. The bridge was built to connect either side of Fifth Avenue through the park. The road was transferred from the jurisdiction of the County Freeholders to the Essex County Park Commission in 1903, and construction of the bridge was completed in 1905.

Boundary Description and Justification: The bridge is located within the Branch Brook Park Historic District, and so it and its surroundings are evaluated as significant. For the exact boundaries of the district, refer to the National Register file maintained by ONJH.

PHOTO: 706:38-39,423:18-21 (04/92) REVISED BY (DATE): QUAD: Orange, NJ

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0700103 **CO** ESSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED LINDEN AVENUE OVER PECKMAN RIVER **FACILITY** LINDEN AVENUE

TOWNSHIP VERONA TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 33 ft **WIDTH** 30 ft

CONSTRUCTION DT 1924 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT W. A. STICKEL, CO. ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane collector road and sidewalks over a minor stream in a residential neighborhood of single-family homes developed in the 1950s.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased stringer bridge supported on concrete abutments has custom concrete parapets with scored geometric designs. The parapet detail is identical to that on 0702465 built in 1921. One of over 22 pre-WW II stringer bridges in the county, the span is an example of a common type in the state, and it is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 702:2-3 (04/92) REVISED BY (DATE): QUAD: Orange

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0700104 **CO** ESSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED RUNNYMEDE ROAD OVER PINE BROOK **FACILITY** RUNNYMEDE ROAD

TOWNSHIP ESSEX FELLS TOWNSHIP

TYPE STRINGER **DESIGN** JACK ARCH (CONCRETE) **MATERIAL** Steel

 # SPANS 1 **LENGTH** 29 ft **WIDTH** 20.5 ft

CONSTRUCTION DT 1919ca **ALTERATION DT** Unknown **SOURCE** STYLE

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane collector road and grass-covered sidewalks over a small stream bordered by masonry retaining walls. The bridge is located at the southernmost terminus of the Grover Cleveland Park, a county park, and borders a post-WW II residential neighborhood.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The stringer and concrete jack arch bridge is supported on stone abutments from an earlier span. The abutment seats have concrete repairs. Gunite was placed on the stone abutments, and the jack arches at the center bays were replaced with a reinforced concrete slab at an undocumented date. The bridge carries metal picket railings. The span has been altered, and it is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 701:3-5 (04/92) REVISED BY (DATE): QUAD: Caldwell, NJ

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0700105 **CO** ESSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BAKER STREET OVER EAST BRANCH RAHWAY RIVER **FACILITY** BAKER STREET

TOWNSHIP MAPLEWOOD TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 32 ft **WIDTH** 40 ft

CONSTRUCTION DT 1915 **ALTERATION DT** 1928 **SOURCE** NJDOT/PLANS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane collector road and sidewalks over a small stream bounded by masonry retaining walls. A small concrete spillway is located under the span. The bridge borders Maplewood Country Club to the south and Memorial Park to the north. Memorial Park, a town park, is dedicated to the veterans of World War I.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 02/08/90

SUMMARY The slightly skewed encased stringer bridge supported on concrete abutments has standard design concrete balustrades. In 1928, the bridge was widened to the north with encased stringers on concrete abutment extensions. One of over 22 stringer bridges in the county from the pre-World War II era, the short span is an altered example of a common bridge type in the state, and it is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 703:34-35 (04/92) REVISED BY (DATE): QUAD: Roselle

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0700108 **CO** ESSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BLOOMFIELD AVENUE OVER ERIE LACKAWANNA RAILROAD **FACILITY** BLOOMFIELD AVENUE

TOWNSHIP VERONA TOWNSHIP

TYPE THRU GIRDER **DESIGN** JACK ARCH (CONCRETE) **MATERIAL** Steel

 # SPANS 1 **LENGTH** 54 ft **WIDTH** 55.1 ft

CONSTRUCTION DT 1900 **ALTERATION DT** 1991 **SOURCE** PLANS

DESIGNER/PATENT ERIE RAILROAD COMPANY **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 4-lane collector road and sidewalks over the abandoned Erie-Lackawanna railroad between a residential area developed between the 1920s and the 1950s and a commercial area of Bloomfield Avenue.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 12/07/89

SUMMARY The skewed thru girder with floorbeams bridge supported on stone abutments has concrete jack arches. Metal pipe railing is supported on the stone wingwalls at one side of the bridge. In 1991 holes in the floorbeams were repaired, and the sidewalks were replaced. Due to deterioration, the structural integrity of the bridge is compromised, and the span is currently shored. One of over 8 pre-WW II thru girder bridges in the county, the span is a common type and is not noteworthy.

INFOR MATION

PHOTO: 701:1-2 (04/92) REVISED BY (DATE): QUAD: Caldwell, NJ

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0700B01 **CO** ESSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PARK AVENUE OVER PASSAIC RIVER **FACILITY** PARK AVENUE (AVONDALE BRIDGE)

TOWNSHIP NUTLEY TOWNSHIP

TYPE SWING SPAN **DESIGN** RIM BEARING **MATERIAL** Steel

 # SPANS 3 **LENGTH** 364 ft **WIDTH** 27 ft

CONSTRUCTION DT 1904-05 **ALTERATION DT** 1984 **SOURCE** PLAQUE

DESIGNER/PATENT J. OWEN, R.WATSON, CO.ENGS. **BUILDER** NEW JERSEY BRIDGE COMPANY

SETTING / CONTEXT The bridge carries a 2-lane collector road and sidewalks over a major river in a commercial area with structures dating from the 1950s to the present. The bridge is known as the Avondale Bridge.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The rim bearing swing span bridge supported on an ashlar substructure is composed of a hybrid pinned/riveted Warren thru truss main span with built-up floorbeams and Warren pony truss approach spans. The electrical system was replaced in 1984. The swing span reflects the state of design knowledge of the time which makes the span an important example of the evolution of movable bridge technology. It is one of four thru truss swing spans in Essex County. All are significant.

INFOR MATION

Bibliography:
Essex County Engineers Office. (Plans)
Essex County Board of Chosen Freeholders Minutes.
Manasquan, New Jersey, compiled by Townsfolk for the Diamond Jubilee under the sponsorship of the Manasquan Chamber of Commerce, 1962.

Physical Description: The rim bearing swing-span bridge is composed of a hybrid pin-connected and riveted double-intersection Warren through truss swing-span and two Warren with verticals pony truss approach spans. The bridge measures 364' in length and carries a 27' roadway and 2 cantilevered sidewalks. The fish-belly shaped top chords are of built-up back-to-back channels connected by lacing at the bottom and a cover plate for most of the span except at the center tower where it is composed of pin-connected stamped eye bars. The same arrangement is also used on the 1906 Gregory Ave. bridge in Passaic County (1600002). The arrangement permits the Warren trusses to act as simply supported span when the bridge is taking live loads. An unusual detail is the transition panel between the pin-connected and rivet-connected portions of the top chords where it is composed of eye bars built up with rivet-connected angles connected by lacing. The diagonals and the lower chords are built up with two pairs of back-to-back angles connected by lacing. They have been strengthened with additional material bolted to the webs. The vertical members are built-up with two pairs of back-to-back angles separated by lacing. The sidewalks are flanked by modern 3-rail metal railings.

The power source and controls for the bridge were altered in 1984 when new motors, generators, and controls were installed. The equipment house was moved to its present mid-span location at that time. The gearing remains the same or inkind replacements. Other work done in 1984 includes repairs to the steel superstructure, rest piers, abutments, and fenders and replacement of the stringers and deck. The truss diagonal members were repaired. The gate houses and operators house, and overhead generating room, including supporting members, also date to the 1984 rehabilitation.

Technological and Historical Significance: The 1904-05 swing-span bridge, designed by the Bergen and Essex county engineers, is historically significant because it is one of fewer than ten spans in the state constructed by the New Jersey Bridge Company, a New Jersey bridge manufacturer who successfully marketed bridges nationally. This is one of if not the largest bridge in New Jersey that they erected. The bridge is technologically significant because its construction details reflect the state of design knowledge at that time which could only account for simply supported spans for live load considerations. The pin-connected top chords are for the tension-only, double cantilever configuration the span assumes during operation (when it is not supported at the toe end by the bearings on the rest piers). The rivet-connected Warren trusses are for live-load configurations. The presence of the not-rigid eye bars would not permit transfer of live-load stresses between spans. (Criteria C). Although the bridge and operating machinery have been altered, the historical and technical significance of the span remain, and the bridge maintains integrity of function.

The New Jersey Bridge Company of Manasquan, New Jersey, was established in 1890 by two men from Canton, Ohio, Mr. Wyckoop and Mr. Braly. The company built many steel bridges in New Jersey, and it employed 15 to 20 draftsmen and up to 100 construction workers. Their bridges have been identified from Maine to Michigan. Financial difficulties incurred due to problems on a bridge in Portland, Maine, caused the failure of the firm in 1907. The F. W. Stillman Company acted as the general contractors for the bridge construction.

Boundary Description and Justification: The bridge has been evaluated as individually significant. The boundary is thus limited to the span itself and includes the superstructure as well as the substructure.

PHOTO: 707:2-4,423:5-11 (04/92) REVISED BY (DATE): QUAD: Orange, NJ

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0700H01 **CO** ESSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CLAY STREET OVER PASSAIC RIVER **FACILITY** CLAY STREET

TOWNSHIP NEWARK CITY

TYPE SWING SPAN **DESIGN** RIM BEARING **MATERIAL** Steel

 # SPANS 3 **LENGTH** 326 ft **WIDTH** 38 ft

CONSTRUCTION DT 1908 **ALTERATION DT** 1975 **SOURCE** CO. RECORDS/PLANS

DESIGNER/PATENT J. OWENS, CO. ENGINEER **BUILDER** A. E. SANDFORD CO.

SETTING / CONTEXT The bridge carries a 2-lane road and sidewalks over a major river in the heart of industrial Newark. The surrounding structures are industrial and commercial and date from the 1900s through the 1970s.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The triple-intersection Warren thru truss swing-span bridge with 1975 replacement approach spans is supported on concrete abutments and an ashlar center pier. It was significantly altered in 1975 when the operating mechanisms (gears, motors, controls., overhead generator house) were replaced with modern equipment. The span is historically important, and the unusual trusses are fairly complete. The bridge still operates in the original manner and is thus noteworthy.

INFOR MATION

Bibliography:
Essex County Engineers Office: Bridge Plans.
Essex County Board of Chosen Freeholders Minutes.

Physical Description: The 3-span bridge is composed of a riveted triple-intersection Warren through truss rim-bearing swing-span, and two approach spans. The bridge measures 326' in length and carries a 38' roadway and 2 cantilevered sidewalks. The trusses have an unusual profile because of the parabolic-shape of the top chords and the curved connection between the top chords and the end posts. The latter is an aesthetic consideration, not a structural one. The top chords are built-up members composed back-to-back channels connected by lattice at the bottom and a cover plate at the top. The diagonal and vertical members are built-up with two pairs of back-to-back angles separated by lacing or batten plates. The lower chords are back-to-back channels connected by lattice. The trusses themselves have some strengthening, but they are for the most part well preserved. The cantilevered sidewalks are enclosed by the original wrought-iron lattice-pattern railings.

In 1975, the bridge was rehabilitated. The east approach span was replaced with prestressed voided slab beams, stringers were replaced and the girders and floor beams were repaired at the west approach span. The floor beam stiffener angles and stringers were replaced at the swing-span, the bridge deck was replaced, new concrete pedestals were placed at the west quarter pier, a new concrete header was added at the east quarter pier, and the timber fender system was repaired. The truss diagonal members were strengthened by adding plates and angles to form a box section. The gate house at the east approach and the overhead generator room located at the center of the span date to the 1975 rehabilitation. In 1992 the timber fenders were repaired and several sidewalk brackets were replaced.

The operating mechanisms were also replaced in the 1975 rehabilitation, but the span still operates in the original manner, by means of a rack and pinion drive mechanism, now powered by new electric motors (the bridge was originally powered by a steam engine) activated by modern control panels . The pinions and gears (one open set, one enclosed reducer) are now at the side of the drum girder, which rides on inkind replacement wheels, rather than in the original position at the center. There are also new screw jack end lifts rather than wedges. The drum girder, drum girders, radial, and floor beams are original, although they too have been strengthened.

Technological and Historical Significance: The 1908 Clay Street rim-bearing swing-span bridge, located in the industrial heart of Newark, was designed by J. Owen, the Essex County engineer and constructed by A. E. Sandford Co., a local contractor. The span replaced an 1889 wrought iron draw span built to help alleviate heavy traffic on the Bridge Street Bridge (0700H03) located downstream. The swing span was one of at least two in Newark that were powered for many years by a steam engine (Jackson Street (0700H02) is the other. Its steam engine is now in the collection of the Newark Museum).

The bridge is a large example of its type, and the truss type of the main span, a triple-intersection Warren thru truss, is not common. While the bridge has been so altered, the trusses and how the span operates remains fairly original. Because of its size, operable condition, truss type, and historic associations with the development of Newark, one of the premier industrial centers in the region, the span is historically and technologically distinguished (Criteria A,C). It is one of three similar rim-bearing swing span bridges in the center of Newark, and the other two (0700H02, 0700H03) have also been evaluated as significant.

Boundary Description & Justification: The movable span of the bridge is evaluated as significant. The approach spans have been either replaced or severely altered so that they no longer have historical or technological significance. The boundary is thus limited to the movable span and the center pier upon which it bears when in the open position.

PHOTO: 707:43-44,1 (04/92) REVISED BY (DATE): QUAD: Elizabeth

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0700H02 **CO** ESSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED JACKSON STREET OVER RAYMOND BLVD & PASSAIC RIVER **FACILITY** JACKSON STREET

TOWNSHIP NEWARK CITY

TYPE SWING SPAN **DESIGN** RIM BEARING **MATERIAL** Steel

 # SPANS 2 **LENGTH** 710 ft **WIDTH** 39.7 ft

CONSTRUCTION DT 1897 **ALTERATION DT** 1991 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT J. OWENS, CO. ENGINEER **BUILDER** MC CANN FAGAN IRON WORKS

SETTING / CONTEXT The bridge carries a 2-lane collector road and sidewalks over a major river and a 2-lane one-way street in a industrial and commercial area dating from the early 1900s to the present.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS DOE 05/28/80. SHPO Letter 6/30/95.

SUMMARY The lattice thru truss swing span bridge is supported on a stone substructure. It has been significantly altered. In 1991 repairs to the span included strengthening the truss lower chord and diagonals, and replacing the drum girder, wheel assembly, and floor beams. Additionally, the entire operating mechanism was replaced. The only original feature of the span is the truss lines, but because they are rare examples of an uncommon type, the span remains technologically and historically noteworthy.

INFOR MATION

PHOTO: 704:30, 705:26,27 (04/92) REVISED BY (DATE): QUAD: Elizabeth

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0700H03 **CO** ESSEX **OWNER** COUNTY **MILEPOINT** 0.0
NAME & FEATURE INTERSECTED BRIDGE STREET OVER PASSAIC RIVER **FACILITY** BRIDGE STREET
TOWNSHIP NEWARK CITY
TYPE SWING SPAN **DESIGN** RIM BEARING **MATERIAL** Steel
 # SPANS 4 **LENGTH** 371 ft **WIDTH** 39 ft
CONSTRUCTION DT 1913 **ALTERATION DT** 1981 **SOURCE** PLANS
DESIGNER/PATENT UNKNOWN **BUILDER** AMERICAN BRIDGE COMPANY

SETTING / CONTEXT The bridge carries a 2-lane road and sidewalks over a major river in the center of Newark. The structures around the bridge are mainly industrial and commercial and date from the 1900s through the 1970s.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes
CONSULT STATUS Individually Eligible.
CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The rim-bearing Pratt thru truss swing span bridge is supported on an ashlar substructure with concrete caps. In 1981 the east gate house was removed, a new overhead control house was erected, and the operation was rendered fully automated. The trusses were also repaired. One of three operational rim-bearing swing spans in the industrial heart of Newark, the span is evaluated as significant based on its type and historical associations despite alterations.

INFORMATION

Bibliography:
Essex County Engineers Office. (Plans)
Essex County Board of Chosen Freeholders Minutes.

Physical Description: The rim bearing swing-span bridge is composed of a riveted Pratt with counters thru truss with curved top chords swing span, and two built-up deck girder approach spans. The bridge measures 371' in length and carries a 39' roadway and 2 cantilevered sidewalks. The top chords are built-up back-to-back channels connected by lattice at the bottom and a cover plate at the top. The diagonal members and the bottom chord are back-to-back channels connected by lacing. The vertical members are built-up with two pairs of back-to-back angles separated by lacing. The sidewalks are flanked by modern 3-rail metal railings. Some of the members, particularly the outside panel members, have been strengthened by additional plates connected with high-strength bolts.

The bridge was rehabilitated in 1981, and although much of the operating machinery and gearing were replaced, some of the new fabric is inkind replacement, and the span still operates in the original manner. The electrical system was completely updated in 1981 as were the operating controls and operator's house, located adjacent to one quadrant of the span. The movable span rotates on wheels affixed to the bottom of the drum girder and inside the rack. While the rack, pinion, and bevel drive gear sets appear to be 1981 replacements, they are inkind and in the original locations. The operation of the bridge was automated in 1981 so that the entire process was performed by engaging a single switch. The automated process was disengaged because the process could not be halted when problems arose. The built-up radials located inside the drum and connected to the center pin and pedestal have web plates. The bearings are now the screw jack type, and they too were installed in 1981. Other 1981 work includes welded floor beams added to the deck girder approach spans and concrete caps added to the ashlar abutments and wingwalls. The bridge deck and stringers were replaced, and the timber fender system was repaired.

Technological and Historical Significance: The 1912 swing-span bridge, located in the industrial heart of Newark, was designed by the county engineer and constructed by the American Bridge Company. The bridge is technologically significant because it is an operating example of an increasingly rare bridge type. It is one of only four known rim bearing swing-span bridges in the county, and it is one of three with curved top chords and curved tops to the end posts. The truss design was popular locally and may well have been done by James Owens, the Essex County Engineer and his staff (Criterion C). In addition to its technological significance, the bridge is associated with the industrial development of Newark, one of the leading industrial centers of the region prior to World War II. The bridge was rehabilitated in 1981, and although some of the work to it resulted in the loss of historic fabric, particularly in the area of the controls and power source, the bridge retains enough of its original material and design to rank as one of the noteworthy swing spans in the state. The bridge is a rim-bearing rather than a center bearing because of its size.

Boundary Description and Justification: The boundary is limited to the swing span and the substructure related to it (pivot pier and rest piers). The approach spans have been so altered that they have lost integrity of original design. Since it is the technology of the swing span that is being recognized, it is appropriate to limit the boundary to just that span.

PHOTO: 707:40-42 (04/92) REVISED BY (DATE): QUAD: Elizabeth

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0701065 **CO** ESSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED EAST HOBART GAP ROAD OVER CANOE BROOK **FACILITY** EAST HOBART GAP ROAD

TOWNSHIP LIVINGSTON TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 37 ft **WIDTH** 46 ft

CONSTRUCTION DT 1915 **ALTERATION DT** **SOURCE** PLANS/INSCRIPTION

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane collector road and sidewalks over a shallow stream in a wooded undeveloped area owned by the water company.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 8/2/90

SUMMARY The slightly skewed encased stringer bridge supported on concrete abutments has custom concrete parapets with geometric shaped panels. The fascia is also paneled. The span is one of four pre-1925 county bridges with custom parapets. One of over 22 stringer bridges in the county, the span is an example of a common type in the state, and it is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 702:13-14 (04/92) REVISED BY (DATE): QUAD: Caldwell, NJ

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0701165 **CO** ESSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PARSONAGE HILL ROAD OVER CANOE BROOK **FACILITY** PARSONAGE HILL ROAD

TOWNSHIP MILLBURN TOWNSHIP

TYPE DECK GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 55 ft **WIDTH** 40 ft

CONSTRUCTION DT 1929 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT W. A. STICKEL, CO. ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane collector road and narrow shoulders over a stream in a wooded undeveloped area adjacent to water supply authority property. An abandoned turn-of-the-century pumping station is located at the north west corner of the bridge. JFK Parkway is located about 50' east of the bridge.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased deck girder with floorbeams bridge is supported on concrete abutments. The span is flanked by metal railings with concrete posts. Guide rail has been placed in front of a damaged portion of the north railing. The girder encasement is spalled. The span is an example of a common type and it is not well-preserved. The bridge is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 702:17-18 (04/92) REVISED BY (DATE): QUAD: Roselle

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0701465 **CO** ESSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED NEW DUTCH LANE OVER DEEPAVAAL BROOK **FACILITY** NEW DUTCH LANE

TOWNSHIP FAIRFIELD TOWNSHIP

TYPE T BEAM **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 2 **LENGTH** 40 ft **WIDTH** 40 ft

CONSTRUCTION DT 1940 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT W. A. STICKEL, CO. ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane collector road over a minor watercourse in a wooded area with light industrial buildings dating to the post-WW II era and adjacent to the Essex County Airport.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 1940 T beam bridge supported on a timber substructure has standard-design open concrete balustrades. A concrete toe wall is visible at the east abutment. The span is an example of a common type, and it is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 701:37-38 (04/92) REVISED BY (DATE): QUAD: Pompton Plains

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0701565 **CO** ESSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED LITTLE FALLS ROAD OVER DEEPAVAAL BROOK **FACILITY** LITTLE FALLS ROAD

TOWNSHIP FAIRFIELD TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 33 ft **WIDTH** 23 ft

CONSTRUCTION DT 1915 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane collector road and grass sidewalks over a small stream in a residential area of single-family homes built in the 1940s and 1950s. A water pumping station constructed in the 1970s is at the upstream end of the bridge. The stream feeds the Passaic River located about 500' from the bridge.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Opinion 10/98, Letter 03/12/01.

SUMMARY The encased stringer bridge supported on concrete abutments has custom concrete parapets with geometric shaped cut-outs. Similarly detailed, custom railings are common in the county (see 0700046, 0701065). Part of the east abutment was rebuilt with brick to facilitate the installation of a storm sewer pipe. One of over 22 stringer bridges in the county, the span is an example of a common type in the state, and it is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 701:33-34 (04/92) REVISED BY (DATE): QUAD: Pompton Plains

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0701665 **CO** ESSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED NYE AVENUE OVER ELIZABETH RIVER **FACILITY** NYE AVENUE

TOWNSHIP IRVINGTON TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 26 ft **WIDTH** 30.2 ft

CONSTRUCTION DT 1935 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT W. A. STICKEL, CO. ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane collector road and sidewalks over a small low-flow stream carried in a concrete channel with stone retaining walls that line the river through Irvington. The area is commercial with buildings dating from the early 1900s to the present.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The reinforced concrete slab bridge supported on concrete abutments has standard design concrete balustrades. The short span is an example of a common type and is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 704:2-3 (04/92) REVISED BY (DATE): QUAD: Elizabeth

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0702150 **CO** ESSEX **OWNER** NJDOT **MILEPOINT** 47.77

NAME & FEATURE INTERSECTED US 1&9 NB OVER NJ 22 RAMP **FACILITY** US 1&9 NORTHBOUND

TOWNSHIP NEWARK CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 101 ft **WIDTH** 28.5 ft

CONSTRUCTION DT 1931 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER** LINDE-GRIFFITH CO.

SETTING / CONTEXT The bridge carries one-directional traffic of a limited access highway over the access ramp to a state highway in an interchange known historically as Newark Junction. It links the Holland Tunnel approach road with north and west highways and Newark Airport.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 9/11/91

SUMMARY The encased stringer bridge with a concrete balustrade is representative of those designed and built by the State in the 1920s and 1930s. It is part of the original interchange known as Newark Junction The interchange has been extensively modified over the years, and there are newer structures located on either side of this bridge. While the bridge itself is not altered, it and the setting are not noteworthy.

INFOR MATION

PHOTO: (1991) REVISED BY (DATE): QUAD: Elizabeth

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0702152 **CO** ESSEX **OWNER** NJDOT **MILEPOINT** 47.84

NAME & FEATURE INTERSECTED US 1&9 OVER NJ 21 & US 22 EB **FACILITY** US 1&9 NORTHBOUND

TOWNSHIP NEWARK CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 4 **LENGTH** 180 ft **WIDTH** 28.5 ft

CONSTRUCTION DT 1929 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER** RUST ENG. CO.

SETTING / CONTEXT The bridge carries one direction of a divided, limited access highway over another highway and ramp to another (US 22). It is part of the Newark Junction interchange designed as part of the development of the "superhighway" approach to the Holland Tunnel. It also serves Newark Airport. The interchange has been altered.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 9/11/91

SUMMARY The 4-span encased stringer bridge with a concrete substructure is finished with a concrete balustrade of the same detailing as other stringer spans on the historic approach road to the Holland Tunnel. The column piers are also detailed like others on the route, which is at grade in this section. Although the bridge itself has not been altered, it is an example of a common type, and the interchange and its setting have been extensively modified. The bridge is not noteworthy.

INFOR MATION

PHOTO: (1991) REVISED BY (DATE): QUAD: Elizabeth

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0702465 **CO** ESSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PASSAIC AVENUE OVER PINE BROOK **FACILITY** PASSAIC AVENUE

TOWNSHIP WEST CALDWELL TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 29 ft **WIDTH** 30 ft

CONSTRUCTION DT 1921 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT F. REMIER, COUNTY ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane collector road, utility pipes, and sidewalks over a small stream in a wooded residential area developed in the 1950s to 1960s.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed encased stringer bridge supported on concrete abutments has panelled concrete parapets with scored geometric designs. The same parapet detail is found on 0700103 built in 1924. One of over 22 pre-WW II stringer bridges in the county, the span is a representative example of a common bridge type in the state and it is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 701:8-10 (04/92) REVISED BY (DATE): QUAD: Caldwell, NJ

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0703065 **CO** ESSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED ESSEX STREET OVER WEST BRANCH RAHWAY RIVER **FACILITY** ESSEX STREET

TOWNSHIP MILLBURN TOWNSHIP

TYPE T BEAM **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 40 ft **WIDTH** 40 ft

CONSTRUCTION DT 1936 **ALTERATION DT** 1969 **SOURCE** PLANS

DESIGNER/PATENT W. BLUHAN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 3-lane one-way street and sidewalks over a low-flow branch of a river carried by a concrete channel with stone retaining walls, and flowing through the center of town. The buildings are commercial use dating from the turn-of-the century to the present.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The T beam bridge is supported on concrete abutments that are continuous with stone retaining walls along the concrete stream channel. Concrete balustrades of standard design border the concrete sidewalks. In 1969 the retaining walls were heightened at one side of the span, and the concrete invert slab was added to the stream bed. The short span is a common type, and it is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 702:21-22 (04/92) REVISED BY (DATE): QUAD: Roselle

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0703152 **CO** ESSEX **OWNER** NJDOT **MILEPOINT** 49.5

NAME & FEATURE INTERSECTED US 1&9 SB OVER OAK ISLAND YARD AND STREETS **FACILITY** US 1&9 SOUTHBOUND

TOWNSHIP NEWARK CITY

TYPE THRU GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 98 **LENGTH** 5033 ft **WIDTH** 104 ft

CONSTRUCTION DT 1932 **ALTERATION DT** Demolished: 1998 **SOURCE** PLANS

DESIGNER/PATENT NJ STATE HWY DEPT **BUILDER** ANDREW O'NEILL CO., MEADE CO.

SETTING / CONTEXT The nearly mile long viaduct is in an industrialized area and crosses former Lehigh Valley RR r-o-w. The viaduct is at the western terminus of the elevated portion of the "superhighway" approach road to the Holland Tunnel, and it originally carried 2-directional traffic. Route 1 Extension was the prototype in the development of the elevated limited access highway that eliminates grade crossings.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Bridge was Individually Eligible.

CONSULT DOCUMENTS MOA 7/22/92. SHPO Letter 6/30/95.

SUMMARY The 39-span viaduct composed of T-beam, stringer, and thru girder spans is historically significant as part of the "superhighway" built by the state to solve the traffic problems associated with the Holland Tunnel. It is part of the elevated portion of the road to the tunnel. The viaduct embodies the distinctive characteristics of type and method of construction used by the state's designers on the historic and innovative route. Northbound traffic is carried on the 1949 parallel structure.

INFOR MATION

PHOTO: (1991) REVISED BY (DATE): QUAD: Elizabeth

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0703153 **CO** ESSEX **OWNER** NJDOT **MILEPOINT**

NAME & FEATURE INTERSECTED SOUTH STREET OVER CONRAIL & WHEELER POINT ROAD **FACILITY** SOUTH STREET

TOWNSHIP NEWARK CITY

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 39 **LENGTH** 1440 ft **WIDTH** 50.5 ft

CONSTRUCTION DT 1929 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER** ANDREW O'NEILL CO.

SETTING / CONTEXT The viaduct carries 2-directional traffic of a local street over a railroad r-o-w and a local street. It is a transition from the elevated portion of the "superhighway" approach road to the Holland Tunnel, and it is contiguous to the Pulaski Skyway portion or western end of that historic and innovative roadway. The surrounding area is industrial.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS MOA 7/22/92. SHPO Letter 6/30/95.

SUMMARY The 39-span viaduct is composed of T beam, encased stringer, and deck girder spans, and it retains its original pipe railings. It serves as an access ramp to the elevated portion of the historic approach road to the Holland Tunnel, which is considered America's first superhighway. The bridge is significant for its association with that roadway. Technologically it is representative of period bridge design used by the State Highway Department.

INFOR MATION

PHOTO: (1991) REVISED BY (DATE): QUAD: Elizabeth

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0703161 **CO** ESSEX **OWNER** NJDOT **MILEPOINT** 50.47

NAME & FEATURE INTERSECTED US 1&9 SB OVER CONRAIL & RICHARDS LANE **FACILITY** US 1&9 SOUTHBOUND

TOWNSHIP NEWARK CITY

TYPE THRU TRUSS **DESIGN** PARKER **MATERIAL** Steel

 # SPANS 2 **LENGTH** 258 ft **WIDTH** 48.5 ft

CONSTRUCTION DT 1927 **ALTERATION DT** 1949 **SOURCE** PLANS

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER** ANDREW O'NEILL CO.

SETTING / CONTEXT The bridge carries the elevation southbound portion of the Holland Tunnel approach road (originally Route 1 Extension) over a railroad r-o-w and a local street in an industrial area. It is part of the original "superhighway" designed and built by the NJ State Highway Department as a solution to the need to move traffic to and from the Holland Tunnel in an efficient manner. This section is elevated on fill with overpasses.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS MOA 7/22/92. SHPO Letter 6/30/95.

SUMMARY The 2-span bridge with a concrete substructure is composed of an asymmetrical Parker truss thru girder bridge and an encased built-up thru girder span. While not technologically innovative, the little-altered bridge is historically significant as part of the historic route that was the prototype of the superhighway in this country. The bridge was evaluated as eligible because it maintains integrity of original design.

INFOR MATION

PHOTO: (1991) REVISED BY (DATE): QUAD: Elizabeth

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0703167 **CO** ESSEX **OWNER** NJDOT **MILEPOINT** 50.06

NAME & FEATURE INTERSECTED US 1&9 SB OVER NIAGARA STREET **FACILITY** US 1&9 SOUTHBOUND

TOWNSHIP NEWARK CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 55 ft **WIDTH** 91.4 ft

CONSTRUCTION DT 1926 **ALTERATION DT** 1947 **SOURCE** PLANS

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER** STANGE CONSTRUCTION CO.

SETTING / CONTEXT The bridge carries one direction of a divided highway over a local street in an industrial section of Newark north of Newark Airport. The highway has been widened thus affecting the original setting and integrity of this section of the road, developed in 1925-1932 as the Route 1 Extension or approach road to the Holland Tunnel. This section was comprised of an elevated highway on fill with overpasses over local roads and highways.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 9/11/91, Letter 6/30/95.

SUMMARY The structure has been so compromised by the subsequent changes that it no longer contributes to the historic character of the resource. Addition of the northbound span to the east and the widening to the west act to virtually encase the original structure and obliterate its historic setting. Modifications also included the removal of the original balustrade and block paving. The concrete encased stringer type construction utilized on this span is typical of the route and state design.

INFOR MATION

PHOTO: (1991) REVISED BY (DATE): QUAD: Elizabeth

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0703169 **CO** ESSEX **OWNER** NJDOT **MILEPOINT** 50.18

NAME & FEATURE INTERSECTED US 1&9 SB OVER MAGAZINE STREET **FACILITY** US 1&9 SOUTHBOUND

TOWNSHIP NEWARK CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 68 ft **WIDTH** 60 ft

CONSTRUCTION DT 1926 **ALTERATION DT** 1947 **SOURCE** PLANS

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER** STANGE CONSTRUCTION CO.

SETTING / CONTEXT The bridge carries one direction of a divided highway over a local street in the industrialized section of Newark north of Newark Airport. It was built as part of the 1925-1932 development of Route 1 Extension, the prototype "superhighway" in this country. It was the approach to the Holland Tunnel. This section of the route was comprised of an elevated highway on fill with overpasses over local streets and railroads.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 9/11/91, Letter 6/30/95.

SUMMARY The structure has been so compromised by the subsequent changes that it no longer characterizes the ca. 1930 building campaign of the historic "superhighway." The addition of a bridge to carry northbound traffic to its east and the widening to the west act to virtually encase the original structure and obliterate its historic setting. These modifications include the removal of the original balustrades and block paving. The encased stringer bridge type is typical of this route and state design.

INFOR MATION

PHOTO: (1991) REVISED BY (DATE): QUAD: Elizabeth

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0703171 **CO** ESSEX **OWNER** NJDOT **MILEPOINT** 50.33

NAME & FEATURE INTERSECTED US 1&9 SB OVER ST CHARLES STREET **FACILITY** US 1&9 SOUTHBOUND

TOWNSHIP NEWARK CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 66 ft **WIDTH** 61.6 ft

CONSTRUCTION DT 1927 **ALTERATION DT** 1947 **SOURCE** PLANS

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER** STANGE CONSTRUCTION CO.

SETTING / CONTEXT The bridge carries one directional traffic of a divided highway over a local street in an industrial area of Newark north of Newark Airport. It was built as part of the 1925-1932 development of the approach road for the Holland Tunnel which served as the prototype for the "superhighway" in this country. Originally known as Route 1 Extension, this section was comprised of an elevated highway on fill with overpasses over local streets and railroads.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 9/11/91, Letter 6/30/95.

SUMMARY This structure has been so compromised by subsequent changes that it no longer characterizes the ca. 1930 building campaign of the "superhighway." The addition of a bridge for northbound traffic on the east and widening to the west virtually encase the original structure and obliterate its historic setting. The modifications include removal of the original balustrades and block paving. The encased stringer bridge type used is typical of the route and state design.

INFOR MATION

PHOTO: (1991) REVISED BY (DATE): QUAD: Elizabeth

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0703173 **CO** ESSEX **OWNER** NJDOT **MILEPOINT** 50.76

NAME & FEATURE INTERSECTED US 1&9 SB OVER ROANOKE AVENUE **FACILITY** US 1&9 SOUTHBOUND

TOWNSHIP NEWARK CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 121 ft **WIDTH** 60 ft

CONSTRUCTION DT 1926 **ALTERATION DT** 1947 **SOURCE** PLANS

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER** STANGE CONSTRUCTION CO.

SETTING / CONTEXT The bridge carries one-directional traffic of a divided highway over a local street in the industrial area of Newark north of the airport. It was built as part of the 1925-1932 development of the Route 1 Extension approach road to the Holland Tunnel. The route is the prototype of the "superhighway" in this country. This section was comprised of an elevated highway on fill with overpasses over local streets and railroads.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 9/11/91, Letter 6/30/95.

SUMMARY This structure has been so compromised by subsequent changes that it no longer characterizes the ca. 1930 building campaign for the "superhighway." The addition of a bridge for northbound traffic on the east and widening on the west virtually encase the original structure and obliterate its original setting. The modifications include removal or the original balustrades and block paving. The encased stringer bridge type used is typical of both the route and state design.

INFOR MATION

PHOTO: (1991) REVISED BY (DATE): QUAD: Elizabeth

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0703175 **CO** ESSEX **OWNER** NJDOT **MILEPOINT** 50.81

NAME & FEATURE INTERSECTED US 1&9 SB OVER CONRAIL (CNJ) **FACILITY** US 1&9 SOUTHBOUND

TOWNSHIP NEWARK CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 77 ft **WIDTH** 62 ft

CONSTRUCTION DT 1926 **ALTERATION DT** 1947 **SOURCE** PLANS

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER** STANGE CONSTRUCTION CO.

SETTING / CONTEXT The bridge carries one-directional traffic of a divided highway over a local street in the industrialized section of Newark north of the airport. It was built as part of the 1925-1932 development of the Route 1 Extension approach road to the Holland Tunnel. The road is the prototype of the "superhighway" in this country. This section of the route is comprised of an elevated highway on fill with overpasses over local streets and railroads.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 9/11/92, Letter 6/30/95.

SUMMARY This structure has been so compromised by subsequent changes that it no longer characterizes the ca. 1930 building campaign of the "superhighway." The addition of a bridge to carry northbound traffic to the east and widening to its west virtually encase the original structure and obliterate its historic setting. The modifications include removal of the original balustrades and block paving. The encased stringer bridge type used is typical of the route and state design.

INFOR MATION

PHOTO: (1991) REVISED BY (DATE): QUAD: Elizabeth

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0703177 **CO** ESSEX **OWNER** NJDOT **MILEPOINT** 50.9

NAME & FEATURE INTERSECTED US 1&9 SB OVER FOUNDRY STREET **FACILITY** US 1&9 SOUTHBOUND

TOWNSHIP NEWARK CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 62 ft **WIDTH** 67.1 ft

CONSTRUCTION DT 1926 **ALTERATION DT** 1947 **SOURCE** PLANS

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER** STANGE CONSTRUCTION CO.

SETTING / CONTEXT The bridge carries one directional traffic of a divided highway over a local street in the industrial area of Newark north of Newark Airport. It was built as part of the 1925-1932 development of what is the prototype of the "superhighway" in this country, the historic approach road for the Holland Tunnel. This section of the Route 1 Extension, as the route was known, was comprised of an elevation highway on fill with overpasses for local streets and railroads.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 9/11/91, Letter 6/30/95.

SUMMARY This structure characterizes the ca. 1930 building campaign for the "superhighway," but it has been so compromised by subsequent changes that it is no longer noteworthy. The addition of a bridge to carry northbound traffic on the east and widening on the west virtually encase the original structure and obliterate its historic setting. The modifications include removal of the original balustrades and block paving. The encased stringer bridge type is typical of the route and state design.

INFOR MATION

PHOTO: (1991) REVISED BY (DATE): QUAD: Elizabeth

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0703265 **CO** ESSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED OLD INDIAN ROAD OVER WEST BRANCH RAHWAY RIVER **FACILITY** OLD INDIAN ROAD

TOWNSHIP WEST ORANGE TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 29 ft **WIDTH** 30 ft

CONSTRUCTION DT 1931 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT W. A. STICKEL, CO. ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane collector road and sidewalks over a shallow watercourse in a residential neighborhood developed in the 1950s and adjacent to the Francis Byrne Golf Course.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased stringer bridge supported on concrete abutments has standard design concrete balustrades. A chain-link fence was attached to the top of the north balustrade. One of over 22 pre-WW II stringer bridges remaining in the county, the span is a representative example of a common type, and it is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 703:1-2 (04/92) REVISED BY (DATE): QUAD: Caldwell, NJ

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0705151 **CO** ESSEX **OWNER** NJDOT **MILEPOINT** 0.73

NAME & FEATURE INTERSECTED US 1&9T OVER PASSAIC RIVER, DOREMUS AVENUE **FACILITY** US 1&9T

TOWNSHIP NEWARK CITY

TYPE VERTICAL LIFT **DESIGN** **MATERIAL** Steel

 # SPANS 18 **LENGTH** 2005 ft **WIDTH** 52 ft

CONSTRUCTION DT 1939 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT ASH HOWARD NEEDLES & TAMMEN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries US 1&9 Truck, a 4-lane divided highway and sidewalks, over a major river and a 2-lane collector road in an industrial area dating from the turn-of-the-century to the present. The bridge spans the Passaic River between Hudson and Essex Counties just south of the Pulaski Skyway. It is located on the highway that serviced the area before the Skyway was completed. Trucks were excluded from the Skyway for safety reasons.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The steel vertical lift bridge supported on a concrete substructure has a Warren truss with verticals main lift span and haunched steel girder with floorbeams approach spans. The original metal railings remain on the span. One of the few highway vertical lift spans in the region, the bridge is technologically noteworthy because it is a long and well-preserved example of an important type. It is historically significant because of its association with an important early state highway.

INFOR MATION

Bibliography:
New Jersey Department of Transportation (Plans).
Bridge Engineering, by J. Waddell, John Wiley & Sons, Inc., NY, 1916.
"Morris Goodkind, Bridge Engineer Dies," from The Daily Home News, New Brunswick, NJ, Sept. 7, 1968, pp. 1,12.
Brown, Kathi Ann. Design By Diversity. Kansas City, Missouri: The Lowell Press, 1989.

Physical Description: The 18-span vertical lift bridge is composed of a steel Warren through truss with verticals and a polygonal top chord movable main span, and 17 girder with floor beams approach spans. The bridge measures 2005' long, and it carries a 52' wide barrier divided roadway. The lift span measures 332.5' long. The span provides 40' clearance over the waterway in the closed position, and 135' when fully lifted. The approach spans were rehabilitated 1990ca, and chain-link-fence was attached along portions of the approach. The original metal railing remains for most of its length, and the lift span appears unaltered.

The operation of the lift is controlled from the operator's house which is located about 10' above the sidewalk within the tower at the northwest corner of the lift span. A second control house, which is no longer used, is located in the southwest tower. The gate house and a storage house are located opposite the operator's houses on the east side of the span. The houses in the towers, the control panel, and machinery are all original. The motors that initiate the lift are in the machine houses that are located at the top of both towers. A total of twelve motors, four drive motors and two break motors at each corner of the towers, provide power to operate the bridge. The span is lifted at four points by means of chains that attach to either end of the lift girders. The chains are retracted by the gears, thus moving the span upward, and simultaneously allowing the counterweights, which are located beneath the machine houses, to move downward. The motors were designed to automatically adjust the power supplied in order to ensure the span remains level as it is lifted.

Historical and Technological Significance: The 1939 viaduct is technologically significant because it is a well preserved and large example of an important bridge type. It ranks as one of the longest spans of its type in the region. It is one of two highway vertical lift bridges in the county. The other one is NJ 280 over the Passaic River (0731161) between Newark and Harrison, and it was designed by Waddell and Hardesty in 1945. The bridge is historically noteworthy because it was designed by a prominent consulting engineer firm of Ash-Howard-Needles & Tammen that did much to both pioneer and promulgate the bridge type (Criterion C).

The bridge was built on a new alignment alongside the bridge that carried the Lincoln Highway. That span was removed after construction of this bridge was completed. The original approach roadway to the previous non-extant bridge remain and serve as secondary roads that terminate at either side of the Passaic River. The Lincoln Highway was developed as a result of nationwide support for an "improved" or rock cross country highway. The Lincoln Highway Association was formed in 1913 to lobby and support such a road, but the effort resulted in little in the way of new construction. In New Jersey the highway followed existing roads that were for the most part already improved (paved) through routes. The Lincoln Highway was the main road through the area before the completion of the Pulaski Skyway (1932), which is just south of the 1939 vertical lift bridge.

The firm of Ash-Howard-Needles and Tammen, consulting engineers on the vertical lift bridge project, was one of the nation's leading designers of movable spans. The firm's principal members began their careers in the 1890s and 1900s under the tutelage of bridge engineer J. A. L. Waddell and his partner John Lyle Harrington, who together receive much of the credit for developing the modern vertical lift bridge technology in the United States. In 1914 Waddell and Harrington dissolved their partnership, and a new firm, Harrington, Howard, and Ash, was formed; in 1928 the partnership became Ash-Howard-Needles and Tammen. From 1914 to 1928 the firm designed more than 45 vertical lift bridges, 13 bascule bridges, and six rolling bascule bridges, including a series of 18 movable bridges across the Welland Canal in Ontario, Canada. During the New Deal era of the 1930s, the firm became one of the leading recipients of Public Works Administration bridge projects, and was one of the most active designers of movable spans in New Jersey. In 1930 the firm completed work on the Burlington-Bristol vertical lift bridge across the Delaware River from New Jersey to Pennsylvania. Their work also included the bascule bridges for the Ocean Highway in Cape May County (3900003-3900006), over six bascule bridges for the New Jersey State Highway Department, and three smaller vertical lift spans in southern New Jersey (1710152, 0806151, 0817151).

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

The bridge approaches were designed by the New Jersey State Highway Department Bridge Division under the direction of Morris Goodkind, a prominent bridge engineer. Morris Goodkind was Chief Bridge Engineer of the State Highway Department from 1925 to 1955. Many of the state highway bridges in use today were constructed during his tenure. He won many awards for his designs including an award from the American Institute of Steel Construction for the Oceanic Bridge over the Navesink River (1300S31), built in 1939-1940, as the most beautiful movable bridge built during that year in the country, and similar award for the Passaic River Bridge between Newark and Kearny, built in 1941, and the Absecon Boulevard Bridge in Atlantic City, built in 1946.

Boundary Description and Justification: The bridge is evaluated as individually significant for its technological distinction. The boundary is limited to the bridge itself including the moveable main span, the approach spans, and the substructure.

PHOTO: 705:37-38,1908:5-15 (04/92) REVISED BY (DATE): QUAD: Jersey City

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 070M060 **CO** ESSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED TWO BRIDGES ROAD OVER PASSAIC RIVER **FACILITY** TWO BRIDGES ROAD

TOWNSHIP FAIRFIELD TOWNSHIP

TYPE THRU GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 268 ft **WIDTH** 30 ft

CONSTRUCTION DT 1928 **ALTERATION DT** **SOURCE** PLANS/PLAQUE

DESIGNER/PATENT W. A. STICKEL, CO. ENGINEER **BUILDER** DYER KANE COMPANY

SETTING / CONTEXT The bridge carries a 2-lane collector road and sidewalks over a major river in a wooded flood-plain area at the border with Morris and Passaic Counties. A metal truss bridge crosses the river just north of the bridge. The buildings in the area are residential and commercial dating from the 1940s to the 1970s.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 3-span encased thru girder bridge supported on a concrete substructure has cantilevered sidewalks bordered by metal railings with concrete posts. One of over 8 pre-WW II thru girder bridges in the county, the bridge is a representative example of a common bridge type, and it is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 701:27-29 (04/92) REVISED BY (DATE): QUAD: Pompton Plains

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 070M063 **CO** ESSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED OLD MOUNT PLEASANT AVENUE OVER PASSAIC RIVER **FACILITY** OLD MOUNT PLEASANT AVENUE

TOWNSHIP LIVINGSTON TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 113 ft **WIDTH** 30.2 ft

CONSTRUCTION DT 1920 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT W. A. STICKEL, CO. ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane collector road that is closed to traffic at the bridge. The road is bordered by sidewalks, and the bridge spans over a major river. The area is residential dating from the 1920s to the 1950s on one side of the span, and office buildings dating in the 1980s on the other.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 12/07/89

SUMMARY The 3-span skewed encased stringer bridge supported on a concrete substructure has standard design concrete balustrades bordering concrete sidewalks. One of over 22 stringer bridges in the county, the span is an example of a common type in the state, and it is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 702:8-9 (04/92) REVISED BY (DATE): QUAD: Caldwell, NJ

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 070M065 **CO** ESSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PASSAIC AVENUE OVER PASSAIC RIVER **FACILITY** PASSAIC AVENUE

TOWNSHIP MILLBURN TOWNSHIP

TYPE THRU GIRDER **DESIGN** PARTIALLY ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 112 ft **WIDTH** 29.9 ft

CONSTRUCTION DT 1925 **ALTERATION DT** 1969 **SOURCE** INSCRIPTION/PLANS

DESIGNER/PATENT UNKNOWN **BUILDER** NORTHERN CONSTRUCTION COMPA

SETTING / CONTEXT The bridge carries a narrow 2-lane collector road over a major river bordered by wooded undeveloped land. Light industrial buildings constructed in the 1960s through the 1980s are located to the south of the bridge.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 2-span riveted thru girder with encased floorbeams bridge is supported on a concrete substructure. In 1969 the bridge was redecked. Gunite was added at the abutments and floorbeams. Concrete obelisk lampposts without luminaries remain on top of the girders at the bridge corners. One of over 8 pre-WW II thru girder bridges in the county, the span is an altered example of a common type and is not distinguished.

INFOR MATION

PHOTO: 702:15-16 (04/92) REVISED BY (DATE): QUAD: Caldwell, NJ

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0713151 **CO** ESSEX **OWNER** NJDOT **MILEPOINT** 0.6

NAME & FEATURE INTERSECTED NEWARK VIADUCT (NJ 21) OVER I-78, CONRAIL, AMTRAK **FACILITY** NJ 21

TOWNSHIP NEWARK CITY

TYPE DECK TRUSS **DESIGN** WARREN (ENCASED) **MATERIAL** Steel

 # SPANS 30 **LENGTH** 2943 ft **WIDTH** 44 ft

CONSTRUCTION DT 1932 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER** UNKNOWN

SETTING / CONTEXT The viaduct carries a 4-lane divided highway and sidewalks over a 6-lane divided highway, and Amtrak and Conrail tracks. The area is industrial dating from the turn-of-the-century to the present. The viaduct crosses the historic rights-of-way of the Pennsylvania and Lehigh Valley railroads in an industrial section of Newark.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The viaduct is composed of 2 encased Warren deck truss main spans and 28 approach spans composed of either encased thru girders with floorbeams or deck girders with floorbeams. The high parapets are panelled and have modern luminaries attached. The viaduct is well-preserved, the deck truss was a common span type by 1938. More significant examples, such as the 1910 viaduct (0900016), the approaches to the Pulaski Skyway (0901150), and the helix (3800031), better represent the type.

INFOR MATION

PHOTO: 704:24-26 (04/92) REVISED BY (DATE): QUAD: Elizabeth

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0714150 **CO** ESSEX **OWNER** RAILROAD **MILEPOINT** 7.23

NAME & FEATURE INTERSECTED NEWARK AND NEW YORK BRANCH OVER NJ 21 **FACILITY** NEWARK AND NEW YORK BRANCH

TOWNSHIP NEWARK CITY

TYPE DECK GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 101 ft **WIDTH** 60 ft

CONSTRUCTION DT 1935 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a parking deck that was converted from the abandoned tracks of the New York and Newark Branch over a 4-lane city street in an urban commercial and business district dating from the late 1800s to the present. Newark's Penn Station is a few blocks north of the bridge.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The deck plate girder with floorbeams bridge is supported on a concrete abutment and an earlier ashlar abutment with concrete extensions. Metal railings are set on top of the concrete curbs. Originally constructed to carry railroad tracks, the span was converted to provide a parking area. No longer functioning as originally designed, the span is an example of a common type, and it is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 704:27-29 (04/92) REVISED BY (DATE): QUAD: Elizabeth

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0716156 **CO** ESSEX **OWNER** NJDOT **MILEPOINT** 5.8

NAME & FEATURE INTERSECTED MAIN STREET OVER SECOND RIVER **FACILITY** MAIN STREET

TOWNSHIP NEWARK CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 46 ft **WIDTH** 69.1 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane collector road and sidewalks over a shallow stream in an industrial area. The Wallace & Tiernan & Co. plant, a chemical company, is located north of the span. The plant was constructed in 1912, and alterations, and additions date to the late 1920s. The Maas & Waldstein Co. plant, located south of the span, was established in 1876, but most of the structures date to the early 1900s. Other local factories date from the early 1900s to the 1940s.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased concrete stringer bridge supported on concrete abutments has bush-hammered panels on the fascia stringer encasement. The balustrades are standard design with bush-hammered panels matching the fascia encasement. One of over 22 stringer bridges in the county, the span is an example of a common type in the state, and it is not technologically innovative. The 1930 span replaced an earlier span, and it does not relate historically to the nearby factories.

INFOR MATION

PHOTO: 706:34-35 (04/92) REVISED BY (DATE): QUAD: Orange, NJ

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0718150 **CO** ESSEX **OWNER** RAILROAD **MILEPOINT** 12.35

NAME & FEATURE INTERSECTED LEHIGH VALLEY MAIN LINE RR OVER US 22 **FACILITY** LEHIGH VALLEY MAIN LINE RAILROAD

TOWNSHIP NEWARK CITY

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 2 **LENGTH** 138 ft **WIDTH** 248 ft

CONSTRUCTION DT 1932 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT A. B. COHEN, CONSULTING ENG **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries 2 tracks of the Lehigh Valley Main Line railroad over US 22, a 4-lane divided highway, and is set at the border of Weequahic Park. The bridge is the center level of a 3 tier grade separation with 0700079 spanning overhead. Weequahic Park is one of the original county parks established in the late 1890s as part of the nations first county park system.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 2-span reinforced concrete slab bridge supported on a concrete substructure is constructed on a large skew. The surface of the fasciae is sawtoothed rather than flush, and the panelled parapets follow the shape. The well-detailed span is part of an innovative engineering solution for the common intersection of two roads and a railroad and is technologically noteworthy. It is also the work of noted engineer A. Burton Cohen, a national leader in the design of concrete bridges.

INFOR MATION

Bibliography:
Essex County Engineers Office (Plans).
Personal interview with A.G. Lichtenstein
A.G. Lichtenstein & Assoc. The New York Times. Obituary, 2/12/1956.
Newark Public Library. Subject File: Weequahic Park.

Physical Description: The 1932 2-span reinforced concrete slab bridge with plain spandrels is constructed on a large skew. The bridge spans 132' and measures 248' wide. Because of the degree of skew, the bridge has a sawtooth profile, a common 1930s design solution to the problem (also used at 0917169 on the Holland Tunnel approach in Weehawken). Constructed as part of a three-level crossing, the span was designed to carry 6 tracks of the Lehigh Valley Railroad over State Highway Route 29 (now US 22). All but 2 tracks have been removed from the span. An open spandrel ribbed arch bridge (0700079), built at the same time, spans over the bridge, and it carries a park road. Both bridges are visually unified by the same concrete parapets that are finished in the Moderne style with flat panels and chamfered caps. The bridge is well preserved.

Historical and Technological Significance: The slab bridge is technologically significant because it is part of a well-preserved example of an innovative three-level bridge crossing designed by a prominent civil engineer (Criterion C). The slab bridge was constructed for the Essex County Park Commission and designed by A. Burton Cohen (1883-1956), a prominent engineer noted for his work in concrete. Before founding his own consulting engineering firm in New York City in 1920, Cohen had a distinguished career as the bridge engineer for the Delaware Lackawanna & Western Railroad's ambitious programs of eliminating grade crossings in New Jersey and improving its main line in Pennsylvania. Perhaps his most monumental work is the Tunkhannock Creek Viaduct in Nicholson, PA. His grade crossing elimination projects in New Jersey include Montclair, South Orange, and Orange. He graduated from Purdue University with an engineering degree in 1910, and he joined the railroad shortly thereafter. He was awarded the American Concrete Institute's gold medal in 1927. While in private practice, he designed many concrete arch bridges including JFK Boulevard over PATH and Conrail in Jersey City, and the 1921 7-span Centerway Bridge over the Chemung River in Corning, New York, which is the first bridge in the United States to be constructed with cast-in-place concrete piles.

Weequahic Park was established as one of the original reservations in Essex County's ambitious county-wide park system established in 1895. Between 1896 and 1899 12 parcels in the what was then swampy land were acquired on the southern edge of Newark. The tract was upgraded to park status in 1910. A lake was created, and the west boundary of the park was extended. The extension included a race track for trotters that was retained. Other recreational facilities were added, such as the 1907 field house, the 1915 golf course, and the 1916 children's playground building, tennis courts, and comfort building. During World War II, Army barracks were built in the park, and after the war they were used as temporary quarters for military families to help ease the national housing crunch. The last of the barracks were removed in 1955.

Boundary Description and Justification: Although the bridge is located in a park setting, the span is evaluated as individually significant based on its technological distinction. It is part of a three level structure, so the span above it (0700079) is also evaluated as significant. The boundaries include the two spans and the retaining walls. The park does not appear to meet National Register criteria.

PHOTO: 704:19-21 (04/92) REVISED BY (DATE): QUAD: Elizabeth

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0719152 **CO** ESSEX **OWNER** RAILROAD **MILEPOINT** 18.42

NAME & FEATURE INTERSECTED MORRISTOWN-ERIE RAILROAD OVER NJ 23 **FACILITY** MORRISTOWN ERIE RAILROAD

TOWNSHIP CEDAR GROVE TOWNSHIP

TYPE THRU GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 3 **LENGTH** 76 ft **WIDTH** 11.8 ft

CONSTRUCTION DT 1916 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT ERIE RR OFFICE OF ENGINEER **BUILDER** H. J. COLLIER CO.

SETTING / CONTEXT The bridge carries abandoned r-o-w of the Morristown branch of the former Erie Railroad. Trackage was removed in the 1970s. The overpass spans over NJ 23, a 2-lane highway, in a commercial area with structures dating from the 1900s to the present.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 3-span riveted thru girder with floorbeams bridge supported on concrete abutments and steel pier bents has an open timber deck. The bridge exhibits no distinctive construction details. A representative example of a common bridge type for both rail-carrying and road-carrying spans, it is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 702:6-7 (04/92) REVISED BY (DATE): QUAD: Orange, NJ

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0722157 **CO** ESSEX **OWNER** NJDOT **MILEPOINT** 55.43

NAME & FEATURE INTERSECTED US 46 EB OVER PASSAIC RIVER **FACILITY** US 46 EASTBOUND

TOWNSHIP FAIRFIELD TOWNSHIP

TYPE THRU GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 248 ft **WIDTH** 43.8 ft

CONSTRUCTION DT 1927 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries the 2 eastbound lanes of US 46, a 4-lane divided highway with shoulders and sidewalks, over a major river in a mixed commercial and residential area with structures built from the 1950s to the present. Lackawanna Street spans the Passaic River about 500 feet downstream of the bridge, and a modern bridge carries the westbound lanes of US 46 adjacent to the bridge upstream.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 3-span encased thru girder with floorbeams bridge supported on a concrete substructure has cantilevered sidewalks bordered by metal railing with concrete rail posts. The span is a representative example of State Highway Department-designed encased thru girder bridges used on state routes in the 1920s. One of over 8 pre-WW II thru girder bridges in the county, the span is a common type, and it is neither technologically nor historically distinguished.

INFOR MATION

PHOTO: 701:30-32 (04/92) REVISED BY (DATE): QUAD: Caldwell, NJ

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0749160 **CO** ESSEX **OWNER** CITY OR MUNC. **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED HAYNES AVENUE OVER AMTRAK **FACILITY** HAYNES AVENUE

TOWNSHIP NEWARK CITY

TYPE THRU GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 13 **LENGTH** 1164 ft **WIDTH** 40.1 ft

CONSTRUCTION DT 1931 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge carries a 2-lane road and sidewalks over Amtrak railroad tracks in an industrial area. The local buildings were constructed from the 1890s through the 1960s.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 4/30/91, Letter 6/30/95.

SUMMARY The 13-span viaduct supported on a concrete substructure is composed of 9 encased thru girder with floorbeams spans and 4 reinforced concrete girder with floorbeams spans at the east. The cantilevered sidewalks are flanked by panelled concrete parapets on the main spans and metal pipe railing with concrete posts at the approach spans. The SHPO determined the bridge eligible based on its historic association as a ramp to the 1 & 9 Corridor and its similarity of type with other spans on the route.

INFOR MATION

PHOTO: 704:8-13 (04/92) REVISED BY (DATE): QUAD: Elizabeth

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0750160 **CO** ESSEX **OWNER** UNKNOWN **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WILSON AVENUE OVER NEWARK & ELIZABETH BRANCH RR **FACILITY** WILSON AVENUE

TOWNSHIP NEWARK CITY

TYPE THRU GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 30 **LENGTH** 1258 ft **WIDTH** 30 ft

CONSTRUCTION DT 1938 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT CRR CO OF NJ **BUILDER** AMERICAN BRIDGE COMPANY

SETTING / CONTEXT The bridge carries a 2-lane collector road and sidewalks over the Newark-Elizabeth Branch Conrail tracks in a post-WW II light industrial area near Port Newark. The span was originally constructed as a grade crossing elimination, and it carried 2 sets of Public Service trolley tracks over the Central Railroad of New Jersey, N & E Branch. Port Newark was developed from a vast marshland in the early 1900s into a major seaport, and it was opened in October of 1915.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The viaduct is composed of 2 riveted thru girder main spans and 28 steel stringer approach spans and is supported on concrete abutments and steel pier bents. Decorative metal railing line the cantilevered sidewalks and 2 concrete stair cases lead from the sidewalks underneath the bridge. The stairs are in deteriorated condition. One of over 8 thru girder bridges in the county, the bridge is a long example of a common type, and it is not technologically or historically distinguished.

INFOR MATION

PHOTO: 705:30-33 (04/92) REVISED BY (DATE): QUAD: Elizabeth

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0751160 **CO** ESSEX **OWNER** UNKNOWN **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED DOREMUS AVENUE OVER LEHIGH VALLEY MAIN LINE RR **FACILITY** DOREMUS AVENUE

TOWNSHIP NEWARK CITY

TYPE THRU GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 18 **LENGTH** 1253 ft **WIDTH** 25 ft

CONSTRUCTION DT 1918 **ALTERATION DT** 1976, 1986 **SOURCE** PLANS

DESIGNER/PATENT LEHIGH VALLEY RR OFF. OF ENGNR **BUILDER** BETHLEHEM STEEL BRIDGE CO

SETTING / CONTEXT The bridge carries a narrow 2-lane collector road and utility pipes over the Lehigh Valley Main Line railroad tracks in an industrial area located near Port Newark. Port Newark was developed from a vast marshland in the early 1900s into a major seaport. The port was opened in October of 1915.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 18-span riveted thru girder with floorbeams bridge is supported on a concrete substructure. In 1986 and in 1976 repairs were made to the deck and deck joints, and cracked stringer clip angles were replaced. The bridge dates to the early development of Port Newark, but the viaduct is an example of a common type, and it is not technologically innovative or historically distinguished. The area does not appear to have historic district potential.

INFOR MATION

PHOTO: 705:34-36 (04/92) REVISED BY (DATE): QUAD: Elizabeth

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0755160 **CO** ESSEX **OWNER** UNKNOWN **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED ARLINGTON AVENUE OVER ORANGE INDUSTRIAL TRACK **FACILITY** ARLINGTON AVENUE

TOWNSHIP BLOOMFIELD TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 111 ft **WIDTH** 30.2 ft

CONSTRUCTION DT 1931 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT ERIE RAILROAD COMPANY **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane collector road and sidewalks over the abandoned r-o-w of the Erie RR Co. The tracks have been removed, and the area is wooded with a few abandoned industrial buildings including one dated 1915.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 3-span encased stringer bridge supported on concrete abutments and steel pier bents has standard design concrete balustrades bordering concrete sidewalks. A staircase leads from the sidewalks down to the underside at the west side of the southernmost span. One of over 22 stringer bridges in the county, the span is an example of a common bridge type in the state and it is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 706:14-15 (04/92) REVISED BY (DATE): QUAD: Orange, NJ

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0801150 **CO** GLOUCESTER **OWNER** NJDOT **MILEPOINT** 24.95

NAME & FEATURE INTERSECTED US 40 OVER STILL RUN **FACILITY** US 40

TOWNSHIP FRANKLIN TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 73 ft **WIDTH** 40 ft

CONSTRUCTION DT 1929 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The slightly skewed, two-span bridge crosses a wide but shallow creek on a tree-lined section of a heavily traveled two-lane highway. Nearby is the intersection of US 40 and the NJ 55 freeway.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased steel-stringer bridge with concrete balustrades is representative of many similar spans designed by the NJ State Highway Department in the 1920s and 1930s. Markers indicate the original route designation of the bridge was "State Highway Route 6." The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 43:4,7 (07/91) REVISED BY (DATE): QUAD: Newfield

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0801151 **CO** GLOUCESTER **OWNER** NJDOT **MILEPOINT** 26.41

NAME & FEATURE INTERSECTED US 40 OVER SCOTLAND RUN AT MALAGA LAKE **FACILITY** US 40

TOWNSHIP FRANKLIN TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 25 ft **WIDTH** 40 ft

CONSTRUCTION DT 1929 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge spans the spillway that flows into Scotland Run, a tributary of the Maurice River, from Malaga Lake. For 3/10 of one mile on either side of the bridge US 40 travels on top of the earthen dam that forms the privately-owned, tree-lined lake. Extending between the wing walls is the concrete dam/spillway and gates that control the water level of the lake. The structural association of bridges and dams is common in the region.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased steel-stringer bridge is an example of many similar bridges designed by the NJ State Highway Department in the 1920s and 1930s. The balustrades are slightly different from most state highway stringer bridges but in all other respects the bridge is representative of the type. Markers indicate the original route designation of the bridge was "State Highway Route 49." The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 43:2-3 (07/91) REVISED BY (DATE): QUAD: Newfield

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0802151 **CO** GLOUCESTER **OWNER** NJDOT **MILEPOINT** 4.1

NAME & FEATURE INTERSECTED NJ 41 OVER SOUTH BRANCH OF BIG TIMBER CREEK **FACILITY** NJ 41

TOWNSHIP DEPTFORD TOWNSHIP

TYPE THRU GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 138 ft **WIDTH** 40 ft

CONSTRUCTION DT 1927 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The steel thru girder bridge is located on a very busy stretch of highway near the intersection of NJ 55, NJ 41, the New Jersey Turnpike, and the Atlantic City Expressway. Convenience stores, gas stations, and shopping centers dominate the bridge's surroundings. Scrub trees and undergrowth line the river banks.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span, encased, thru-girder bridge has reinforced-concrete abutments and piers, and cantilevered sidewalks with steel railings. The bridge is representative of a type designed by the State Highway Department in the 1920s. A historic marker notes that in 1777 the Hessians fled across the river at this site at the Battle of Red Hook, but the bridge lacks a historic context with this event. The bridge is not technologically distinguished, and better examples, like 0802I14, exist.

INFOR MATION

PHOTO: 41:41-42 (08/91) REVISED BY (DATE): QUAD: Runnemede

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0802H03 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED DELAWARE STREET (CR 534) OVER STARRS DITCH **FACILITY** DELAWARE STREET / COOPER AVENUE (CR 534)

TOWNSHIP WEST DEPTFORD TOWNSHIP

TYPE ARCH **DESIGN** BARREL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 30 ft **WIDTH** 30 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** E. P. HENRY & SON

SETTING / CONTEXT The bridge spans Starr's Ditch, a tributary of Woodbury Creek. Upstream the creek widens to form large tidal mudflats. Trees line Delaware Avenue and the surrounding area is a residential neighborhood (c. 1900-1980). To the west is a high-tension electric power line.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The earth-filled, reinforced-concrete arch with plain concrete parapets is a representative example of over 15 other existing arches built by Gloucester County between 1912 and 1940. William C. Cattell, the county engineer from 1909 to 1942, preferred the parapet arches for the creek crossings in the hillier western sections of the county. An eligible example of the bridge type is located in the Mullica Hill Historic District (#0825150).

INFOR MATION

PHOTO: 41:31-32 (08/91) REVISED BY (DATE): QUAD: Woodbury

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0802I11 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED EVERGREEN AVENUE (CR 553) OVER WOODBURY CREEK **FACILITY** EVERGREEN AVENUE (CR 553)

TOWNSHIP WOODBURY CITY

TYPE ARCH **DESIGN** BARREL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 45 ft **WIDTH** 40 ft

CONSTRUCTION DT 1929 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** JUST F. ERIKSEN

SETTING / CONTEXT Evergreen Avenue passes through Evergreen Park (c. 1970), a narrow green strip along Woodbury Creek in Woodbury City. The creek has been dammed shortly downstream and the concrete arch bridge spans Frank H. Stewart Memorial Lake. The bridge is not integral to the park design, in fact the street ungraciously cuts the park in half. Nearby is a residential area with single-family homes and apartments.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The earth-filled, reinforced-concrete arch with plain concrete parapets is a representative example of over 15 other existing arches built by Gloucester County between 1912 and 1940. William C. Cattell, the county engineer from 1909 to 1942, preferred the parapet arches for the creek crossings in the hillier western sections of the county. An eligible example of the bridge type is located in the Mullica Hill Historic District (#0825150).

INFOR MATION

PHOTO: 41:27-28 (08/91) REVISED BY (DATE): QUAD: Woodbury

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0802I14 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED HUNTER STREET OVER CONRAIL **FACILITY** HUNTER STREET

TOWNSHIP WOODBURY CITY

TYPE THRU GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 93 ft **WIDTH** 20 ft

CONSTRUCTION DT 1914 **ALTERATION DT** 1935 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** SUBURBAN CONSTRUCTION CO.

SETTING / CONTEXT The two-lane wide, encased thru girder spans a single-track railroad running through an older, well-preserved, 19th-century residential neighborhood in Woodbury City. The bridge is within a large historic district that incorporates Woodbury's commercial and residential areas. A nomination has been submitted for review by ONJH. The bridge appears to be a contributing element.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Agreed Potential Historic District. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span, encased, thru-girder with floor beams bridge has stone abutments. The bridge was designed by William C. Cattell, the county engineer, and built by the Suburban Construction Co. of Philadelphia. It was repaired and strengthened by the McClintic-Marshall Co., a division of Bethlehem Steel, in 1935. The bridge is eligible because it falls within the period of significance of the historic neighborhood in which it is located.

INFOR MATION

SOURCES:
Gloucester County Engineer. Bridge File Cards and Plans, #0802i14, 1914-1935.
Office of New Jersey Heritage. Woodbury Historic District Nomination. 1991.
Waddell, J. A. L. Bridge Engineering. 1916.

PHYSICAL DESCRIPTION: The single-span bridge is an above grade crossing of the former Pennsylvania-Reading Seashore Lines, now Conrail. The bridge is a 93'-span encased thru girder with encased floor beams. It is supported on coursed-stone abutments. The bridge has a 20'-roadway and two narrow concrete sidewalks on the interior side of the girders.

HISTORICAL AND TECHNOLOGICAL SIGNIFICANCE: The Hunter Street Bridge lies within the proposed Woodbury Historic District, a large historic district that incorporates Woodbury's commercial and residential areas. Built in 1914, the bridge was constructed within the dates of significance of the proposed district (c.1715-1941) and contributes to the historic character of the well-preserved, 19th-century residential neighborhood in which it is located. The bridge serves to connect the residential area with the downtown commercial area to the west.

The bridge was constructed by the Suburban Construction Company of Philadelphia after plans approved by the Gloucester County Engineer, William C. Cattell. In 1935 the bridge was repaired by the McClintic-Marshall Co., a division of Bethlehem Steel, but the overall design of the bridge was not significantly altered. The bridge is a representative example of a thru-girder bridge technology, and is historically significant because of its location within a proposed historic district. A nomination for the historic district has been submitted for review by ONJH.

PHOTO: 41:29-30 (08/91) REVISED BY (DATE): QUAD: Woodbury

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0803E01 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED TOMLIN STATION ROAD (CR 607) OVER NEHONSEY BROOK **FACILITY** TOMLIN STATION ROAD (CR 607)

TOWNSHIP GREENWICH TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 26 ft **WIDTH** 30 ft

CONSTRUCTION DT 1924 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** E. P. HENRY & SON

SETTING / CONTEXT The concrete-slab bridge spans a shallow creek in a low-lying wetlands. Scrub brush, small trees and rushes dominate the landscape. To the northeast of the bridge is a small boat launch. The small town of Greenwich lies a few hundred yards north on Tomlin Station Road. The bridge has reinforced concrete abutments.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge is a representative example of over 20 existing short-span, parapet, concrete slab bridges built by Gloucester County between 1922 and 1941. Since 1920 concrete slab bridge designs have been popular because of their low cost, strength, durability, and ease of construction. An early example of a concrete slab bridge (#0809L02) has been recommended for National Register eligibility.

INFOR MATION

PHOTO: 40:5-6 (08/91) REVISED BY (DATE): QUAD: Bridgeport

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0803E05 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED SWEDESBORO-PAULSBORO ROAD OVER STILL RUN **FACILITY** SWEDESBORO PAULSBORO ROAD

TOWNSHIP GREENWICH TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 28 ft **WIDTH** 30 ft

CONSTRUCTION DT 1935 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** JAMES C. HENRY

SETTING / CONTEXT The two-lane bridge spans a small creek in a sparsely developed area. The fields surrounding the bridge were probably once farmed but haven since been allowed to turn to scrub brush. A number of warehouses are located nearby due to the proximity of I-295 and the New Jersey Turnpike. A large electric power line crosses overhead. The bridge has reinforced concrete abutments and wing walls.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge is a representative example of over 20 existing short-span, parapet, concrete slab bridges built by Gloucester County between 1922 and 1941. Since 1920 concrete slab bridge designs have been popular because of their low cost, strength, durability, and ease of construction. An early example of a concrete slab bridge (0809L02) has been recommended for National Register eligibility.

INFOR MATION

PHOTO: 40:1-2 (08/91) REVISED BY (DATE): QUAD: Bridgeport

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0803E08 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED DEMOCRAT ROAD (CR 551 SPUR) OVER NEHONSEY BROOK **FACILITY** DEMOCRAT ROAD / MICKLETON GIBBSTOWN ROAD

TOWNSHIP GREENWICH TOWNSHIP

TYPE T BEAM **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 24 ft **WIDTH** 24 ft

CONSTRUCTION DT 1918 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** E. P. HENRY & SON

SETTING / CONTEXT The two-lane bridge spans a shallow, tree-lined creek in the village of Gibbstown. The bridge is located within a residential neighborhood (c. 1950-60), although next to the bridge is a large vacant lot.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 12/07/89

SUMMARY The bridge is a representative example of at least five existing T-beam bridges built by Gloucester County between 1915 and 1932. The T-beam, so called because of the T-pattern of the steel rebars in the reinforced concrete beams, was a popular design from the mid-1910s to the 1930s. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 40:7-9 (08/91) REVISED BY (DATE): QUAD: Bridgeport

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0803G01 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED KINGS HIGHWAY (CR 551) OVER MANTUA CREEK **FACILITY** KINGS HIGHWAY (CR 551)

TOWNSHIP WEST DEPTFORD TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 76 ft **WIDTH** 30 ft

CONSTRUCTION DT 1936 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** GRAY CONSTRUCTION CO.

SETTING / CONTEXT The two-lane bridge spans a tidal tributary of the Delaware River outside of the small village of Mount Royal. Up and downstream from the bridge are large marshes and tree-lined banks. The local neighborhood includes a scattering of homes (c. 1950-70) and a number of warehouses and small factories, the most prominent of which is Imperial Chemical Industries at the corner of CR 551 and CR 643.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased steel-stringer bridge is one at least four similar bridges with balustrades and reinforced concrete substructure built by Gloucester County between 1933 and 1942. The Gray Construction Co. of Morristown contracted to build the bridge. Encased stringers are a common bridge type throughout New Jersey and since 1920 have been in wide use by the state and county highway departments. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 41:33-34 (08/91) REVISED BY (DATE): QUAD: Woodbury

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0803K03 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED COOPER STREET (CR 706) OVER ALMONESSON CREEK **FACILITY** COOPER STREET (CR 706)

TOWNSHIP DEPTFORD TOWNSHIP

TYPE ARCH **DESIGN** BARREL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 30 ft **WIDTH** 31 ft

CONSTRUCTION DT 1926 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** E. P. HENRY & SON

SETTING / CONTEXT Located in a suburban neighborhood (c. 1970) near the NJ 55 freeway, the two-lane concrete arch bridge spans a narrow but steeply banked, tree-lined creek. Just upstream from the bridge is a small dam and lake.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The earth-filled, reinforced-concrete arch with plain concrete parapets is a representative example of over 15 other existing arches built by Gloucester County between 1912 and 1940. William C. Cattell, the county engineer from 1909 to 1942, preferred the parapet arches for the creek crossings in the hillier western sections of the county. An eligible example of the bridge type is located in the Mullica Hill Historic District (#0825150).

INFOR MATION

PHOTO: 41:43-44 (08/91) REVISED BY (DATE): QUAD: Runnemede

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0804E05 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WARRINGTON MILL ROAD OVER PURGEY CREEK **FACILITY** WARRINGTON MILL ROAD

TOWNSHIP EAST GREENWICH TOWNSHIP

TYPE T BEAM **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 32 ft **WIDTH** 30 ft

CONSTRUCTION DT 1921 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** UNKNOWN

SETTING / CONTEXT Set in beautiful park-like surroundings, the bridge forms part of a mill pond, dam, and canal system that once powered a mill which recently burned to the ground. The bridge's roadway approaches are part of an earthen dam creating the mill pond and extending from bridge abutment to abutment is a concrete spillway that once supported flood gates. The structural association of bridges and dams is common in the region.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The T-beam bridge with plain concrete parapets is an example of at least five existing T-beam bridges built by Gloucester County between 1915 and 1932. The bridge postdates the dam and mill, and if the mill had survived the bridge might be of greater historic interest. The T-beam was a popular design from the mid-1910s to the 1930s. The bridge has no significant historical or technological associations.

INFOR MATION

PHOTO: 42:1-3 (08/91) REVISED BY (DATE): QUAD: Bridgeport

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0804F03 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED RATTLING RUN ROAD OVER RATTLING RUN **FACILITY** RATTLING RUN ROAD

TOWNSHIP EAST GREENWICH TOWNSHIP

TYPE ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 26 ft **WIDTH** 24 ft

CONSTRUCTION DT 1920 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** UNKNOWN

SETTING / CONTEXT Located in a rural section of Gloucester County, the two-lane, concrete arch bridge spans a shallow creek running through farmer's fields. Nearby is a nineteenth-century farmhouse in good condition.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The earth-filled, reinforced-concrete arch with plain concrete parapets is an elliptical example of over 15 other existing arches built by Gloucester County between 1912 and 1940. William C. Cattell, the county engineer from 1909 to 1942, preferred the parapet arches for the creek crossings in the hillier western sections of the county. An eligible example of the type is located in the Mullica Hill Historic District (#0825150).

INFOR MATION

PHOTO: 42:43-44 (07/91) REVISED BY (DATE): QUAD: Bridgeport

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0804F05 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED TOMLIN STATION ROAD (CR 607) OVER RATTLING RUN **FACILITY** TOMLIN STATION ROAD (CR 607)

TOWNSHIP EAST GREENWICH TOWNSHIP

TYPE ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 30 ft **WIDTH** 24 ft

CONSTRUCTION DT 1919 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** UNKNOWN

SETTING / CONTEXT Suburban residences (c. 1920-70) on relatively large wooded lots line Tomlin Station Road. Rattling Run is tree-lined and picturesque with grass-covered banks. The concrete arch bridge with parapet walls blends well with its surroundings.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The earth-filled, reinforced-concrete arch with plain concrete parapets is an elliptical example of over 15 other existing arches built by Gloucester County between 1912 and 1940. William C. Cattell, the county engineer from 1909 to 1942, preferred the parapet arches for the creek crossings in the hillier western sections of the county. An eligible example of the bridge type is located in the Mullica Hill Historic District (#0825150).

INFOR MATION

PHOTO: 42:41-42 (07/91) REVISED BY (DATE): QUAD: Bridgeport

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0804H05 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED JESSUPS MILL ROAD OVER EDWARDS RUN **FACILITY** JESSUPS MILL ROAD

TOWNSHIP MANTUA TOWNSHIP

TYPE ARCH **DESIGN** BARREL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 30 ft **WIDTH** 30 ft

CONSTRUCTION DT 1925 **ALTERATION DT** 1940 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** E. P. HENRY & SON

SETTING / CONTEXT The two-lane concrete arch spans a small creek along a tree-lined county road. Nearby is the privately-owned Hidden Acres Picnic Area and Wildlife Refuge. The surroundings woods are new growth scrub trees and undergrowth.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The earth-filled, reinforced-concrete arch with plain concrete parapets is not a good example of over 15 other existing arches built between 1912 and 1940 in Gloucester County. In 1940 the county rebuilt the west abutment. William C. Cattell, the county engineer from 1909 to 1942, preferred the parapet arches for the hillier western sections of the county. An eligible example of the bridge type is located in the Mullica Hill Historic District (#0825150).

INFOR MATION

PHOTO: 42:9-10 (07/91) REVISED BY (DATE): QUAD: Woodbury

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0804I02 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MANTUA-WENONAH ROAD (CR 632) OVER MANTUA CREEK **FACILITY** MANTUA-WENONAH ROAD (CR 632)

TOWNSHIP WENONAH BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 50 ft **WIDTH** 40 ft

CONSTRUCTION DT 1933 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** CHARLES D. PROSSER

SETTING / CONTEXT The two-lane bridge spans a tree-lined river in a suburban residential neighborhood (c. 1920-60). Trees and heavy undergrowth line the fairly deep and wide Mantua Creek.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased steel stringer with balustrades and reinforced-concrete substructure is one of at least four similar bridges built by Gloucester County between 1933 and 1942. Charles D. Prosser of Pitman contracted to construct the bridge. Encased stringers are a common bridge type throughout New Jersey and since 1920 have been widely used by the state and county highway departments. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 43:10-11 (07/91) REVISED BY (DATE): QUAD: Woodbury

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0804J08 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BARNSBORO-BLACKWOOD ROAD OVER MANTUA CREEK **FACILITY** BARNSBORO-BLACKWOOD ROAD (CR 603)

TOWNSHIP DEPTFORD TOWNSHIP

TYPE T BEAM **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 38 ft **WIDTH** 30 ft

CONSTRUCTION DT 1932 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** HILL CONSTRUCTION COMPANY

SETTING / CONTEXT The two-lane bridge spans a small creek near an intersection with a gas station and convenience store. The surrounding neighborhood is suburban residential (c. 1950-1990).

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge is a representative example of at least five existing T-beam bridges with parapets built by Gloucester County between 1915 and 1932. The T-beam, so called because of the T-pattern of the rebars in the reinforced concrete beams, was a popular design from the mid-1910s to the 1930s, and it is common in southern New Jersey. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 41:1-2 (08/91) REVISED BY (DATE): QUAD: Woodbury

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0804L04 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WILSON ROAD OVER BELLS LAKE BRANCH **FACILITY** WILSON ROAD

TOWNSHIP WASHINGTON TOWNSHIP

TYPE T BEAM **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 32 ft **WIDTH** 20 ft

CONSTRUCTION DT 1920 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** UNKNOWN

SETTING / CONTEXT The narrow, skewed, two-lane bridge spans a small creek in a suburban residential neighborhood (c. 1950) near the NJ 168 commercial strip. Developers are building a new shopping center and professional office building in the vacant lot downstream from the bridge.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge with plain parapets is one at least five existing T-beam bridges built by Gloucester County between 1915 and 1932. It is similar to the other T-beams except for its skew. The T-beam, so called because of the T-pattern of the rebars in the reinforced-concrete beams, was a popular design from the mid-1910s to the 1930s. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 43:18-19 (07/91) REVISED BY (DATE): QUAD: Runnemede

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0804L05 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 705 OVER BELLS LAKE BRANCH **FACILITY** LAKELAND-TURNERSVILLE ROAD (CR 705)

TOWNSHIP WASHINGTON TOWNSHIP

TYPE T BEAM **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 24 ft **WIDTH** 24 ft

CONSTRUCTION DT 1915 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** UNKNOWN

SETTING / CONTEXT The two-lane bridge spans a small creek in a transitional area between a small industrial zone and a residential neighborhood (c.1920-1950) near NJ 168. A small trapezoidal-shape dam with a single gate extends upstream from the bridge abutments for flood control. The structural association of bridges and dams is common in the region.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The T-beam bridge with plain concrete parapets is an example of at least five existing T-beam bridges built by Gloucester County between 1915 and 1932. The T-beam, so-called because of the T-pattern of the rebars in the reinforced-concrete beams, was a popular design from the mid-1910s to the 1930s, and they are common in southern New Jersey. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 43:12-14 (07/91) REVISED BY (DATE): QUAD: Runnemede

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0805153 **CO** GLOUCESTER **OWNER** NJDOT **MILEPOINT** 3.2

NAME & FEATURE INTERSECTED NJ 44 OVER NEHONSEY BROOK **FACILITY** NJ 44

TOWNSHIP GREENWICH TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 20 ft **WIDTH** No Data

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER** UNKNOWN

SETTING / CONTEXT The two-lane bridge spans a small creek near where NJ 44 passes over the Penns Grove Branch of Conrail (#0805154). The bridge has a slight grade and makes up part of the approach to the railroad overpass. The surrounding area is wooded with scrub trees and heavy undergrowth. Slightly upstream from the bridge is a small wooded lot with home (c. 1920).

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The concrete slab with reinforced-concrete substructure is representative of many short-span bridges designed and built by the state highway department in the period between 1920 and 1950. No historic railing survives and beam guide rails have been added. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 40:12-13 (08/91) REVISED BY (DATE): QUAD: Bridgeport

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0805154 **CO** GLOUCESTER **OWNER** NJDOT **MILEPOINT** 2.79

NAME & FEATURE INTERSECTED NJ 44 OVER CONRAIL **FACILITY** NJ 44

TOWNSHIP GREENWICH TOWNSHIP

TYPE SLAB **DESIGN** CONTINUOUS **MATERIAL** Reinforced Concrete

 # SPANS 6 **LENGTH** 182 ft **WIDTH** 40.5 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT PENNSYLVANIA RAILROAD **BUILDER** DANIEL S. BADER

SETTING / CONTEXT The skewed continuous-slab bridge provides an above grade crossing for NJ 44 over the Penn's Grove Branch of Conrail (formerly PRSLRR) at the outskirts of the small village of Gibbstown near the Delaware River. To the east and along the railroad track is a small working-class neighborhood of single-story bungalows (c. 1900-1930). To the west is a freight siding. To the south is a dense covering of scrub trees and undergrowth.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The six-span, continuous-slab bridge with paneled concrete parapets has reinforced-concrete abutments, floor beams, and column-and-beam bents. Engineers of the Soo Line Railroad pioneered the continuous slab design in the period before WW I. This span is well preserved, but it is not technologically or historically significant. A more elaborately detailed example of the bridge type (0421150) has been recommended for eligibility.

INFOR MATION

SOURCES:
Condit, Carl W. American Building Art: The Twentieth Century. New York: Oxford University Press, 1961.
New Jersey Department of Transportation. Bridge File 0805154. 1930.

PHYSICAL DESCRIPTION: The skewed, two-lane, six-span, 182'-long, 40.5'-wide bridge survives with very few alterations. The bridge is a continuous reinforced-concrete slab with reinforced-concrete bents, floor beams, and abutments. The bents are composed of concrete columns and longitudinal beams spaced 17' apart except for the central bents which is separated from its neighbors by 22'6". The floor beams do not extend across the middle two spans. The bridge has overhanging sidewalks with paneled parapets. A steel guard rail has been added to the bridge. The approaches are earth fill.

HISTORICAL AND TECHNOLOGICAL SIGNIFICANCE: According to Condit, the first continuous-slab bridge in the United States was built in 1909 to carry Lafayette Avenue over the tracks of the Soo Line in St. Paul, Minnesota. The steady improvement of concrete-slab bridge designs and concrete-reinforcing systems led to their increasing adoption, especially for highway bridges. The NJ 44 bridge employs a common continuous slab design with piers consisting of longitudinal beams extending over rows of columns. A rarer design employs a single row of columns along the center line of the deck.

Railroads in New Jersey did not frequently build continuous slab bridges. No documentation has been located to explain why the Pennsylvania Railroad chose continuous slab construction over other more common bridge designs, e.g. steel girder. The continuous slab design appears to lend itself well to the pronounced skew of the crossing. The railroad also planned in the future to lay a second track under the bridge explaining the uneven placement of the bents and floor beams. The bridge is a good example of its type, but it is not historically or technologically distinguished, and better examples exist.

PHOTO: 40:10-11 (08/91) REVISED BY (DATE): QUAD: Bridgeport

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0805D03 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED KINGS HIGHWAY (CR 551) OVER RACCOON CREEK **FACILITY** KINGS HIGHWAY (CR 551)

TOWNSHIP SWEDESBORO BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 4 **LENGTH** 154 ft **WIDTH** 40 ft

CONSTRUCTION DT 1942 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** EDWARD H. ELLIS

SETTING / CONTEXT The two-lane bridge is located on one of the main thoroughfares leading into downtown Swedesboro. Raccoon Creek is a wide slow-moving, tree-lined river with frequent fishing holes along its banks. To the south is a residential neighborhood (c. 1800-1990) with an intermixture of small businesses.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The concrete-encased steel stringer with pierced balustrade and reinforced-concrete substructure is one of four similar bridges built by Gloucester County between 1933 and 1942. Edward H. Ellis of Westville contracted to construct the bridge. Concrete-encased stringers are a common bridge type throughout New Jersey and since 1920 have been widely used by the state and county highway departments. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 40:21-22 (08/91) REVISED BY (DATE): QUAD: Bridgeport

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0805D04 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED LOCKE AVE (CR 671) OVER RACCOON CREEK **FACILITY** LOCKE AVENUE (CR 671)

TOWNSHIP SWEDESBORO BOROUGH

TYPE SWING SPAN **DESIGN** CENTER BEARING **MATERIAL** Steel

 # SPANS 2 **LENGTH** 156 ft **WIDTH** 15.3 ft

CONSTRUCTION DT 1911 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** OWEGO BRIDGE COMPANY

SETTING / CONTEXT The Locke Avenue Bridge, the furthest upstream of three movable spans across Raccoon Creek between the Delaware River and Swedesboro, last opened to river traffic in the mid-1960s. A working-class neighborhood of two-story, two-family houses is located upstream on the southern river bank. Across the tree-lined northern bank, the land opens into farmers' fields. At the southern approach is the original tender's house.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 11/29/90, Letter 6/30/95.

SUMMARY The riveted-steel truss is the only swing span, and the oldest of three existing movable spans in Gloucester County. The center-bearing swing was one of the most common movable spans built in the 19th and early-20th centuries. Fabricated by the Owego Bridge Co. of Owego, NY, the hand-operated bridge has roller end lifts. Although no longer operable, the bridge possesses good historic integrity and documentation, and its neighborhood provides an appropriate context.

INFOR MATION

PHOTO: 40:26-29 (08/91) REVISED BY (DATE): QUAD: Bridgeport

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0805D05 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 538 OVER NARRATICON RUN **FACILITY** SWEDESBORO FRANKLINVILLE ROAD (CR 538)

TOWNSHIP SWEDESBORO BOROUGH

TYPE ARCH **DESIGN** BARREL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 30 ft **WIDTH** 30 ft

CONSTRUCTION DT 1925 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** WILLIAM B. JONES

SETTING / CONTEXT The two-lane, concrete arch bridge spans tree-lined Narraticon Creek near its confluence with Raccoon Creek on the northern side of Swedesboro. The neighborhood is a mixture of residential and commercial structures some which date to the nineteenth century but they have all been heavily altered. Immediately adjacent to the bridge is a garage.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The earth-filled, reinforced-concrete arch with plain concrete parapets is a representative example of over 15 other existing arches built by Gloucester County between 1912 and 1940. William C. Cattell, the county engineer from 1909 to 1942, preferred the parapet arches for the creek crossings in the hillier western sections of the county. An eligible example of the bridge type is located in the Mullica Hill Historic District (#0825150).

INFOR MATION

PHOTO: 40:22-23 (08/91) REVISED BY (DATE): QUAD: Woodstown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0805D06 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED FRANKLIN STREET (CR 666) OVER NARRATICON RUN **FACILITY** FRANKLIN STREET (CR 666)

TOWNSHIP SWEDESBORO BOROUGH

TYPE STRINGER **DESIGN** **MATERIAL** Wood

 # SPANS 2 **LENGTH** 20 ft **WIDTH** 30 ft

CONSTRUCTION DT 1942 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT W. H. BAUM, COUNTY ENGINEER **BUILDER** JOSEPH W. ROGERS

SETTING / CONTEXT The two-lane bridge spans the spillway from Narraticon Lake in the village of Swedesboro. The surrounding neighborhood is residential (c. 1870-1950), and a number of homes back onto the tree-lined lake. A timber pile and frame dam extends between the bridge's upstream wing walls. The structural association of bridges and dams is common in the region and an example has been recommended for eligibility in Salem County (#1700449).

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 12/05/90

SUMMARY The built-up timber stringer with timber pile piers and board railing is an example of at least seven other wood-stringer bridges built by Gloucester County between 1941 and 1947. Due to deterioration and in-kind replacement little original bridge fabric survives, although no repair records could be located. Timber stringers are common bridge type in Southern New Jersey, and the bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 40:24-25 (08/91) REVISED BY (DATE): QUAD: Woodstown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0805F04 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MULLICA HILL-SWEDESBORO ROAD OVER SOUTH RACCOON CREEK **FACILITY** MULLICA HILL SWEDESBORO ROAD

TOWNSHIP HARRISON TOWNSHIP

TYPE ARCH **DESIGN** BARREL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 34 ft **WIDTH** 30 ft

CONSTRUCTION DT 1940 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** JUST F. ERIKSEN

SETTING / CONTEXT The 2-lane bridge spans a small creek in a rural section of Harrison Township. The tree-lined road passes near cow pastures and orchards.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The earth-filled, reinforced-concrete arch with plain concrete parapets is one of the newest examples of over 15 other existing arches built by Gloucester County between 1912 and 1940. William C. Cattell, the county engineer from 1909 to 1942, preferred the parapet arches for the creek crossings in the hillier western sections of the county. An eligible example of the bridge type is located in the Mullica Hill Historic District (#0825150).

INFOR MATION

PHOTO: 45:38a-39a (09/91) REVISED BY (DATE): QUAD: Woodstown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0805H03 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BREAKNECK ROAD (CR 603) OVER EDWARDS RUN **FACILITY** BREAKNECK ROAD

TOWNSHIP MANTUA TOWNSHIP

TYPE PIPE CULVERT **DESIGN** **MATERIAL** Steel

 # SPANS 2 **LENGTH** 28 ft **WIDTH** 47 ft

CONSTRUCTION DT 1940 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** UNKNOWN

SETTING / CONTEXT The two-span corrugated-steel pipe culvert spans a very shallow creek in a rural area of Mantua Township. Along the tree-lined county road are numerous farmers' fields and scattered farmhouses and residences (c. 1800-1980).

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY Steel pipe culverts are a very common form of short-span bridge. An unusual feature of the culvert is the retaining walls made with field stones, perhaps from the abutments of an earlier wood beam bridge that county records indicate once stood at the site. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 42:4-5 (08/91) REVISED BY (DATE): QUAD: Woodbury

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0805I01 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BARNSBORO-FAIRVIEW ROAD (CR 603) / CHESTNUT BRANCH **FACILITY** BARNSBORO-FAIRVIEW ROAD (CR 603)

TOWNSHIP MANTUA TOWNSHIP

TYPE ARCH **DESIGN** BARREL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 36 ft **WIDTH** 30 ft

CONSTRUCTION DT 1922 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** NIELSEN-CARLSON CO.

SETTING / CONTEXT The area surrounding the single-span concrete arch bridge is densely wooded and heavily overgrown with vegetation. The depot village of Sewell (c. 1875) on the Glassboro Branch of Conrail is north along CR 603. Sewell was once a shipment point for locally grown vegetables and fruits. The bridge is one of three arches spanning Chestnut Branch within 3/4 of a mile.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The earth-filled, reinforced-concrete arch with plain concrete parapets is a representative example of over 15 other existing arches built by Gloucester County between 1912 and 1940. William C. Cattell, the county engineer from 1909 to 1942, preferred the parapet arches for the creek crossings in the hillier western sections of the county. An eligible example of the bridge type is located in the Mullica Hill Historic District (#0825150).

INFOR MATION

PHOTO: 41:5-6 (08/91) REVISED BY (DATE): QUAD: Woodbury

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0805I02 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED TYLERS MILL ROAD OVER CHESTNUT BRANCH **FACILITY** TYLERS MILL ROAD

TOWNSHIP MANTUA TOWNSHIP

TYPE ARCH **DESIGN** BARREL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 24 ft **WIDTH** 30 ft

CONSTRUCTION DT 1926 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** JUST F. ERIKSEN

SETTING / CONTEXT The Tyler Mill Road Bridge crosses Chestnut Branch just down the hill from a small crossroads village (c. 1850). Upstream the remains of a dam suggest that a mill once stood nearby. Today, the area is lightly wooded and subdivided into residential properties. The crossroads has become a busy intersection near the NJ 55 freeway. The bridge is one of three concrete arches spanning Chestnut Branch within a 3/4 mile radius.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The earth-filled, reinforced-concrete arch with plain concrete parapets is a representative example of over 15 other existing arches built by Gloucester County between 1912 and 1940. William C. Cattell, the county engineer from 1909 to 1942, preferred the parapet arches for the creek crossings in the hillier western sections of the county. An eligible example of the bridge type is located in the Mullica Hill Historic District (#0825150).

INFOR MATION

PHOTO: 41:11-12 (08/91) REVISED BY (DATE): QUAD: Woodbury

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0805I03 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MANTUA-GLASSBORO ROAD OVER CHESTNUT BRANCH **FACILITY** MANTUA-GLASSBORO ROAD (CR 553A)

TOWNSHIP MANTUA TOWNSHIP

TYPE ARCH **DESIGN** BARREL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 32 ft **WIDTH** 29 ft

CONSTRUCTION DT 1915 **ALTERATION DT** 1926 **SOURCE** PLAQUE

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** UNKNOWN

SETTING / CONTEXT The ruins of a dam downstream from the bridge indicate that a mill probably once stood nearby and also accounts for the depth of the abutments below the springing line. The surrounding area has been subdivided into wooded residential lots. The bridge is one of three reinforced concrete arches spanning Chestnut Branch within 3/4 of a mile.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The earth-filled, reinforced-concrete arch with plain concrete parapets is a representative example of over 15 other existing arches built by Gloucester County between 1912 and 1940. In 1926 the county added concrete wing walls and the soffit shows extensive repair including the addition of an iron or steel stiffening rod. An eligible example of the bridge type is located in the Mullica Hill Historic District (#0825150).

INFOR MATION

PHOTO: 41:7-10 (08/91) REVISED BY (DATE): QUAD: Woodbury

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0805J06 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 635 OVER MANTUA CREEK **FACILITY** GRENLOCH RICHWOOD ROAD (CR 635)

TOWNSHIP WASHINGTON TOWNSHIP

TYPE ARCH **DESIGN** BARREL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 28 ft **WIDTH** 30 ft

CONSTRUCTION DT 1932 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** E. P. HENRY & SON

SETTING / CONTEXT Extending between the upstream wing walls of the two-lane bridge is a curved concrete dam/spillway that forms Bethel Lake. On one side of the lake is Bethel Mill County Park and on the other side wooded residential lots (c. 1950-90). Near the intersection of the NJ 55 freeway, the area has become heavily developed in recent years. The structural association of bridges and dams is common in the region.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The earth-filled, reinforced-concrete arch with plain concrete parapets is an example with dam and spillway of over 15 other existing arches built by Gloucester County between 1912 and 1940. William C. Cattell, the county engineer from 1909 to 1942, preferred the parapet arches for the creek crossings in the hillier western sections of the county. An eligible example of the bridge type is located in the Mullica Hill Historic District (#0825150).

INFOR MATION

PHOTO: 46:29-31 (07/91) REVISED BY (DATE): QUAD: Runnemede

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0805J12 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED HOLLY AVENUE (CR 624) OVER MANTUA CREEK **FACILITY** HOLLY AVENUE (CR 624)

TOWNSHIP PITMAN BOROUGH

TYPE PIPE CULVERT **DESIGN** **MATERIAL** Steel

 # SPANS 3 **LENGTH** 42 ft **WIDTH** 32 ft

CONSTRUCTION DT 1941 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** UNKNOWN

SETTING / CONTEXT The three-span pipe culvert crosses Mantua Creek at the Pitman Borough and Washington Township border. On the Pitman side of the border is a residential neighborhood (c. 1900-1980) and L. Arthur Walter Park, a city playground. On the Washington Township side of the border is a busy intersection with NJ 47, commercial properties, and an electric transformer station.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The three-span culvert consists of standard corrugated steel pipes with earth backfill and stone and concrete rubble facing. According to county engineer's records, in 1940 a flood washed out an earlier concrete slab bridge, and the contractor apparently used the rubble to build the retaining walls for the culvert. Single and double pipe culverts such as this are common but usually fall below the 20' span limit. The culvert is not historically or technologically distinguished.

INFOR MATION

PHOTO: 46:27-28 (07/91) REVISED BY (DATE): QUAD: Pitman East

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0806151 **CO** GLOUCESTER **OWNER** NJDOT **MILEPOINT** 6.62

NAME & FEATURE INTERSECTED NJ 44 OVER MANTUA CREEK **FACILITY** NJ 44

TOWNSHIP PAULSBORO BOROUGH

TYPE VERTICAL LIFT **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 167 ft **WIDTH** 40 ft

CONSTRUCTION DT 1935 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER** UNKNOWN

SETTING / CONTEXT The operating vertical lift bridge spans Mantua Creek on the northern edge of Paulsboro, once the principle Delaware River port in Gloucester County. Mantua Creek is a tidal estuary and is still frequently navigated seasonally by pleasure craft. On the north bank is a new operator's house (c.1988). To the south is Paulsboro's business district with a mixture of nineteenth and twentieth century structures without NR district potential.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The vertical lift bridge has thru-girder deck, lattice-girder vertical towers with portal bracing and longitudinal lattice girders, wire-rope lift mechanism, reinforced-concrete counterweights in steel-plate frames, and operating machinery at the center of the span. The bridge is a distinguished and well-preserved example of a "Waddell-type" vertical lift, and is one of three such bridges built by the state in the county between 1935 and 1940. All are eligible.

INFOR MATION

SOURCES:

Pulver, H. E. "Vertical Lift Bridges," in George A. Hool and W. S. Kinne, eds., Movable and Long-Span Bridges. New York: McGraw-Hill, 1923.
Waddell, J. A. Bridge Engineering. New York: John Wiley & Sons, 1916.

PHYSICAL DESCRIPTION: The two-lane bridge is a single-span movable Waddell-type vertical lift with two encased steel stringer approach spans. Its overall length is 167' with a 40' roadway. The main vertical lift span consists of a single thru girder with floor beams. The span is constructed to permit it being lifted vertically to a height of 64' clear above mean low water. At each end of the main span are steel towers approximately 96'-high. Each tower consists of two legs with horizontal and diagonal sway bracing. Between the tops of the opposite towers pass two trusses, and suspended between the trusses is the central overhead machinery house. The towers and bracing are all riveted angles, channels, and beams steel construction. Cantilevered off both sides of the main span are concrete deck sidewalks with sheet metal balustrades. The main span is operable and tended.

Power for lifting the bridge is supplied from the central overhead machinery house that contains an electric motor and a back-up gas engine. At the top of each of the four tower legs are sheaves over which pass steel-wire ropes. The ropes are attached at one end to counterweights and at the other to couplings attached to the roadway. Power is transmitted from the motor to the sheave coupling by means of direct drive line shafting and gears. The span moves up and down along a C-shaped guide on the interior of the tower legs. The machinery is equipped with brakes, clutch, and locks. The two counterweights consist of concrete blocks held within riveted steel plate frames on the exterior side of the tower legs.

The approach spans are concrete encased steel stringers with concrete balustrades and sidewalks. The bridge has a concrete substructure with cutwater piers. The fenders are timber piling. At each end of the main span are safety gates original to the bridge construction. Additional modern safety gates have been added at the abutment ends of the approach spans. Northeast of the northern approach span is a modern two-story operator's house.

HISTORICAL AND TECHNOLOGICAL SIGNIFICANCE: The vertical lift bridge across Mantua Creek is a well-preserved and operable example of a historically and technologically significant bridge type. The vertical lift type represented important advances in structural steel construction, and was an alternative to bascule and swing span type movable bridges. The Mantua Creek Bridge is one of three vertical lifts along old New Jersey Highway Route 44 in Salem and Gloucester Counties. All three bridges, built between 1935 and 1940, have been recommended as eligible because they represent an increasingly rare early 20th-century bridge type.

Vertical lift bridges are a special bridge type combining both mechanical and civil engineering technologies. The first vertical lift bridge of importance in the United States was designed by well-known bridge engineer, J. A. L. Waddell. In 1894 he oversaw the construction of the South Halsted Street Bridge over the Chicago River in Chicago, Illinois. The bridge, which had overhead trusses between the towers and sheaves at the top of each tower leg, became known as the Waddell-type vertical lift. Beginning in 1908 vertical lift bridges were built in increasing numbers, often replacing swing-span type movable bridges. According to bridge engineer H. E. Pulver (1923) the advantages of the vertical lift included simplicity of design, rigidity, reliability, ease of operation, short time of operation (usually 40-50 seconds), power economy, cost of operation, and less chance of collision with boats. The bridge type was particularly suitable to long span crossings where high navigational clearance was required.

The Mantua Creek Bridge was built in 1935 as part of the reconstruction of NJ Highway Route 44. No plans or records of the original construction have been located, however, plans from the other two existing vertical lift bridges suggest that the firm of Ash, Howard, Needles, and Tammen of New York and Kansas City probably acted as consulting engineers on the New Deal era public works project. The bridge survives with few significant alterations. In c.1985 the electric motors were rehabilitated and new brakes and locks added. The bridge still opens to navigation, mostly to pleasure craft in the summer.

The Mantua Creek Bridge is the oldest of the three bridges on old NJ Highway Route 44. The second oldest, US 130 over Oldmans Creek

(1710152), is nearly identical to the Mantua Creek Bridge. It is no longer operable but retains its original operator's house. The youngest bridge, US 130 over Raccoon Creek (0807151) is also operable. It is of different construction and has been retrofitted with machinery and a new operator's house. As a group the bridges are neither the oldest or largest of their type in the United States, however, they are significant engineering achievements representing the application of vertical lift bridge technology to medium-span crossings.

PHOTO: 40:35-42 (08/91) REVISED BY (DATE): QUAD: Woodbury

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0806G05 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 581 OVER SOUTH BRANCH OF RACCOON CREEK **FACILITY** COMMISSIONERS ROAD (CR 581)

TOWNSHIP HARRISON TOWNSHIP

TYPE PIPE CULVERT **DESIGN** **MATERIAL** Steel

 # SPANS 2 **LENGTH** 30 ft **WIDTH** No Data

CONSTRUCTION DT 1940 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** UNKNOWN

SETTING / CONTEXT The corrugated-steel pipe culvert crosses a shallow tree-lined creek in a rural section of Harrison Township.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY According to county records, the two-span culvert replaced an earlier reinforced-concrete bridge that washed away in the 1940 flood. Concrete rubble from the older bridge appears to have been used to construct the culvert retaining walls. Beam guide rails have been added. Single-span and two-span pipe culverts are common and usually fall under the 20'-minimum for bridge classification. The culvert is not historically or technologically distinguished.

INFOR MATION

PHOTO: 45:1a,44a (08/91) REVISED BY (DATE): QUAD: Pitman West

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0806G08 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 618 OVER SOUTH BRANCH OF RACCOON CREEK **FACILITY** RICHWOOD HARRISVILLE ROAD (CR 618)

TOWNSHIP SOUTH HARRISON TOWNSHIP

TYPE ARCH **DESIGN** BARREL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 28 ft **WIDTH** 24 ft

CONSTRUCTION DT 1920 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** UNKNOWN

SETTING / CONTEXT The two-lane bridge spans a small creek in a rural section of South Harrison Township. Nearby are farmers' fields and homes on large wooded lots. Immediately adjacent to the bridge is a well-maintained house (c. 1950) with a generous yard.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The earth-filled, reinforced-concrete arch with plain concrete parapets is a representative example of over 15 other existing arches built by Gloucester County between 1912 and 1940. William C. Cattell, the county engineer from 1909 to 1942, preferred the parapet arches for the creek crossings in the hillier western sections of the county. An eligible example of the bridge type is located in the Mullica Hill Historic District (#0825150).

INFOR MATION

PHOTO: 45:2a-3a (08/91) REVISED BY (DATE): QUAD: Pitman West

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0806H05 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED AURA-MULLICA HILL ROAD (CR 623) OVER CLEMS RUN **FACILITY** AURA-MULLICA HILL ROAD (CR 623)

TOWNSHIP HARRISON TOWNSHIP

TYPE ARCH **DESIGN** BARREL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 31 ft **WIDTH** 36 ft

CONSTRUCTION DT 1926 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** JUST F. ERIKSEN

SETTING / CONTEXT The two-lane bridge spans the spillway from tree-lined Kincaid Lake in the eastern portion of Harrison Township. Nearby are a few scattered residences (c. 1900-1990), but the area is predominantly rural and forested. A box-shaped, reinforced concrete spillway/dam extends from the bridge's upstream abutments to create the lake. The structural association of bridges and dams is common in the region.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The earth-filled, reinforced-concrete arch with plain concrete parapets is an example with dam and spillway of over 15 other existing arches built by Gloucester County between 1912 and 1940. William C. Cattell, the county engineer from 1909 to 1942, preferred the parapet arches for the creek crossings in the hillier western sections of the county. An eligible example of the bridge type is located in the Mullica Hill Historic District (#0825150).

INFOR MATION

PHOTO: 45:4a-6a (08/91) REVISED BY (DATE): QUAD: Pitman West

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0807151 **CO** GLOUCESTER **OWNER** NJDOT **MILEPOINT** 16.35

NAME & FEATURE INTERSECTED NJ 45 OVER SOUTH BRANCH OF RACCOON CREEK **FACILITY** NJ 45

TOWNSHIP HARRISON TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 35 ft **WIDTH** 30.3 ft

CONSTRUCTION DT 1920 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER** UNKNOWN

SETTING / CONTEXT The two-lane bridge spans a shallow creek about 4/5 mile south of the village of Mullica Hill. The creek banks are densely covered with brush and undergrowth. Nearby are homes (c. 1850-1980) on wooded lots.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased steel stringer bridge with concrete balustrades and substructure is representative of many bridges designed and built by the NJ State Highway Department in the 1920s and 1930s. Markers indicate the original route designation of the bridge was "State Highway Route 6." Steel-stringer bridges are the most common pre-1946 bridge type in New Jersey. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 45:40a-41a (08/91) REVISED BY (DATE): QUAD: Pitman West

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0807152 **CO** GLOUCESTER **OWNER** NJDOT **MILEPOINT** 17.65

NAME & FEATURE INTERSECTED NJ 45 OVER RACCOON CREEK **FACILITY** NJ 45 (MAIN STREET)

TOWNSHIP HARRISON TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 44 ft **WIDTH** 40.2 ft

CONSTRUCTION DT 1940 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The two-lane bridge is located in Mullica Hill near the busy intersection of NJ 45 and US 322. Mullica Hill is a picturesque village with many older homes and buildings (c. 1770-1920). Storefront antique shops are numerous and the village retains much of its nineteenth-century character. Downstream from the bridge is a concrete arch bridge (#0825150) listed as contributing to the Mullica Hill Historic District.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Listed. Mullica Hill Historic District. 04/25/1991. Noncontributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased steel-stringer bridge with balustrade and reinforced-concrete substructure is representative of many bridges designed by the NJ State Highway Department from 1920 to 1940. The bridge does not fit within the dates of significance of the Mullica Hill Historic District (c. 1770-1920). Steel stringer are the most common pre-1946 bridge type in New Jersey. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 45:31a-32a (08/91) REVISED BY (DATE): QUAD: Pitman West

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0807D03 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PORCHES MILL ROAD OVER OLDMANS CREEK **FACILITY** PORCHES MILL ROAD

TOWNSHIP SOUTH HARRISON TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 29 ft **WIDTH** 20.3 ft

CONSTRUCTION DT 1912 **ALTERATION DT** 1970ca **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** UNKNOWN

SETTING / CONTEXT The narrow bridge spans Oldman's Creek on the Salem County line. Heavy undergrowth and trees line the narrow creek; the surrounding area is rural with vegetable farms, orchards, and scattered residences (c. 1800-1990).

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 12/05/90

SUMMARY The short stringer bridge with reinforced-concrete substructure, encased fascia stringers, and pipe railings, has been modified by the addition of concrete jack arches. The corrugated pattern arches were installed c.1970 when the bridge deck was replaced. Their finish duplicates that of the steel form, and waterproofing is seeping out between the seams. The bridge is one of three similar altered stringer spans in the vicinity. None is technologically or historically noteworthy.

INFOR MATION

PHOTO: 43:31-32 (07/91) REVISED BY (DATE): QUAD: Woodstown

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0807E07 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MILL STREET OVER OLDMANS CREEK **FACILITY** MILL STREET

TOWNSHIP SOUTH HARRISON TOWNSHIP

TYPE ARCH **DESIGN** BARREL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 33 ft **WIDTH** 25 ft

CONSTRUCTION DT 1917 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** H. B. RICEMAN (?)

SETTING / CONTEXT The two-lane bridge spans the spillway from Harrisonville Lake on the border between Gloucester and Salem Counties. To the north is the small mill village of Harrisonville (c. 1810-1920) and downstream the wooded DEP Harrisonville Wildlife Management Area. A circular-shaped concrete spillway/dam extends from the upstream abutments to create the lake. The structural association of bridges and dams is common in the region.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The earth-filled, reinforced-concrete arch with plain concrete parapets is an example with dam and spillway of over 15 other existing arches built by Gloucester County between 1912 and 1940. William C. Cattell, the county engineer from 1909 to 1942, preferred the parapet arches for the creek crossings in the hillier western sections of the county. An eligible example of the bridge type is located in the Mullica Hill Historic District (#0825150).

INFOR MATION

PHOTO: 45:15a-17a (08/91) REVISED BY (DATE): QUAD: Woodstown

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0807E08 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 617 OVER OLDMANS CREEK **FACILITY** WOODSTOWN-HARRISONVILLE ROAD (CR 617)

TOWNSHIP SOUTH HARRISON TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 34 ft **WIDTH** 30 ft

CONSTRUCTION DT 1941 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT HOWARD SKINNER, SALEM CO. ENG. **BUILDER** C. FISKE CAMPBELL

SETTING / CONTEXT The two-lane bridge spans a shallow creek on the Gloucester-Salem County border. Nearby are residences (c. 1850-1980), fields, and orchards. Gloucester and Salem County jointly paid for the construction of the steel-stringer bridge. Salem County Engineer Howard Skinner prepared the design.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge is similar to at least eight existing steel stringers with balustrades, encased fascia, and reinforced-concrete substructure built by Salem County between 1930 and 1941. The bridge replaced an earlier bridge destroyed in the 1940 flood. The bridge is a representative example of the most common type of pre-1946 bridge in the state, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 45:18a-20a (08/91) REVISED BY (DATE): QUAD: Woodstown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0807H01 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MAIN STREET (CR 622) OVER RACCOON CREEK **FACILITY** MAIN STREET (CR 622)

TOWNSHIP ELK TOWNSHIP

TYPE ARCH **DESIGN** BARREL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 28 ft **WIDTH** 30 ft

CONSTRUCTION DT 1938 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** JAMES C. HENRY

SETTING / CONTEXT The two-lane bridge spans the spillway from Ewan Lake on the outskirts of the small village of Ewan (c. 1790-1950). Immediately east of the bridge is a large 2 1/2 story, brick, federal-style home with a 1793 datestone. A concrete box dam extends from the southern abutments to create the tree-lined lake. The structural association of bridges and dams is common in the region.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The earth-filled, reinforced-concrete arch with plain concrete parapets is a representative example of over 15 other existing arches built by Gloucester County between 1912 and 1940. William C. Cattell, the county engineer from 1909 to 1942, preferred the parapet arches for the creek crossings in the hillier western sections of the county. An eligible example of the bridge type is located in the Mullica Hill Historic District (#0825150).

INFOR MATION

PHOTO: 45:7a-8a (08/91) REVISED BY (DATE): QUAD: Pitman West

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0808151 **CO** GLOUCESTER **OWNER** NJDOT **MILEPOINT** 20.75

NAME & FEATURE INTERSECTED NJ 45 OVER EDWARDS RUN **FACILITY** NJ 45

TOWNSHIP MANTUA TOWNSHIP

TYPE ARCH **DESIGN** BARREL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 22 ft **WIDTH** 38 ft

CONSTRUCTION DT 1920 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge spans a shallow but steep-banked creek outside of the town of Mantua. Small scrub trees and undergrowth line the creek and the roadway. A residential neighborhood (c. 1950-1980) is located to the north on NJ 45. Constructed by the county, the bridge was taken over by the state in 1927.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The earth-filled, reinforced-concrete arch with plain concrete parapets is a representative example of over 15 other existing arches built by Gloucester County between 1912 and 1940. William C. Cattell, the county engineer from 1909 to 1942, preferred the parapet arches for the creek crossings in the hillier western sections of the county. An eligible example of the bridge type is located in the Mullica Hill Historic District (#0825150).

INFOR MATION

PHOTO: 42:7-8 (08/91) REVISED BY (DATE): QUAD: Woodbury

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0808F01 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED STRINGTOWN ROAD OVER OLDMANS CREEK **FACILITY** STRINGTOWN ROAD

TOWNSHIP SOUTH HARRISON TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 29 ft **WIDTH** 18 ft

CONSTRUCTION DT 1912 **ALTERATION DT** 1970ca **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** UNKNOWN

SETTING / CONTEXT The single-lane bridge spans a shallow creek on the border between Gloucester and Salem Counties. The surrounding area is rural with cow pastures, orchards, fields, and scattered residences (c. 1850-1990).

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The short stringer bridge with reinforced concrete abutments, encased fascia stringers, and pipe railings has been modified by the addition of concrete jack arches between the stringers. The bridge is one of three similarly altered short stringer spans in the vicinity. The corrugated-pattern arches were added c.1970 when the concrete deck was replaced. Their finish reflects that of the steel form. Waterproofing is seeping out the seams. The bridge is not a good example of its type.

INFOR MATION

PHOTO: 45:12a-14a (08/91) REVISED BY (DATE): QUAD: Pitman West

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US
November 12, 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0808F02 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED COMMISSIONERS ROAD (CR 581) OVER OLDMANS CREEK **FACILITY** COMMISSIONERS ROAD (CR 581)

TOWNSHIP SOUTH HARRISON TOWNSHIP

TYPE ARCH **DESIGN** BARREL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 36 ft **WIDTH** 23 ft

CONSTRUCTION DT 1912 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** UNKNOWN

SETTING / CONTEXT The two-lane bridge spans the spillway from Algonkin Lake at Oldmans Creek on the border between Gloucester and Salem Counties. The surrounding area is wooded with dense undergrowth and nearby are farmers' fields, orchards, and scattered residences. A circular concrete spillway/dam extends from the eastern wing walls to create the tree-lined Algonkin Lake. The structural association of bridges and dams is common in the region.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The earth-filled, reinforced-concrete arch with plain concrete parapet is an early example with dam and spillway of over 15 other existing arches built by Gloucester County between 1912 and 1940. William C. Cattell, the county engineer preferred the parapet arches for the creek crossings in the hillier western sections of the county. An eligible example of the bridge type is located in the Mullica Hill Historic District (#0825150).

INFOR MATION

PHOTO: 45:9a-11a (08/91) REVISED BY (DATE): QUAD: Pitman West

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0808J01 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BUCK ROAD (CR 553) OVER STILL RUN **FACILITY** BUCK ROAD (CR 553)

TOWNSHIP ELK TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 28 ft **WIDTH** 28.7 ft

CONSTRUCTION DT 1927 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** BUCKINGHAM BROTHERS

SETTING / CONTEXT The two-lane bridge spans a shallow creek in a low lying wooded marsh in an undeveloped rural area of Elk Township. To the east, but out of sight, is Silver Lake.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 02/05/90

SUMMARY The bridge is a representative example of over 20 existing short-span, parapet, concrete slab bridges built by Gloucester County between 1922 and 1941. Since 1920 the concrete slab bridge designs have been popular because of their low cost, strength, durability, and ease of construction. An early example of a concrete slab bridge (#0809L02) has been recommended for National Register eligibility.

INFOR MATION

PHOTO: 46:23-24 (07/91) REVISED BY (DATE): QUAD: Pitman East

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0808J04 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED SILVER LAKE ROAD (CR 608) OVER STILL RUN **FACILITY** SILVER LAKE ROAD

TOWNSHIP CLAYTON BOROUGH

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 20 ft **WIDTH** 30 ft

CONSTRUCTION DT 1922 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** E. P. HENRY & SON

SETTING / CONTEXT The two-lane bridge spans the spillway from Silver Lake, a privately-owned development with lakefront homes (c. 1920-1990). Rushes and scrub trees line Silver Lake Road which also acts as an earthen retaining wall for the lake. A box-shaped box dam with gates extends from the upstream abutments to form the 3/4-mile long lake. The structural association of bridges and dams is common in the region.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge is an early example in fair condition of over 20 existing short-span, parapet, concrete slab bridges built by Gloucester County between 1922 and 1941. Since 1920 concrete slab bridge designs have been popular because of their low cost, strength, durability and ease of construction. Another early example of a concrete slab bridge (#0809L02) in better condition and with fewer cosmetic alterations (i.e. chainlink fence and guardrails) has been recommended for eligibility.

INFOR MATION

PHOTO: 44:22a-24a (07/91) REVISED BY (DATE): QUAD: Pitman East

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0808K03 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WASHINGTON AVENUE OVER LITTLE EASE RUN **FACILITY** WASHINGTON AVENUE

TOWNSHIP CLAYTON BOROUGH

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 26 ft **WIDTH** 30 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** GEORGE A. PEACOCK

SETTING / CONTEXT The two-lane bridge spans a small creek in a low-lying, wooded, undeveloped area of Clayton Borough.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge is a representative example of over 20 existing short-span, parapet, concrete slab bridges built by Gloucester County between 1922 and 1941. Since 1920 concrete slab bridge designs have been popular because of their low cost, strength, durability, and ease of construction. An early example of a concrete slab bridge (#0809L02) has been recommended for National Register eligibility.

INFOR MATION

PHOTO: 44:15a-16a (07/91) REVISED BY (DATE): QUAD: Pitman East

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0808K06 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED GRANT AVENUE OVER LITTLE EASE RUN **FACILITY** GRANT AVENUE

TOWNSHIP FRANKLIN TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Wood

 # SPANS 2 **LENGTH** 32 ft **WIDTH** 30 ft

CONSTRUCTION DT 1942 **ALTERATION DT** 1973 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT W. H. BAUM, CO. ENG. **BUILDER** JUST F. ERIKSEN

SETTING / CONTEXT The two-lane bridge spans a small creek in a low-lying, wooded, sparsely developed area of Franklin Township. A few scattered residences (c. 1950-90) are located nearby.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The built-up timber stinger bridge with timber pile piers and board railings is a representative example of at least seven other wood-stringer spans built by Gloucester County between 1941 and 1947. In 1973 the county replaced the deck and made other repairs to the bridge. Due to deterioration and in-kind replacement little original bridge fabric remains. The bridge, a common type in Southern New Jersey, is not historically or technologically distinguished.

INFOR MATION

PHOTO: 4:13a-14a (07/91) REVISED BY (DATE): QUAD: Pitman East

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0808L01 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CLAYTON-WILLIAMSTOWN ROAD OVER SCOTLAND RUN **FACILITY** CLAYTON WILLIAMSTOWN ROAD (CR 610)

TOWNSHIP CLAYTON BOROUGH

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 28 ft **WIDTH** 30 ft

CONSTRUCTION DT 1931 **ALTERATION DT** **SOURCE** MARKER

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** COMTE AND MATAZZO

SETTING / CONTEXT The two-lane, single-span bridge crosses Scotland Run within the boundaries of Scotland Run Park, a county recreation area with beach, playground and picnic area. Downstream the creek enters a densely forested area. Extending from the abutments is a box-shaped spillway/dam with flood gates that creates 7/10-mile long Wilson Lake. The structural association of bridges and dams is common in the region.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge is a representative example with spillway and dam of over 20 existing short-span, parapet, concrete slab bridges built by Gloucester County between 1922 and 1941. Since 1920 concrete slab bridge designs have been popular because of their low cost, strength, durability, and ease of construction. An early example of a concrete slab bridge (#0809L02) has been recommended for National Register eligibility.

INFOR MATION

PHOTO: 44:19a-21a (07/91) REVISED BY (DATE): QUAD: Pitman East

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0808L04 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED GRANT AVENUE OVER SCOTLAND RUN **FACILITY** GRANT AVENUE

TOWNSHIP FRANKLIN TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 28 ft **WIDTH** 30 ft

CONSTRUCTION DT 1938 **ALTERATION DT** **SOURCE** MARKER

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** JUST F. ERIKSEN

SETTING / CONTEXT The two-lane bridge spans a small, heavily polluted stream in a forested, undeveloped area within the DEP's Glassboro Fish and Wildlife Management Area.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge with plain concrete parapets is a representative example of over 20 existing short-span, parapet, concrete slab bridges built by Gloucester County between 1922 and 1941. The bridge has been coated with gunnite. Since 1920 concrete slab bridges have been popular because of their low cost, strength, durability, and ease of construction. An early example of a concrete slab bridge (#0809L02) has been recommended for National Register eligibility.

INFOR MATION

PHOTO: 44:11a-12a (07/91) REVISED BY (DATE): QUAD: Pitman East

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0808N03 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MALAGA ROAD (CR 659) OVER HOSPITALITY BRANCH **FACILITY** MALAGA ROAD (CR 659)

TOWNSHIP MONROE TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 23 ft **WIDTH** 29 ft

CONSTRUCTION DT 1936 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** GEORGE A. CHARLESWORTH

SETTING / CONTEXT The two-lane bridge spans a small tree-lined creek in a rural area of Monroe Township. A two-story house (c. 1960) sits near the bridge on the downstream side.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge with plain concrete parapets is a representative example of over 20 existing short-span, parapet, concrete slab bridges built by Gloucester County between 1922 and 1941. Since 1920 concrete slab bridge designs have been popular because of their low cost, strength, durability, and ease of construction. An early example of a concrete slab bridge (#0809L02) has been recommended for National Register eligibility.

INFOR MATION

PHOTO: 44:42a-43a (07/91) REVISED BY (DATE): QUAD: Williamtown

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0808O01 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WHITEHALL ROAD OVER HOSPITALITY BRANCH **FACILITY** WHITEHALL ROAD

TOWNSHIP MONROE TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 23 ft **WIDTH** 30 ft

CONSTRUCTION DT 1924 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** HILL CONSTRUCTION COMPANY

SETTING / CONTEXT The two-lane, single-span bridge crosses a small creek downstream from the earthen dam and concrete spillway that forms Timber Lake, a privately-owned campground and resort. The surrounding area is lightly wooded with scattered residences(c. 1950-1970).

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge is a representative example of over 20 existing short-span, parapet, reinforced-concrete slab bridges built by Gloucester County between 1922 and 1941. Since 1920 concrete slab bridge designs have been popular because of their low cost, strength, durability, and ease of construction. An early example of a concrete slab bridge (#0809L02) has been recommended for National Register eligibility.

INFOR MATION

PHOTO: 44:40a-41a (07/91) REVISED BY (DATE): QUAD: Williamtown

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0809J01 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CENTERTON-GLASSBORO ROAD OVER REEDS BRANCH **FACILITY** CENTERTON GLASSBORO ROAD (CR 553)

TOWNSHIP ELK TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 24 ft **WIDTH** 30 ft

CONSTRUCTION DT 1924 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** GEORGE A. CHARLESWORTH

SETTING / CONTEXT The two-lane bridge spans a shallow creek downstream from a small privately-owned lake. The surrounding area is rural with scattered farmhouses, ranch homes, open fields, and woods.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge is a representative example of over 20 existing short-span, parapet, reinforced-concrete slab bridges built by Gloucester County between 1922 and 1941. Since 1920 concrete slab bridge designs have been popular because of their low cost, strength, durability, and ease of construction. An early example of a concrete slab bridge (#0809L02) has been recommended for National Register eligibility.

INFOR MATION

PHOTO: 43:33-34 (07/91) REVISED BY (DATE): QUAD: Pitman West

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US
November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0809J02 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED AURA-WILLOW GROVE ROAD OVER REEDS BRANCH **FACILITY** AURA-WILLOW GROVE ROAD

TOWNSHIP FRANKLIN TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Wood

 # SPANS 2 **LENGTH** 24 ft **WIDTH** 28.5 ft

CONSTRUCTION DT 1942 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT W. H. BAUM, COUNTY ENGINEER **BUILDER** JOSEPH W. ROGERS

SETTING / CONTEXT The surrounding area is rural with scattered farmhouses, ranch homes, fields, and woods.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The county recently demolished the bridge (c. 1991).

INFOR MATION

PHOTO: 43:35 (07/91) REVISED BY (DATE): QUAD: Newfield

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0809J03 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MONROEVILLE-FRANKLINVILLE ROAD OVER REEDS BRANCH **FACILITY** MONROEVILLE FRANKLINVILLE ROAD (CR 604)

TOWNSHIP FRANKLIN TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 24 ft **WIDTH** 30 ft

CONSTRUCTION DT 1928 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** GEORGE A. CHARLESWORTH

SETTING / CONTEXT The two-lane bridge spans a small stream in a rural area with scattered farmhouses, ranch homes, fields, and woods.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge with concrete parapets is a representative example of over 20 similar, short-span, reinforced-concrete slab bridges built by Gloucester County between 1922 and 1941. Since 1920 concrete slab bridge designs have been popular because of their low cost, strength, durability, and ease of construction. An early example of a concrete slab bridge (#0809L02) has been recommended for National Register eligibility.

INFOR MATION

PHOTO: 43:36-37 (07/91) REVISED BY (DATE): QUAD: Newfield

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0809K02 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED COLES MILL ROAD (CR 538) OVER LITTLE EASE RUN **FACILITY** COLES MILL ROAD (CR 538)

TOWNSHIP FRANKLIN TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 28 ft **WIDTH** 30 ft

CONSTRUCTION DT 1923 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** GEORGE A. CHARLESWORTH

SETTING / CONTEXT The two-lane bridge spans a small creek within the village of Coles. A short distance upstream is the dam that creates Franklinville Lake. Next to the dam is a small public beach and parking area. Also near the bridge are a public school and ball fields. The bridge is about 50 yards from the busy intersection of Coles Mill Road and NJ 47.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge with concrete parapet is a representative example of over 20 similar short, parapet, reinforced-concrete slab bridges built by Gloucester County between 1922 and 1941. Since 1920 concrete slab bridge designs have been popular because of their low cost, strength, durability, and ease of construction. An early example of a concrete slab bridge (#0809L02) has been recommended for National Register eligibility.

INFOR MATION

PHOTO: 43:38-39 (07/91) REVISED BY (DATE): QUAD: Newfield

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0809K05 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED ROYAL AVENUE OVER REEDS BRANCH **FACILITY** ROYAL AVENUE

TOWNSHIP FRANKLIN TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Wood

 # SPANS 2 **LENGTH** 32 ft **WIDTH** 28.5 ft

CONSTRUCTION DT 1941 **ALTERATION DT** 1972 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** EDWARD H. ELLIS

SETTING / CONTEXT The two-lane bridge spans a small creek in a wooded area near the NJ 55 freeway. Upstream is a small dam that creates privately-owned Idle Acres Lake. On the north side of the lake is a small residential development (c. 1950-60).

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The built-up timber stringer bridge with timber pile piers and board railing is a representative example of at least seven other similar bridges built by Gloucester County between 1941 and 1947. In 1973 the bridge was damaged and unspecified repairs made. Due to deterioration and in-kind replacement little original bridge fabric survives. Timber stringers are common in Southern New Jersey and the bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 43:8-9 (07/91) REVISED BY (DATE): QUAD: Newfield

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0809K06 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED AURA-WILLOW GROVE ROAD OVER BRANCH OF STILL RUN **FACILITY** AURA-WILLOW GROVE ROAD

TOWNSHIP FRANKLIN TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 24 ft **WIDTH** 30 ft

CONSTRUCTION DT 1935 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** GEORGE A. CHARLESWORTH

SETTING / CONTEXT The two-lane bridge spans a small stream near the Salem County line. The area is rural with scattered residences (c. 1800-1990), large wooded lots, and open fields.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge with concrete parapets is a representative example of over 20 similar short-span, parapet, reinforced-concrete slab bridges built by Gloucester County between 1922 and 1941. Since 1920 concrete slab bridge designs have been popular because of their low cost, strength, durability, and ease of construction. An early example of a concrete slab bridge (#0809L02) has been recommended for National Register eligibility.

INFOR MATION

PHOTO: 43:5-6 (07/91) REVISED BY (DATE): QUAD: Newfield

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0809L01 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED FRANKLINVILLE-WILLIAMSTOWN ROAD OVER SCOTLAND RUN **FACILITY** FRANKLINVILLE WILLIAMSTOWN ROAD

TOWNSHIP FRANKLIN TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 24 ft **WIDTH** 24 ft

CONSTRUCTION DT 1923 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** KOLYN CONSTRUCTION CO.

SETTING / CONTEXT The two-lane bridge spans a shallow stream in a modern residential neighborhood (c. 1970-80) with houses built on large wooded lots.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 8/2/90

SUMMARY The bridge with concrete parapets is a representative example of over 20 similar short-span, parapet, reinforced-concrete slab bridges built by Gloucester County between 1922 and 1941. Since 1920 concrete slab bridge designs have been popular because of their low cost, strength, durability, and ease of construction. An early example of a concrete slab bridge (#0809L02) has been recommended for National Register eligibility.

INFOR MATION

PHOTO: 44:9a-10a (07/91) REVISED BY (DATE): QUAD: Newfield

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0809L02 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED COLES MILL ROAD (CR 538) OVER SCOTLAND RUN **FACILITY** COLES MILL ROAD (CR538)

TOWNSHIP FRANKLIN TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 24 ft **WIDTH** 30 ft

CONSTRUCTION DT 1922 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** GEORGE A. CHARLESWORTH

SETTING / CONTEXT The two-lane bridge spans a small tree-line stream in a semi-rural area with farmhouses, open fields, and woods. The forested lots adjacent the bridge were probably open fields in the 1920s.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge with concrete parapets is one of the oldest and most complete examples of over 20 similar short reinforced-concrete slab bridges built by Gloucester County between 1922 and 1941. Slab bridges were often designed by county engineers like William C. Cattell to replace older bridges in the highway improvement campaigns of the 1920s and 1930s. The bridge is technologically significant within the county context and is one of the best examples of its type in the area.

INFORMATION

SOURCES:

Biographical, Genealogical and Descriptive History of the First Congressional District of New Jersey. Volume I. Chicago: Lewis Publishing Company, 1900. pp.477-78.
Gloucester County Records, County Engineer's Office. Plans and Bridge Cards. 1922.
Ketchum, Milo S. Design of Highway Bridges of Steel, Timber and Concrete. New York: McGraw-Hill, 1920.
Seely, Bruce. Building the American Highway System. Philadelphia: Temple University Press, 1986.
"William C. Cattell Died Last Night at Wenonah Home." Woodbury Daily Times. Dec. 24, 1948.

PHYSICAL DESCRIPTION: The two-lane, 24'-long, 30'-wide, single-span concrete-slab bridge with parapets spans a shallow creek in rural Gloucester County. The slab reinforcing consists of ½", ¾" and 1" steel rebars. The abutments are reinforced concrete. According to the county engineer's records, the only alterations to the bridge have been resurfacing the roadway, and in 1983 sandblasting and painting. The cast-metal plaque on the inside of the parapet reads "William C. Cattell, County Engineer. George A. Charlesworth, Contractor."

HISTORICAL AND TECHNOLOGICAL SIGNIFICANCE: The bridge is an early example of over 20 similar concrete-slab bridges built by Gloucester County between 1922 and 1941. The bridge is technologically representative of the other concrete slabs in Gloucester County and has the solid parapets and decorative moldings characteristic of county engineer William C. Cattell's designs. The bridge is one of the best examples of a bridge type of local historical significance.

In Gloucester County and throughout rural New Jersey, concrete-slab bridges designed by professional county engineers rapidly replaced older bridges (often less durable timber stringers) in the highway improvement campaigns of the 1920s and 1930s. The slab bridge was an important link in the development of farm to market roads. Proponents hoped that better roads would end the cultural and social isolation of rural dwellers, and would provide a recreational outlet for automobile-owning city dwellers. The roads brought perishable goods, such as milk and vegetables, to the cities, and were one factor leading to the expansion of specialized agriculture in rural New Jersey.

Many county engineers adopted reinforced-concrete bridge construction not only because of its durability but because of the local availability of concrete, sand, and gravel. William C. Cattell (1867-1948), Gloucester County's engineer from 1909 to 1942, was the son of a farmer and received no formal engineering training except at the hands of a professor at a local private academy. At the age of 21, he entered into the business of surveying and civil engineering. Cattell was intimately involved with the professionalization of engineering; he became a member of the American Society of Civil Engineers, and was the first president of the New Jersey Society of Professional Engineers. Cattell appears to have followed the best engineering practice of his time, drawing up general specifications for the systematic improvement of Gloucester County's roads and bridges. By the 1920s Cattell had settled upon a concrete-arch design (0825150) for the hillier western sections of the county, and the concrete slab design for the flatter topography of the eastern part of the county. Through the agency of county engineers such as Cattell and county and state highway improvement campaigns, local contractors, like George A. Charlesworth of Elmer, learned the techniques of reinforced concrete construction. Charlesworth, and perhaps a dozen other local contractors, competed for the county bridge contracts through a bidding process overseen by the county engineer. Between 1922 and 1936 Charlesworth constructed 8 of the existing concrete-slab bridges in the county. Charlesworth built the Coles Mill Road Bridge at a price of $4675.

Although the wooded lots near the Coles Mill Road Bridge were probably open fields in the 1920s, the setting remains rural, speaking to the bridge's significance as a link on a country farm to market road. The Coles Mill Road runs east to west connecting the countryside with New Jersey State Highway Route 47 and the railroad depot at Coles.

PHOTO: 44:7a-8a (07/91) REVISED BY (DATE): QUAD: Newfield

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0809P02 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED COLES MILL ROAD (CR 538) OVER HOSPITALITY BRANCH **FACILITY** COLES MILL ROAD (CR 538)

TOWNSHIP MONROE TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 28 ft **WIDTH** 30 ft

CONSTRUCTION DT 1934 **ALTERATION DT** **SOURCE** MARKER

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** CHARLES D. PROSSER

SETTING / CONTEXT The two-lane bridge crosses a small stream in a rural area of Monroe Township. Upstream is a small dam and lake with a privately-owned campground and beach. The surrounding area is sparsely developed with scattered residences (c.1950-1990) and wooded lots.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge with concrete parapets is a representative example of over 20 similar short-span, parapet, reinforced-concrete slab bridges built by Gloucester County between 1922 and 1941. Since 1920 concrete slab bridge designs have been popular because of their low cost, strength, durability, and ease of construction. An early example of a concrete slab bridge (0809L02) has been recommended for National Register eligibility.

INFOR MATION

PHOTO: 44:33a (07/91) REVISED BY (DATE): QUAD: Buena

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0809P06 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PINEY HOLLOW ROAD OVER HOSPITALITY BRANCH **FACILITY** PINEY HOLLOW ROAD

TOWNSHIP MONROE TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 29 ft **WIDTH** 30 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** MARKER

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** GEORGE S. MILLER

SETTING / CONTEXT The two-lane bridge spans a small stream in a rural area with scrub forests, fields, and scattered residences (c.1950-1990).

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge with concrete parapets is a representative example of over 20 similar short-span, parapet, reinforced-concrete slab bridges built by Gloucester County between 1922 and 1941. Since 1920 concrete slab bridge designs have been popular because of their low cost, strength, durability, and ease of construction. An early example of a concrete slab bridge (#0809L02) has been recommended for National Register eligibility.

INFOR MATION

PHOTO: 44:36a-37a (07/91) REVISED BY (DATE): QUAD: Buena

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0810150 **CO** GLOUCESTER **OWNER** NJDOT **MILEPOINT** 26.15

NAME & FEATURE INTERSECTED NJ 45 OVER WOODBURY CREEK **FACILITY** NJ 45 (BROAD STREET)

TOWNSHIP WOODBURY CITY

TYPE MULTI GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 42 ft **WIDTH** 46 ft

CONSTRUCTION DT 1892 **ALTERATION DT** 1953 **SOURCE** NJDOT

DESIGNER/PATENT EDGEMOOR BRIDGE WORKS **BUILDER** DELAWARE CONSTRUCTION CO.

SETTING / CONTEXT The four-lane wide bridge spans Woodbury Creek at the northern end of downtown Woodbury. The bridge lies on the border of a large historic district that incorporates Woodbury's commercial and residential areas (c.1715-1941). A nomination has been submitted for review by ONJH. The bridge appears to be a contributing element, but is also historically and technologically significant in its own right.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Individually Eligible. Agreed Potential Historic District. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY Constructed in 1892, the single-span deck-girder with floor beams bridge with stone abutments and lattice railing is one of the earliest examples of steel girder construction in New Jersey. The bridge has four shallow girders with floor beams, stringers, and a corrugated plate deck that is now under steel flooring added in 1958. The bridge divides the older section of town from the newer development to the north and contributes to the proposed historic district.

INFORMATION

SOURCES:

Darnell, Victor. Directory of American Bridge Building Companies. Washington, DC: Society for Industrial Archeology, 1984.
New Jersey Department of Transportation. Bridge Plans 0810150, 1892-1958.
Office of New Jersey Heritage. Nomination for Woodbury Historic District, 1991.
Scharf, J. Thomas. History of Delaware, 1609-1888. Volume II. Philadelphia: L. J. Richards Co., 1888.

PHYSICAL DESCRIPTION: The single-span bridge is a multi deck girder and floor beam system with a 42'-span and 46'-roadway. On either side of the bridge are sidewalks with lattice railing. The bridge members consist of 4 built-up girders, 4'-depth, floor beams, and interior and exterior stringers. Original plans indicate all bridge members were constructed of steel. The bridge has been strengthened and some of the floor beams and stringers are modern additions. The bridge rests on coursed-ashlar abutments.

HISTORICAL AND TECHNOLOGICAL SIGNIFICANCE: The Broad Street Bridge is technologically significant as one of the earliest examples of steel-girder highway bridge construction in New Jersey. It was designed by a well-known fabricator, the Edgemoor Bridge Works of Delaware, at a time when steel was rapidly replacing iron as a structural material in bridges. In addition, the bridge lies on the proposed border of the Woodbury Historic District (c.1715-1941), and makes a significant contribution to the historic character of the neighborhood. A nomination has been submitted for review by ONJH. The large district, located to the south of the bridge, incorporates portions of Woodbury's commercial and residential areas. The bridge with its distinctive lattice railing visually divides the older section of town from the newer development to the north. The bridge spans Woodbury Creek at its furthest navigable point, and the area adjacent the bridge was once an industrial center with mills and warehouses, and a point for export downstream to the Delaware River.

In 1892 the Edgemoor Bridge Works of Edgemoor, Delaware, received the sub-contract to design and fabricate the Broad Street Bridge for the Delaware Construction Company. Organized in 1869 by William Sellers, the Edgemoor Bridge Works was one of the nation's largest builders of highway and railroad bridges. Among the noteworthy bridges constructed by the company were the East River Bridge between New York and Brooklyn, the Schuylkill and Susquehanna River Bridges for the Pennsylvania Railroad, and the crossing of the Missouri River between Omaha, Nebraska, and Council Bluffs, Iowa. In the late-19th century the Edgemoor Bridge Works' shops were considered some of the most complete and up-to-date in the nation. The company employed between 500 and 800 workers, most of whom lived in the company town of Edgemoor. The Broad Street Bridge is one of the earliest surviving examples of the company's work in New Jersey.

The bridge deck and floor beam system have been strengthened twice in the last one hundred years, but the bridge retains its overall integrity of design. In 1922, shortly after the State Highway Department took over Broad Street as part of State Highway Route 6, new stringers and floor beams were added to the bridge. In 1953 a new deck and roadway was constructed above the existing corrugated plate, and some repairs and changes were made to the stringers and floor beams. The original 1892 plans show a fancy railing different from the one now on the bridge. The original plans specify a "Carnegie Hand Rail," however the current lattice railing was manufactured by the Lyon's Iron Works. It is not known whether the current railing was added after the bridge construction, or if perhaps a change was made from the original plans at the time of construction.

PHOTO: 41:22-26 (08/91 JPH (5/96)) REVISED BY (DATE): QUAD: Woodbury

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US
November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0810K02 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 612 OVER LITTLE EASE RUN **FACILITY** CR 612

TOWNSHIP FRANKLIN TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 24 ft **WIDTH** 30 ft

CONSTRUCTION DT 1929 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** GEORGE A. CHARLESWORTH

SETTING / CONTEXT The two-lane bridge spans a small stream just south of the NJ 55 freeway overpass. Nearby is the small lakeside neighborhood of Porchtown (c. 1920-60). Scrub trees and heavy undergrowth cover the area between the creek and the freeway.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 03/12/01

SUMMARY The bridge with concrete parapets is a representative example of over 20 similar short-span, parapet, reinforced-concrete slab bridges built by Gloucester County between 1922 and 1941. Since 1920 concrete slab bridge designs have been popular because of their low cost, strength, durability, and ease of construction. The structure is not individually eligible for listing in the National Register of Historic Places. However it lies in between two archaeological sites for which there are formal Determinations of Eligibility.

INFOR MATION

PHOTO: 44:1a,44a (07/91 JPH (5/96)) REVISED BY (DATE): QUAD: Newfield

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0810K03 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED LEONARD CAKE ROAD OVER LITTLE EASE RUN **FACILITY** LEONARD CAKE ROAD

TOWNSHIP FRANKLIN TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Wood

 # SPANS 2 **LENGTH** 32 ft **WIDTH** 30 ft

CONSTRUCTION DT 1942 **ALTERATION DT** 1978 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT W. H. BAUM, COUNTY ENGINEER **BUILDER** JUST F. ERIKSEN

SETTING / CONTEXT The two-lane bridge spans a small stream in a wooded area near the NJ 55 freeway overpass of Leonard Cake Road. The surrounding area is residential (c. 1950-70).

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The built-up timber stringer with timber pile piers and board railing is a representative example of at least seven similar bridges built by Gloucester County between 1941 and 1947. In 1978 the county replaced the stringers, deck, and railing. Little original bridge fabric survives. Timber stringers are a common bridge type in Southern New Jersey, and the bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 4:5a-6a (07/91) REVISED BY (DATE): QUAD: Newfield

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0810K04 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BRIDGETON ROAD (CR 613) OVER STILL RUN **FACILITY** BRIDGETON ROAD (CR 613)

TOWNSHIP FRANKLIN TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 29 ft **WIDTH** 30 ft

CONSTRUCTION DT 1939 (c1980) **ALTERATION DT** **SOURCE** MARKER

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** JOSEPH W. ROGERS

SETTING / CONTEXT The two-lane bridge crosses the spillway at privately-owned Iona Lake. A box-shaped spillway/dam extends between the upstream abutments and a concrete slab extends from the bridge at deck level to help support the water-control gates. The approaches form the earthen retaining wall for the lake. Summer homes and residences (c. 1920-50) line the 3/5-mile long lake. The structural association of bridges and dams is common in the region.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge with concrete parapets is an example of over 20 similar short-span, parapet, concrete slab bridges built by Gloucester County between 1922 and 1941. Since 1920 concrete slab bridge designs have been popular because of their low cost, strength, durability, and ease of construction. The bridge is in fair condition although it has been sprayed with gunite (c. 1980). An early example of a concrete slab bridge (#0809L02) has been recommended for eligibility.

INFOR MATION

PHOTO: 44:2a-4a (07/91) REVISED BY (DATE): QUAD: Newfield

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0810P01 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED JACKSON ROAD OVER FARAWAY BRANCH **FACILITY** JACKSON ROAD

TOWNSHIP MONROE TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 23 ft **WIDTH** 30 ft

CONSTRUCTION DT 1935 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** GEORGE A. CHARLESWORTH

SETTING / CONTEXT No visible sign of the bridge can be seen above the roadway. To the west is a small lake and to the east is a small trickle of water feeding into Faraway Branch from underneath the road. Possibly some portion of the concrete slab lies underneath the blacktop and berm. No evidence of a pipe can be seen. The area is undeveloped and covered with undergrowth and scrub trees.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The concrete slab has been significantly altered or demolished. No record of repair or damage to the bridge could be found at the county engineer's office.

INFOR MATION

PHOTO: 44:34a-35a (07/91) REVISED BY (DATE): QUAD: Buena

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0813150 **CO** GLOUCESTER **OWNER** NJDOT **MILEPOINT** 64.86

NAME & FEATURE INTERSECTED NJ 47 OVER MANTUA CREEK **FACILITY** NJ 47

TOWNSHIP GLASSBORO BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 28 ft **WIDTH** 40 ft

CONSTRUCTION DT 1929 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER** UNKNOWN

SETTING / CONTEXT The two-lane bridge spans a small creek near an electric substation at the intersection of NJ 47 and CR 658. Upstream from the bridge is a small privately-owned lake with surrounding suburban residences (c. 1950-80). NJ 47 is a heavily traveled commercial strip.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The short, encased steel-stringer bridge with concrete balustrades and reinforced-concrete substructure is representative of many bridges designed by the NJ State Highway Department in the 1920s and 1930s (e.g. bridge nos. 0807151 & 0807152). Steel stringers are the most common pre-1946 bridge type in New Jersey. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 46:25-26 (07/91) REVISED BY (DATE): QUAD: Pitman East

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0815152 **CO** GLOUCESTER **OWNER** NJDOT **MILEPOINT** 74.87

NAME & FEATURE INTERSECTED NJ 47 OVER BIG TIMBER CREEK **FACILITY** NJ 47

TOWNSHIP WESTVILLE BOROUGH

TYPE THRU GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 6 **LENGTH** 327 ft **WIDTH** 46 ft

CONSTRUCTION DT 1934 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT NJ STATE HIGHWAY DEPT **BUILDER** UNKNOWN

SETTING / CONTEXT The four-lane, six-span bridge crosses Big Timber Creek about 3/4 mile upstream from the Delaware River. The surrounding area is heavily developed with a mixture of commercial buildings and warehouses (c. 1900) near the river. Upstream is a small marina with docks for pleasure craft.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 6-span bridge is composed of a thru girder main span and encased stringer approaches. It is supported on concrete piers and abutments, and it has concrete balustrades. The road was improved as part of the Camden Extension in the late 1920s, but the new bridge, which replaced a swing span, was not completed until 1934. The State Hwy. Dept. designed several girder bridges for longer crossings, and although not common, the bridge is not historically or technologically significant.

INFORMATION

SOURCES:
New Jersey Department of Transportation. Bridge Plans 0815152. 1934.

PHYSICAL DESCRIPTION: The four-lane, six-span bridge has a thru girder with floor beams main span and 5 encased stringer approach spans, three to the north and two to the south. The main span has a sheet-metal balustrade and cantilevered sidewalks. The approach spans have concrete balustrades and sidewalks. Beam guide rails have been added to the interior of the thru girders and between the sidewalks and the roadway of the approach spans. The bridge is supported on concrete piers and abutments. Wood fenders protect the main channel piers.

HISTORICAL AND TECHNOLOGICAL SIGNIFICANCE: The bridge is an undistinguished example of thru girder and steel-stringer construction using period technology. The New Jersey State Highway Department often chose girders for longer crossings, and the bridge type is standard, although not as frequently seen as some other State Highway Department bridge types. The road was improved as part of the Camden Extension in the late 1920s, but the new bridge, which replaced a movable span, was not completed until 1934.

PHOTO: 41:37-40 (07/91) REVISED BY (DATE): QUAD: Runnemede

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0817150 **CO** GLOUCESTER **OWNER** NJDOT **MILEPOINT** 9.93

NAME & FEATURE INTERSECTED US 130 SB OVER BIG BIRCH CREEK **FACILITY** US 130 SOUTHBOUND

TOWNSHIP LOGAN TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 23 ft **WIDTH** 50 ft

CONSTRUCTION DT 1941 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT C. M. FOX, NJ STATE HWY DEPT **BUILDER** UNKNOWN

SETTING / CONTEXT The two-lane concrete bridge spans Big Birch Creek on an open stretch of US 130 along the Delaware River. The bridge carries the southbound traffic of US 130 while a continuous concrete slab built during four-lane expansion (c. 1955) carries the northbound traffic. The surrounding landscape is flat with low-lying reed-covered marshland. In the distance on the banks of the Delaware River can be seen the Monsanto Chemical Plant.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The concrete slab with wing walls is a common bridge design popular since 1920. The bridge is representative of many short-span concrete slabs designed and built by the State Highway Department between 1920 and 1950. The bridge is not historically or technologically significant.

INFOR MATION

PHOTO: 40:19 (08/91) REVISED BY (DATE): QUAD: Marcus Hook

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0817151 **CO** GLOUCESTER **OWNER** NJDOT **MILEPOINT** 11.8
NAME & FEATURE INTERSECTED US 130 OVER RACCOON CREEK **FACILITY** US 130
TOWNSHIP LOGAN TOWNSHIP
TYPE VERTICAL LIFT **DESIGN** **MATERIAL** Steel
 # SPANS 5 **LENGTH** 285 ft **WIDTH** 52 ft
CONSTRUCTION DT 1940 **ALTERATION DT** **SOURCE** NJDOT
DESIGNER/PATENT ASH, HOWARD, NEEDLES & TAMMEN **BUILDER** UNKNOWN

SETTING / CONTEXT The four-lane, heavily-skewed, vertical-lift bridge spans Raccoon Creek on the southern edge of Bridgeport near the Commodore Barry Bridge to Chester, PA. The bridge is the furthest downstream of three movable bridges across Raccoon Creek and is still operable. On the northern bank is a modern, two-story operator's house (c. 1988) neighboring a number of small residences and businesses (c. 1830-1950).

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes
CONSULT STATUS Individually Eligible.
CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed vertical lift bridge has a thru-girder moveable span, built-up towers with portal bracing and longitudinal girders, concrete counterweights with steel-plate frames, and a steel grate deck. It is a distinguished and well-preserved example of a "Waddell-type" vertical lift. The bridge is the largest and newest of three vertical lifts built by the state in the county between 1935-1940. All are eligible. The tender's shanty was replaced in 1988.

INFORMATION

SOURCES:
New Jersey State Highway Commission, Division of Bridges, Raccoon Creek Bridge Plans, 1938.
Pulver, H. E. "Vertical Lift Bridges," in George A. Hool and W. S. Kinne, eds., Movable and Long-Span Bridges. New York: McGraw-Hill, 1923.
Waddell, J. A. Bridge Engineering. New York: John Wiley & Sons, 1916.

PHYSICAL DESCRIPTION: The four-lane bridge is a single-span movable Waddell-type vertical lift with four encased steel stringer approach spans. Its overall length is 285' with a 52' roadway. The main vertical lift span, which is skewed, consists of a single, 93'-long toe-to-toe, thru girder with floor beams. The span is constructed to permit it being lifted vertically to a height of 64' clear above mean low water. At each end of the main span are steel towers approximately 95'-high. Each tower consists of two built-up girder legs with horizontal and diagonal sway bracing. Between the tops of the opposite towers pass two girders, and suspended between the girders is the central overhead machinery house. Cantilevered off both sides of the main span are concrete deck sidewalks with sheet metal balustrades. The main span is operable.

Power for lifting the bridge is supplied from the central overhead machinery house that contains an electric motor and a back-up gas engine. At the top of each of the four tower legs are sheaves over which pass steel-wire ropes. The ropes are attached at one end to counterweights and at the other to couplings attached to the roadway. Power is transmitted from the motor to the sheave coupling by means of direct drive line shafting and gears. The span moves up and down along a C-shaped guide on the interior of the tower legs. The machinery is equipped with brakes, clutch, and locks. The two counterweights consist of concrete blocks held within riveted steel plate frames on the exterior side of the tower legs.

The approach spans are concrete encased steel stringers with concrete balustrades and sidewalks. There are four approach spans, two to the north and two to the south of the main span. The bridge has a concrete substructure with cutwater piers. The fenders are timber piling. At each end of the main span are safety gates original to the bridge construction. Additional modern safety gates have been added at the abutment ends of the approach spans. Northeast of the northern approach span is a modern two-story operator's house.

HISTORICAL AND TECHNOLOGICAL SIGNIFICANCE: The vertical lift bridge across Raccoon Creek is a well-preserved and operable example of a historically and technologically significant bridge type. The vertical lift type represented important advances in structural steel construction, and was an alternative to bascule and swing span type movable bridges. The Raccoon Creek Bridge is one of three vertical lifts along old New Jersey Highway Route 44 in Salem and Gloucester Counties. All three bridges, built between 1935 and 1940, have been recommended as eligible because they represent an increasingly rare early 20th-century bridge type.

Vertical lift bridges are a special bridge type combining both mechanical and civil engineering technologies. The first vertical lift bridge of importance in the United States was designed by well-known bridge engineer, J. A. L. Waddell. In 1894 he oversaw the construction of the South Halsted Street Bridge over the Chicago River in Chicago, Illinois. The bridge, which had overhead trusses between the towers and sheaves at the top of each tower leg, became known as the Waddell-type vertical lift. Beginning in 1908 vertical lift bridges were built in increasing numbers, often replacing swing-span type movable bridges. According to bridge engineer H. E. Pulver (1923) the advantages of the vertical lift included simplicity of design, rigidity, reliability, ease of operation, short time of operation (usually 40-50 seconds), power economy, cost of operation, and less chance of collision with boats. The bridge type was particularly suitable to long span crossings where high navigational clearance was required.

The Raccoon Creek Bridge was built in 1940 as part of the reconstruction of NJ Highway Route 44. The firm of Ash, Howard, Needles, and Tammen of New York and Kansas City acted as consulting engineers on the New Deal public works project. The bridge survives with few significant alterations. In c.1985 the electric motors were rehabilitated and locking mechanism added. As well, a new operator's house was constructed on the Bridgeport side of the creek. The original operator's house and dwelling, which plans show on the opposite bank of the creek, have been demolished. The bridge still opens to navigation, mostly to pleasure craft in the summer. At one time Raccoon Creek was navigable upstream to Swedesboro, which was a shipping point for lumber and fresh produce.

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

The Raccoon Creek Bridge is the youngest of the three bridges on old NJ Highway Route 44. It differs from the other two in that it is skewed; it has a 4-lane roadway instead of a 2-lane; and, it has tower legs and bracing of built-up girders rather than riveted angle, channel, and beam columns and trusses. The oldest vertical lift bridge, NJ 44 over Mantua Creek in Paulsboro (0806150), is still operable and has been outfitted with new operating machinery and operator's house. The second oldest bridge, US 130 over Oldmans Creek (1710152) is no longer operable, but retains its original operator's house. As a group the bridges are neither the oldest or largest of their type in the United States, however, they are significant engineering achievements representing the application of vertical lift bridge technology to medium-span crossings.

PHOTO: 40:16-18 (08/91) REVISED BY (DATE): QUAD: Bridgeport

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0818151 **CO** GLOUCESTER **OWNER** NJDOT **MILEPOINT** 25.4

NAME & FEATURE INTERSECTED US 130 OVER BIG TIMBER CREEK **FACILITY** US 130

TOWNSHIP WESTVILLE BOROUGH

TYPE DECK PLATE GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 3 **LENGTH** 287 ft **WIDTH** 58 ft

CONSTRUCTION DT 1928 **ALTERATION DT** 1977 **SOURCE** NJDOT

DESIGNER/PATENT HARDESTY AND HANOVER **BUILDER** UNKNOWN

SETTING / CONTEXT The four-lane, three-span bridge crosses Big Timber Creek between Gloucester and Camden Counties. The surrounding area is heavily developed with commercial warehouses (c. 1900), small businesses, and restaurants near the river, and residential neighborhoods (c. 1830-1950) lying off side streets. The bridge spans the creek about 1/2 mile upstream from the Delaware River.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The three-span bridge has a deck girder main span and steel stringer approaches. The main span rests on reinforced-concrete cutwater piers while the approach spans rest on separate concrete bents. According to NJDOT plans the bridge was originally built as a bascule designed by Hardesty and Hanover of New York. In 1977, the state built entirely new approach spans and fixed the moveable span in place, retaining only the girders, floor beams, and substructure.

INFOR MATION

PHOTO: 41:35-36 (08/91) REVISED BY (DATE): QUAD: Philadelphia

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0819150 **CO** GLOUCESTER **OWNER** NJDOT **MILEPOINT** 0.78

NAME & FEATURE INTERSECTED NJ 168 OVER GRENLOCH LAKE **FACILITY** NJ 168

TOWNSHIP WASHINGTON TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 23 ft **WIDTH** 73.6 ft

CONSTRUCTION DT 1932 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER** UNKNOWN

SETTING / CONTEXT The very wide four-lane bridge spans a shallow lake on the border between Gloucester and Camden Counties. The area to the north is suburban residential (c. 1950-90) and the area to the south is a heavily developed commercial strip with shopping centers and fast food restaurants (c. 1960-90). A small grassy park surrounds the lake, which is popular with fishermen.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The concrete slab with balustrades and reinforced-concrete substructure is a common bridge design popular since 1920. The bridge is a representative example of many short-span concrete slabs designed by the State Highway Department in the 1920s and 1930s. Markers indicate the original route designation of the bridge was "State Highway Route 42". The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 43:15-17 (07/91) REVISED BY (DATE): QUAD: Runnemede

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0821179 **CO** GLOUCESTER **OWNER** NJDOT **MILEPOINT** 23.07

NAME & FEATURE INTERSECTED I 295, US 130 SOUTHBOUND OVER HESSIAN RUN **FACILITY** I-295 / US 130 SOUTHBOUND

TOWNSHIP WEST DEPTFORD TOWNSHIP

TYPE BOX CULVERT **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 20 ft **WIDTH** No Data

CONSTRUCTION DT 1941 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The two-lane culvert carries the southbound traffic of I-295 over the former creek bed of Hessian Run. The state is currently rebuilding portions of the road, and Hessian Run has been rechanneled through a new pipe culvert north of the old culvert. During the construction the old culvert and creek bed have been gradually filled in by dirt and silt. The nearby areas on either side of the road are residential (c. 1950-70).

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The concrete box culvert with wing walls is a very common form in short-span crossings. Extensive highway improvements in the area around Westville have significantly altered the original context of the culvert, which was built in 1941 as part of the NJ 44 highway improvements. Concrete culverts have been in use since the early 20th century, and this example is neither innovative nor exceptional.

INFOR MATION

PHOTO: 40:44 (08/91) REVISED BY (DATE): QUAD: Woodbury

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0824150 **CO** GLOUCESTER **OWNER** NJDOT **MILEPOINT** 2.45

NAME & FEATURE INTERSECTED US 322 OVER CONRAIL **FACILITY** US 322

TOWNSHIP LOGAN TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 113 ft **WIDTH** 52.1 ft

CONSTRUCTION DT 1939 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT M. LUDASY, PA-READING RAILROAD **BUILDER**

SETTING / CONTEXT The four-lane bridge crosses a single track of the former Pennsylvania-Reading Seashore Railroad about 1 1/2 miles east of the Commodore Barry Bridge across the Delaware River. The topography is low-lying and flat. To the west is the small town of Bridgeport (c. 1850-1950) and to the east farmers' fields and an abandoned airfield (c. 1960).

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The three-span encased stringer bridge with concrete balustrades is supported by concrete bents with crash walls. The only stringer railroad overpass in the county, the bridge is representative of common period technology. It is not innovative or historically significant. The Reading and Pennsylvania Railroad systems built the bridge after the merger of their South Jersey operations.

INFOR MATION

PHOTO: 40:14-15 (08/91) REVISED BY (DATE): QUAD: Bridgeport

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0825150 **CO** GLOUCESTER **OWNER** NJDOT **MILEPOINT** 11.25

NAME & FEATURE INTERSECTED US 322 OVER RACCOON CREEK **FACILITY** US 322

TOWNSHIP HARRISON TOWNSHIP

TYPE ARCH **DESIGN** BARREL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 36 ft **WIDTH** 24.3 ft

CONSTRUCTION DT 1928 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** CONARD & BUGBY

SETTING / CONTEXT The two-lane bridge spans Raccoon Creek within the village of Mullica Hill (c. 1770-1920) near the busy intersection of US 322 and NJ 45. The surrounding area is commercial with numerous storefront antique shops in older residential structures. The bridge sits immediately upstream from a concrete-encased steel stringer bridge (1940, #0807152) that carries NJ 45. The creek lies in a shallow valley that divides the village in half.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Not Individually Eligible. Listed. Mullica Hill Historic District. 04/25/1991. Contributing.

CONSULT DOCUMENTS SHPO Opinion 10/98, Letter 03/12/01.

SUMMARY The earth-filled, reinforced-concrete arch bridge is a representative example of over 15 similar arches built by Gloucester County between 1912 and 1940. While not individually distinguished based on size, date and detailing, the bridge was constructed within the Mullica Hill Historic District's period of significance and contributes to the historic character of the village. William C. Cattell, the county engineer from 1909 to 1942, preferred the distinctive parapet bridges for the hillier western sections of the county.

INFORMATION

PHOTO: 45:33a-34a (09/91) REVISED BY (DATE): QUAD: Pitman West

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0825152 **CO** GLOUCESTER **OWNER** NJDOT **MILEPOINT** 11.3

NAME & FEATURE INTERSECTED US 322 OVER BRANCH OF RACCOON CREEK **FACILITY** US 322

TOWNSHIP HARRISON TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 24 ft **WIDTH** 28.6 ft

CONSTRUCTION DT 1924 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** UNKNOWN

SETTING / CONTEXT The two-lane bridge spans the spillway from Mullica Hill Pond on a branch of Raccoon Creek just east of the village of Mullica Hill (c. 1770-1920). The pond lies within a municipal park and is surrounded by residential housing (c. 1950-70). A box-shaped concrete spillway/dam extends from the upstream abutments to create the lake. The structural association of bridges and dams is common in the region.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge with concrete parapets is a representative example of over 20 similar short-span, parapet, concrete slab bridges built by Gloucester County between 1922 and 1941. Since 1920 concrete slab bridge designs have been popular because of their low cost, durability, strength and ease of construction. The bridge lies well outside the Mullica Hill Historic District. An early example of a concrete slab bridge (#0809L02) has been recommended for National Register eligibility.

INFOR MATION

PHOTO: 45:35a-37a (09/91) REVISED BY (DATE): QUAD: Pitman West

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0833150 **CO** GLOUCESTER **OWNER** NJDOT **MILEPOINT** 27.14

NAME & FEATURE INTERSECTED US 40 & NJ 47 OVER CONRAIL **FACILITY** US 40 & NJ 47

TOWNSHIP FRANKLIN TOWNSHIP

TYPE T BEAM **DESIGN** CONTINUOUS **MATERIAL** Reinforced Concrete

 # SPANS 3 **LENGTH** 107 ft **WIDTH** 40 ft

CONSTRUCTION DT 1929 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The two-lane bridge spans a single railroad track on a busy stretch of highway within the town of Malaga. Immediately east of the bridge US 40 splits off to the east and NJ 47 splits to the north in a T-shaped intersection. Across from the intersection is the Malaga Elementary School (c. 1950) and to the south a small residential neighborhood (c.1900-1980).

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The three-span, continuous T-beam bridge with paneled concrete parapets has concrete bents and abutments. The bridge is the only T-beam railroad overpass in the county. Engineers pioneered the continuous T-beam bridge in the period before WWI and the bridge is representative of period technology. The bridge spans the West Jersey and Seashore Railroad, part of the Pennsylvania Railroad system. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 43:1,44 (07/91) REVISED BY (DATE): QUAD: Newfield

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0837152 **CO** GLOUCESTER **OWNER** NJDOT **MILEPOINT** 54.62

NAME & FEATURE INTERSECTED NJ 47 OVER SCOTLAND RUN **FACILITY** NJ 47

TOWNSHIP FRANKLIN TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 22 ft **WIDTH** 40 ft

CONSTRUCTION DT 1926 **ALTERATION DT** **SOURCE** MARKER

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The two-lane bridge spans a small creek along a heavily travelled section of NJ 47 between the towns of Iona and Malaga. Trees and heavy undergrowth line the roadway and creek near the bridge. The surrounding area is developed with billboards, scattered residences, and small businesses.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The concrete slab with reinforced-concrete substructure and balustrades is representative of many short concrete-slab bridges designed by the State Highway Department in the 1920s and 1930s. A beam guide rail has been added to the bridge. Markers indicate the original route designation of the bridge was "State Highway Route 20." The bridge is not historically or technologically significant.

INFOR MATION

PHOTO: 43:42-43 (07/91) REVISED BY (DATE): QUAD: Newfield

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0837153 **CO** GLOUCESTER **OWNER** NJDOT **MILEPOINT** 56.26

NAME & FEATURE INTERSECTED NJ 47 OVER LITTLE EASE RUN **FACILITY** NJ 47

TOWNSHIP FRANKLIN TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 31 ft **WIDTH** 40 ft

CONSTRUCTION DT 1926 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The two-lane bridge spans a small creek in the village of Coles in the western part of Gloucester County. The area along NJ 47 is developed with scattered small businesses, convenience stores and residences. Immediately north of the bridge is a busy intersection with CR 538. To the south are ball fields associated with the brick Franklinville Elementary School (c. 1920-50).

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span, skewed, concrete slab bridge with reinforced-concrete substructure and balustrades is a representative example of many short concrete-slab bridges designed by the State Highway Department in the 1920s and 1930s. Beam guide rails have been added to the bridge. Markers indicate the original route designation of the bridge was "State Highway Route 20." The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 43:40-41 (07/91) REVISED BY (DATE): QUAD: Newfield

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0850160 **CO** GLOUCESTER **OWNER** NJDOT **MILEPOINT** 2.1

NAME & FEATURE INTERSECTED MANTUA BOULEVARD OVER MILLVILLE BRANCH OF CONRAIL **FACILITY** MANTUA BOULEVARD (CR 676)

TOWNSHIP MANTUA TOWNSHIP

TYPE DECK PLATE GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 70 ft **WIDTH** 30 ft

CONSTRUCTION DT 1937 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT CENTRAL RAILROAD OF NEW JERSEY **BUILDER** UNKNOWN

SETTING / CONTEXT The heavily-skewed, two-lane, deck girder bridge spans a single track of the Millville Branch of Conrail near the western end of the village of Sewell. The immediately surrounding area is lightly wooded with scrub trees and heavy undergrowth. To the east is a residential neighborhood (c. 1920-80) and to the west a commercial warehouse (c. 1980).

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span, encased, deck-girder and floor beams bridge with a vaguely Moderne-styled reinforced-concrete substructure has paneled concrete parapets with vertical scoring and concrete wing walls with horizontal scoring. While not common, such detailing is not infrequent in the late 1930s. The bridge is technologically unexceptional. Better detailed railroad overpass bridges that are evaluated as eligible are located in Mercer and Camden counties.

INFOR MATION

SOURCES:
Ketchum, Milo S. The Design of Highway Bridges of Steel, Timber and Concrete. New York: McGraw-Hill, 1920.
New Jersey State Department of Transportation. Bridge Plans. 1937.

PHYSICAL DESCRIPTION: The 70'-foot long, 30'-wide, skewed, single-span, concrete-encased, deck-girder bridge survives with very few alterations. The paneled parapet walls carry an Art-Deco motif with vertical scoring and the concrete wing walls have been molded to appear like masonry. The concrete-encased girder fascia have horizontal scoring. The floor beams are also encased. Stone block pavers, probably original, can be seen in spots underneath the bridge's asphalt road surface.

HISTORICAL AND TECHNOLOGICAL SIGNIFICANCE: Many railroads, including the Central Railroad of New Jersey, frequently chose steel-girder bridges for their above grade crossings. Except for the distinguishing Art-Deco motif on the parapets, fascia, and wing walls, the Mantua Boulevard bridge is technologically unexceptional in comparison to other girders. Built in 1937, it is not an early example of concrete-encased girder construction. In Gloucester County, an older example of a concrete-encased girder, Hunter Street over Conrail (0802I14, c. 1914), has been recommended for contributing status in the proposed Woodbury Historic District.

PHOTO: 41:3-4 (08/91) REVISED BY (DATE): QUAD: Woodbury

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0870150 **CO** GLOUCESTER **OWNER** NJDOT **MILEPOINT** 108.19

NAME & FEATURE INTERSECTED WINSLOW INDUSTRIAL TRACK OVER EGG HARBOR CREEK **FACILITY** WINSLOW INDUSTRIAL TRACK RAILROAD SPUR

TOWNSHIP MONROE TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Wood

 # SPANS 28 **LENGTH** 176 ft **WIDTH** 9 ft

CONSTRUCTION DT 1910 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT CENTRAL RAILROAD OF NEW JERSEY **BUILDER** UNKNOWN

SETTING / CONTEXT The single track railroad trestle spans a shallow but wide creek in a section of sandy pine barrens in eastern Gloucester County on the border with Camden County. To the north is a Camden County landfill and many abandoned sand pits. The area to the south is covered with scrub trees and heavy undergrowth. The railway does not appear to be heavily used.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge is one of two open-deck, timber stringers with closely-spaced pile bents and abutments on the Winslow Industrial Track in Gloucester County. Due to deterioration and in-kind replacement it appears that little original bridge fabric survives although no repair records could be located. Timber stringers are a common railroad bridge type, and the bridge is not historically or technologically significant.

INFOR MATION

PHOTO: 400:4-5 (08/91) REVISED BY (DATE): QUAD: Buena

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0870151 **CO** GLOUCESTER **OWNER** NJDOT **MILEPOINT** 108.95

NAME & FEATURE INTERSECTED WINSLOW INDUSTRIAL TRACK OVER HOSPITALITY LAKE **FACILITY** WINSLOW INDUSTRIAL TRACK RAILROAD SPUR

TOWNSHIP MONROE TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Wood

 # SPANS 11 **LENGTH** 128 ft **WIDTH** 5.1 ft

CONSTRUCTION DT 1922 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT CENTRAL RAILROAD OF NEW JERSEY **BUILDER** UNKNOWN

SETTING / CONTEXT The single-track railroad trestle spans a lake in the pine barrens of south-central New Jersey. The lake is a popular spot with fishermen and a short walk south from US 322. The surrounding area is sparsely developed with a few scattered roadside stands and residences along the nearby highway.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge is one of two open-deck timber stringers with closely-spaced pile bents and abutments on the Winslow Industrial Track in Gloucester County. Due to deterioration and in-kind replacement it appears that little original bridge fabric survives although no repair records could be located. Timber stringers are a common railroad bridge type, and the bridge is not historically or technologically significant.

INFOR MATION

PHOTO: 44:38a-39a (07/91) REVISED BY (DATE): QUAD: Buena

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0900002 **CO** HUDSON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WILLOW AVENUE OVER CONRAIL RIVER LINE **FACILITY** WILLOW AVENUE

TOWNSHIP HOBOKEN CITY

TYPE THRU GIRDER **DESIGN** PARTIALLY ENCASED **MATERIAL** Steel

 # SPANS 22 **LENGTH** 731 ft **WIDTH** 40 ft

CONSTRUCTION DT 1935 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge is located on the boundary between Weehawken and Hoboken and carries a four-lane arterial street over a busy Conrail route. South (in Hoboken) is vacant formerly industrial land. North is a small mixed neighborhood of modernized late-19th century and modern commercial/residential buildings and one 19th century brick 3-story factory interspersed with vacant lots. It lacks sufficient integrity to be an historic district.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 22-span bridge viaduct is composed of 3 spans of thru girders with floor beams and 19 spans (9 on one side, 10 on the other) of short enclosed stringer approaches supported on rolled section columns with encased bases. The cantilevered sidewalks have the original metal railings. The bridge is a representative example of a common bridge type, and it is not historically or technologically distinguished.

INFOR MATION

PHOTO: 26:5,6,7 (05/12/91) REVISED BY (DATE): QUAD: Weehawken

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0900004 **CO** HUDSON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED SECAUCUS ROAD OVER PENHORN CREEK **FACILITY** SECAUCUS ROAD

TOWNSHIP SECAUCUS TOWN

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 32 ft **WIDTH** 40 ft

CONSTRUCTION DT 1938 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge carries a two-lane road over a minor creek in the Hackensack Meadowlands. It is surrounded by vacant land with reeds and a post-1950 low industrial building and a parking lot. It also carries a utility pipe.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The concrete-encased stringer bridge with concrete balustrades is representative of many of the over 15 similar spans in the county. It is supported on a concrete substructure. Although unaltered, it is not technologically innovative or historically distinguished. The stringer is the most common pre-World War II bridge type in the state.

INFOR MATION

PHOTO: 25:14-16 (05/17/91) REVISED BY (DATE): QUAD: Weehawken

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0900005 **CO** HUDSON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED J F KENNEDY BOULEVARD EAST OVER CLEFT IN CLIFF **FACILITY** JFK BOULEVARD EAST

TOWNSHIP WEEHAWKEN TOWNSHIP

TYPE CLOSED SPANDREL ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 60 ft **WIDTH** 50 ft

CONSTRUCTION DT 1915 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a four-lane arterial street along the edge of the cliff of the Palisades and over a fissure in that cliff. West of the bridge rises a large 1920s apartment house; other apartment houses of the same era are nearby. To the east of the bridge is a 150' rock cliff, at the bottom of which is a railway and vacant land being redeveloped. A modern steel stairway descends the face of the cliff next to the bridge.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge is an earth-filled reinforced concrete closed spandrel arch built in 1915 essentially to fill in a depression along the edge of the cliff of the Palisades. It is an unadorned utilitarian structure. The structure is open on one side only. A plain concrete parapet encloses the cliff side of the span while the other is framed by a large building. The structure is not technologically innovative.

INFOR MATION

PHOTO: 23:36-39;2s (05/28/91) REVISED BY (DATE): QUAD: Weehawken

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0900006 **CO** HUDSON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED OGDEN AVENUE OVER HOLLAND AVENUE **FACILITY** OGDEN AVENUE

TOWNSHIP JERSEY CITY

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 34 ft **WIDTH** 25 ft

CONSTRUCTION DT 1905 **ALTERATION DT** **SOURCE** INSCRIPTION/PLANS

DESIGNER/PATENT T. H. MCCANN (HOBOKEN) **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane street over an old depressed road (now abandoned) that ran down the side of the Palisades. Originally known as Bowers St., it is paved with Belgian pavers, and a random-ashlar retaining wall holds back the cut. Bowers St. becomes Holland St. a short distance east of the bridge. The bridge is located in a late-19th century residential area, and there is a park on one side.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The handsome, well-detailed concrete arch bridge is finished with a stone veneer. It has radiating limestone voussiors and a keystone incised with the "1905" date. The iron lattice railing is also original. The bridge was designed in 1905 by T.H. McCann, an engineer from Hoboken. While the plans do not indicate the use of reinforcing bars, the shape of the arch suggests that it is one of the earliest surviving reinforced concrete spans in the county.

INFOR MATION

PHOTO: 26:18-21,2s (05/12/91) REVISED BY (DATE): QUAD: Jersey City

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0900007 **CO** HUDSON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED JFK BLVD EAST OVER CLEFT IN CLIFF (EAST END 77TH ST) **FACILITY** JFK BOULEVARD EAST

TOWNSHIP NORTH BERGEN TOWNSHIP

TYPE DECK TRUSS **DESIGN** WARREN **MATERIAL** Steel

 # SPANS 1 **LENGTH** 135 ft **WIDTH** 50 ft

CONSTRUCTION DT 1931 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT T.J. WASSER, CO. ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT Located on the east side of the Palisades, the bridge carries a wide city street over a fissure or gully in the Palisades, the rugged cliffs that parallel the Hudson River for many miles in New Jersey, forming the east side of the ridge known as Bergen Hill. West of the bridge is an undistinguished residential neighborhood of recent brick row houses. The setting is not historic.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 3-panel rivet-connected Warren deck truss bridge is supported on the bedrock of the Palisades cliff. It consists of three trusses. Offering the best engineering solution to the crossing, the bridge is not a common type, but it is not technologically or historically distinguished. It is the newest deck truss bridge in the county. The original railing or parapet has been replaced by a modern high chain-link barrier and steel railing.

INFOR MATION

PHOTO: 23:27-28,40 (05/28/91) REVISED BY (DATE): QUAD: Central Park

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0900008 **CO** HUDSON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED JFK BLVD OVER CONRAIL (JERSEY CITY BRANCH) & PATH **FACILITY** JFK BOULEVARD (former HUDSON COUNTY BLVD)

TOWNSHIP JERSEY CITY

TYPE OPEN SPANDREL RIBBED ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 2 **LENGTH** 487 ft **WIDTH** 106.5 ft

CONSTRUCTION DT 1926 **ALTERATION DT** 1973 **SOURCE** PLAQUE

DESIGNER/PATENT A. BURTON COHEN **BUILDER** STILLMAN DELEHANTY FERRIS

SETTING / CONTEXT The bridge forms part of Journal Square, the business and transportation center of Jersey City, and carries a wide avenue over a major rapid transit station. Its east face is now concealed by an adjacent new bridge supporting PATH Square. A historic Loews movie theater abuts and conceals the north half of the north arch on the west side while a historic Art Deco-style theater is just north. Other surrounding buildings are modern.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 8/2/90, Letter 6/30/95.

SUMMARY The graceful handsomely ornamented open spandrel ribbed arch forms one of the oldest elements of Journal Square. It continues the urban texture of the city over a major east-west rail line contained in a partly natural, partly artificial cut that traverses the Palisades ridge. The west side of the span appears generally unaltered, but 1973 extensions on the east conceal the arch from that side. It was designed by A. B. Cohen (d. 1956), one of the leading designers of concrete bridges.

INFOR MATION

PHOTO: 22:2,4-5 (04/26/91) REVISED BY (DATE): QUAD: Jersey City

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0900010 **CO** HUDSON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED NELSON AVENUE OVER SECAUCUS ROAD **FACILITY** NELSON AVENUE

TOWNSHIP NORTH BERGEN TOWNSHIP

TYPE DECK GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 65 ft **WIDTH** 40 ft

CONSTRUCTION DT 1920 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in an urban residential neighborhood, with undistinguished 20th-century apartment buildings at the southeast and northeast corners of the bridge. The other buildings around it are primarily modernized late-19th century rowhouses with new siding and windows. The bridge carries a city street over another city street that descends the west side of Bergen Hill (the Palisades).

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The thru girder with floor beams bridge on a concrete substructure is a representative example of its type. It is not technologically or historically distinctive. The upper portion of the girders are encased to form a curb, and the cantilevered sidewalks are enclosed by modern chain-link barriers added in 1970. The bridge is one of over ten thru girder spans in the county.

INFOR MATION

PHOTO: 26: 32-36 (05/17/91) REVISED BY (DATE): QUAD: Weehawken

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0900011 **CO** HUDSON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BERGEN AVENUE OVER CONRAIL (EX-CENTRAL RR OF NJ) **FACILITY** BERGEN AVENUE

TOWNSHIP JERSEY CITY

TYPE DECK GIRDER **DESIGN** OPEN WEB **MATERIAL** Wrought Iron

 # SPANS 1 **LENGTH** 54 ft **WIDTH** 36 ft

CONSTRUCTION DT 1890ca **ALTERATION DT** **SOURCE** STYLE

DESIGNER/PATENT **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is in an undistinguished late 19th-century urban residential neighborhood. It carries a wide city street over now-abandoned 1869 cut built for the CNJ RR's Newark & New York Branch (later ConRail's West Side Avenue Branch). The railroad right-of-way is not maintained.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge consists of 4 open web, triple-intersection deck girders with lateral bracing supported on ashlar abutments that probably predate this span. The flooring system with a concrete deck on rolled transverse beams is not original. The cantilevered sidewalks have metal picket railings. Information on when and by whom the bridge was constructed was not located, but stylistically its appears to be ca. 1890. A rare example of an early open web girder span, it is technologically significant.

INFORMATION

Bibliography:
Schmidt, W.H. "Costliest Railroad Now Half Abandoned." Trains Magazine. November, 1948. NJDOT. Plan File.

Physical Description: The deck girder bridge consists of four triple-intersection or lattice open web girders supported on low masonry abutments resting on the solid rock walls of the railroad cut. The web diagonals are cast or rolled wrought-iron T-sections set back-to-back. The flanges are built up with plate and angles. The present flooring system is replacement, and it consists of rolled transverse beams and a concrete deck. The lateral braces set between the girders are angles, and they may also be an addition. The bridge has a cantilevered sidewalk enclosed by a metal railing that appears to date stylistically to 1913. The date attribution is based on stylistic similarities with the Ocean Avenue bridge (0950163).

Historical and Technological Significance: When the wrought-iron lattice-web deck girder bridge was fabricated has not been verified (no plans are on file with NJDOT, and the SI&A sheet indicates that no plans are available from Conrail), but stylistically it dates to at least ca. 1890. It is very similar to a lattice-web bridge over the same rail line at Ocean Avenue in Jersey City (0950163). The date of construction of the Ocean Avenue bridge is also unknown. This span is technologically significant as because it is a rare and well-preserved survivor of an early overpass bridge type, and it has the unusual T-section members. Several other examples of the T-section have been identified on late-19th century railroad bridges in the northern half of the state as well as on the Ocean Avenue span, but the detail is so rare and so early, that all spans with it have been evaluated as technologically significant.

The Bergen Avenue bridge carries a city street over a mile-long double-track cut built in 1869 for the Newark & New York Railroad through Bergen Hill, a long ridge separating the waterfront of Hudson County from the land to the west. The Newark & New York Railroad was built to give the shortest, fastest route between Newark and the Central Railroad of New Jersey (CNJ) ferry terminal at Communipaw. The line was built for and operated by the CNJ. In the 1920s, 38 daily local passenger trains traversed this route, which serviced four passenger stations in its mile-long roadway through Jersey City. Passenger service ended in 1948, and the line was single-tracked and used for freight only (Trains, p. 52). When Conrail took over the CNJ's property in 1967, the line became known as the West Side Avenue Branch. It was abandoned by Conrail in the mid-1980s.

PHOTO: 28:4-6;29:3-6;3 (05/31/91) REVISED BY (DATE): QUAD: Jersey City

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0900012 **CO** HUDSON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MARTIN LUTHER KING DRIVE OVER CONRAIL (CENTRAL RR OF NJ) **FACILITY** MARTIN LUTHER KING DRIVE (JACKSON AVENUE)

TOWNSHIP JERSEY CITY

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 68 ft **WIDTH** 34 ft

CONSTRUCTION DT 1945 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a four-lane city street over a deep cut built for the Newark & New York RR, which later became ConRail's West Side Ave. Branch, now abandoned. The surrounding structures are mixed urban commercial and residential, from 1880 to the present. A station stop was located beneath the bridge, with station building at street level (now used as a church) and stairs to the platform level. The bridge also carries a utility pipe.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The steel stringer superstructure with concrete deck and concrete balustrades built in 1945 is supported on stone abutments from an earlier span. In the wingwalls are steps that provided access from the street-level station to the track side platform. Although the station building and stairways are associated with a historic rapid transit line, the bridge itself is a later replacement and has no association with the rail-related structures. It also carries a pipe in a truss-webbed frame.

INFOR MATION

PHOTO: 29: 7-11 (05/31/91) REVISED BY (DATE): QUAD: Jersey City

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0900013 **CO** HUDSON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED NEWARK AVENUE OVER CONRAIL RIVER LINE **FACILITY** NEWARK AVENUE

TOWNSHIP JERSEY CITY

TYPE PONY TRUSS **DESIGN** WARREN **MATERIAL** Steel

 # SPANS 1 **LENGTH** 90 ft **WIDTH** 48.1 ft

CONSTRUCTION DT 1915 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT UNKNOWN **BUILDER** PHOENIX BRIDGE COMPANY

SETTING / CONTEXT The bridge is part of one of the few routes leading from the lower level of Jersey City up to the higher level, atop the ridge known as Bergen Hill. This bridge carries busy Newark Avenue over ConRail's heavily-used River Line; the elevated NJ Turnpike is in full view from the east side of the bridge. A late 19th-century cemetery adjoins the bridge in the NW quadrant. On a hill to the NE is the NR-listed 1904-12 Dickinson High School.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed 4-panel rivet-connected Warren pony truss consists of 3 trusses supported on ashlar abutments that predate this span. Newark Ave. makes a transition from four to three lanes on the bridge, so one side is skewed more heavily than the other. The only example of its type in the county, the heavy bridge was most likely built by the NY Central RR over its New Jersey Junction Branch. The bridge is a late example of a pony truss in an urban setting, but it is not technologically noteworthy.

INFOR MATION

PHOTO: 22:15-16;1s (04/26/91) REVISED BY (DATE): QUAD: Jersey City

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0900014 **CO** HUDSON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED KEARNY AVE OVER NJT BOONTON LINE **FACILITY** KEARNY AVENUE

TOWNSHIP KEARNY TOWN

TYPE DECK GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 3 **LENGTH** 193 ft **WIDTH** 48 ft

CONSTRUCTION DT 1935 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located among undistinguished 20th century row houses and commercial buildings. It carries an important city street over a deep railroad cut created prior to 1874; the cut was widened to allow double tracking of the railroad in 1896. The bridge is named Jones Memorial Bridge, and was dedicated to the memory of Kearny Mayor Arthur H. Jones in 1938.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 3-span built-up deck plate girder bridge composed of 2 sets of girders with floor beams is supported on built-up steel bents. It has concrete balustrades with rectangular piercing. Of greater historic significance is the railroad cut the bridge crosses which was a branch of the former Delaware, Lackawanna & Western RR. The present bridge, which is not technologically innovative, is more recent than the late-19th century cut, and is thus not historically associated with the railroad.

INFOR MATION

PHOTO: 20:23-29 (04/20/91) REVISED BY (DATE): QUAD: Orange

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0900016 **CO** HUDSON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED 14TH STREET VIADUCT OVER CONRAIL **FACILITY** 14TH STREET

TOWNSHIP HOBOKEN CITY

TYPE DECK GIRDER & DECK TRUSS **DESIGN** WARREN **MATERIAL** Steel

 # SPANS 31 **LENGTH** 1460 ft **WIDTH** 41 ft

CONSTRUCTION DT 1910 **ALTERATION DT** 1938, 1987 **SOURCE** NJDOT

DESIGNER/PATENT WADDELL & HARDESTY (1938) **BUILDER** UNKNOWN

SETTING / CONTEXT The viaduct carries a four-lane street from the low-lying land of Hoboken up the side of Bergen Hill (also known as the Palisades) to the Jersey City Heights neighborhood. Under the viaduct are parking lots and undistinguished 20th-century industrial structures, as well as ConRail's River Line. At its foot, at the east end, is a group of 19th-century commercial structures with historic district potential.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The long, 31-span bridge consists of 2 Warren deck truss spans, 27 deck girder spans, and 2 stringer spans supported on steel bents that were strengthened in 1938 and concrete abutments. The truss bearings and footings were also upgraded in 1938. While the spans themselves are not technologically innovative, the structure as a whole is impressive given its size, date of construction, and state of preservation. It was rehabilitated again in 1987, the year the roadway was widened.

INFOR MATION

Bibliography:
Hudson County Engineer Office: Bridge File.

Physical Description: The viaduct consists of 31 span; 2 are Warren deck trusses, 27 are built-up deck girders, and 2 are steel stringers. It is supported on steel bents, some on concrete plinths, and concrete piers and abutments. The trusses have hinged bearings. Most of the bents are composed of four built-up steel columns with heavy lateral bracing. One bent that was rehabilitated in 1983 has only two columns that rest on heavy steel girders that distribute the load. In 1938 the viaduct was rehabilitated and strengthened by the addition of new floor beams, heavier bents and new footings, and lateral bracing. That rehab was done after plans prepared by Waddell & Hardesty. In 1987 A. G. Lichtenstein prepared plans for another rehabilitation that included changing the way the previously canted bearings work and conversion of one sidewalk to part of the roadway. Both rehabilitations were sensitive to the original design of the structure.

Historical and Technological Significance: The 31-span viaduct was originally built in 1910, and it forms an important route from Hoboken up the Bergen Hill to Jersey City. Bergen Hill, also called the Palisades, is a mile-wide ridge that runs parallel to the Hudson River for many miles. The approximately mile-square town of Hoboken lies between the ridge and the river. Because the east side of the hill is a steep cliff about 100' high, access from Hoboken to Jersey City was limited. At the south end of Hoboken there are old roads that scale the hill, but at the north end, there were none until the 14th Street viaduct was completed in 1910. Thus, in addition to its local historical significance, the viaduct is an impressive engineering solution to a difficult transportation problem, and it utilizes a variety of bridge types ion that solution. It is technologically significant. The 1938 strengthening and rehabilitation was designed by the noted consulting engineer firm of Waddell & Hardesty.

PHOTO: 26:8-12,15,30-3 (05/17/91) REVISED BY (DATE): QUAD: Weehawken

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0900017 **CO** HUDSON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MANHATTAN AVENUE VIADUCT OVER GORGE **FACILITY** MANHATTAN AVENUE

TOWNSHIP UNION CITY

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 12 **LENGTH** 695 ft **WIDTH** 36 ft

CONSTRUCTION DT 1939 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The low viaduct climbs up the side of Bergen Hill from the west end of Hoboken's 14th St. Viaduct through scrub woods, connecting the low-lying areas of Hoboken with the Jersey City Heights to the west. It is also called the North Wing Viaduct, and carries a two-lane street. Although a trolley line once ran beneath the viaduct, inspection revealed no trace of trolley resources remaining there.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 8/2/91

SUMMARY The 12-span viaduct consists of steel I-beam stringers supported by reinforced concrete piers and encased floor beams. It is not historically or technologically distinctive. It is one of over 15 stringer bridges in Hudson County.

INFOR MATION

PHOTO: 26:13-14,16-17 (05/12/91) REVISED BY (DATE): QUAD: Weehawken

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0900019 **CO** HUDSON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WEST HUDSON PARK ROAD OVER LAKE **FACILITY** WEST HUDSON PARK ROAD

TOWNSHIP HARRISON TOWN

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 3 **LENGTH** 132 ft **WIDTH** 22 ft

CONSTRUCTION DT 1911 **ALTERATION DT** Rebuilt: 1991 **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a two-lane park road over an artificial lake in a small urban park built about 1911 by the Hudson County Park Commission as one of a series of parks in the Olmsted or City Beautiful tradition. The landscape architect was Charles Lowrie, and the bridge was an original element in his design for the park. 0900020 is also in the park, and it has been evaluated as significant.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The graceful segmental reinforced concrete arch bridge with Arts & Crafts-style detailing was rebuilt in 1991-92, at which time its deck, spandrels, and balustrade were removed, although its arches and pylons were left intact. While a reconstruction in the spirit of the original design, the new fabric makes it essential a modern bridge, and thus, a noncontributing resource to the historic park. Remaining original details include colorful geometric tiles on its pylons.

INFOR MATION

PHOTO: 21:8-10 (04/26/91) REVISED BY (DATE): QUAD: Jersey City

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0900020 **CO** HUDSON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WEST HUDSON PARK ROAD OVER DAVIS AVENUE **FACILITY** WEST HUDSON PARK ROAD

TOWNSHIP HARRISON TOWN

TYPE ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 72 ft **WIDTH** 22.7 ft

CONSTRUCTION DT 1911 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a two-lane road over a 2-lane city street that divides a small urban park in two. The park is landscaped in the traditional Olmsted fashion, with trees on rolling grassy hills. It was completed by the Hudson County Park Commission in 1911, with Charles Lowrie as landscape architect. Just outside this area of the park are undistinguished 1920s apartment buildings.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible. Potential Park Historic District. May contribute.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge is significant as a contributing element to an early 20th century park. It is an impressive example of a concrete-arch park bridge and does not attempt to imitate stone masonry. Its decoration consists of a concrete balustrade with oval piercing and geometric colored tiles on its pylons. It is an elliptical barrel arch with solid spandrel walls, and is essentially unaltered. West Hudson Park appears to be a potential historic district because of its design and local civic history.

INFOR MATION

Bibliography:
Hudson County Park Commission. Second Report of the Hudson County Park Commission (covering June 23,1908-November 30, 1910). Jersey City Publishing Company.
Hudson County Engineers Office: Plan Files.

Physical Description: The handsome, well-preserved bridge is a simple elliptical reinforced concrete arch span with graceful, attenuated proportions. Its adornment consists of low balustrades with oval piercing flanking the 22'-7" wide roadway. Faience tile accents the plain posts. The wingwalls are topped by balustrades that match those used on the main span. The bridge appears unaltered.

Historical and Technological Significance: The 1911 bridge is a contributing element in a well-preserved, historically significant park that was designed by landscape architect Charles Lowrie. The span is not technologically innovative for its time, but it is representative of the high-quality, well detailed designs the plastic qualities of concrete afforded. The bridge is located in informally landscaped West Hudson Park, one of five county parks established by the Hudson County Park Commission about 1909. It was completed in 1911. Landscape architect Lowrie's description of West Hudson Park emphasized its woodland scenery, viewpoints, and the opportunity to create a picturesque lake out of several ponds already on the site. Because the park was long and narrow, Lowrie felt a direct driveway through it was essential to give access between the different sections. At the same time it was necessary to provide a transverse street, which is Davis Avenue, the road the bridge crosses. To keep Davis Avenue from disrupting the park, the park road was made to cross it. No plans for the bridge were located, so it is not known who designed the handsome arch bridge.

West Hudson Park ranks with Bayonne Park (completed about 1916) as the two most noteworthy of the original five parks. Both were important civic projects, and both retain their original planting schemes to a large extent. They also share a common design element of having bridges as prominent landscape features. Another bridge in West Hudson Park that was an original feature was rebuilt in 1991-1992. It no longer retains its historic design, so it is not a contributing resource (0900019).

PHOTO: 21:5-7 (04/26/91 JPH (5/96)) REVISED BY (DATE): QUAD: Orange

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0900022 **CO** HUDSON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BAYONNE PARK ROAD OVER PARK FOOTPATH **FACILITY** BAYONNE PARK ROAD

TOWNSHIP BAYONNE CITY

TYPE ARCH **DESIGN** BARREL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 24 ft **WIDTH** 30.2 ft

CONSTRUCTION DT 1916 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a two-lane park road over a paved footpath in the pastoral landscape of a large park completed by the Hudson County Park Commission in 1916. It was landscaped by architect Charles Lowrie. Bayonne Park is one of the five major Hudson County parks constructed as part of the City Beautiful movement of the early 20th century.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Potential Park Historic District. Contributing.

CONSULT DOCUMENTS SHPO Letter 03/12/01

SUMMARY The bridge is a representative example of an early 20th century concrete arch bridge, designed as an integral element of the landscaping plan for a large urban park in the Olmsted tradition. It is an elliptical arch with solid spandrels and quatrefoil-pierced balustrades. The well-preserved county park is historically significant as part of an ambitious 5-park project from the 1910s. The bridge is not individually eligible for listing in the National Register, but would be a contributing element of an urban park historic district or a County - Wide Park Multiple Property listing should either of those be defined in the future.

INFOR MATION

Bibliography:

Second Report of the Hudson County Park Commission. 1910 (covering the period from June 23, 1908-November 30, 1910). Jersey City Printing Company.

Physical Description: The well-proportioned pedestrian bridge is an elliptical, closed spandrel, reinforced concrete arch bridge 24' long and 30' wide. Its decoration consists chiefly of the gracefully curved top concrete parapets with quatrefoil-shaped pierced panels. The bridge is well preserved.

Historical and Technological Significance: The handsome, well-proportioned 1916 reinforced concrete arch bridge is historically significant as an original element in a locally significant, picturesquely landscaped urban park. Bayonne Park, completed in 1916, is one of the five urban parks established about 1910 by the Hudson County Park Commission. It is one of two of those parks that was designed in the Olmsted style by landscape architect Charles Lowrie. The park is well preserved and is evaluated as significant because of its local civic and landscape architecture history. The bridge is an integral design element in the park, and it too is well preserved. No plans for the span were located, so the designer is not known. It is one of three concrete arch bridges in the potential historic district of Bayonne Park that were evaluated as contributing resources (0900023, 0900024).

Boundary Description and Justification: The bridge is located within an urban park that appears to have the history and integrity of original design to meet the criteria for inclusion in the National Register. Thus the bridge and its immediate setting are evaluated as significant.

PHOTO: 201:22-24 (06/07/91 JPH (5/96)) REVISED BY (DATE): QUAD: Jersey City

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0900023 **CO** HUDSON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BAYONNE PARK ROAD OVER PARK FOOTPATH **FACILITY** BAYONNE PARK ROAD

TOWNSHIP BAYONNE CITY

TYPE ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 24 ft **WIDTH** 29.7 ft

CONSTRUCTION DT 1916 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a two-lane park road over a paved footpath in the pastoral landscape of a large park completed by the Hudson County Park Commission in 1916 and landscaped by architect Charles Lowrie. Bayonne Park is one of the five major Hudson County parks constructed as part of the City Beautiful movement of the early 20th century. Both the bridge and its setting are well preserved.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible. Potential Park Historic District. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The span is an attractive example of an early 20th century concrete arch bridge, designed as an integral element of the landscaping plan for a large urban park in the Olmsted tradition. Although it is in fact a closed spandrel arch, it has a graceful blind arcade to imitate an open spandrel arch. Ornamental geometric colored tiles are set into the bridge's pylons. The well-detailed bridge is individually distinguished and is also located in a potential historic district, a county park.

INFOR MATION

Bibliography:
Second Report of the Hudson County Park Commission. 1910 (covering the period from June 23, 1908-November 30, 1910). Jersey City Printing Company.

Physical Description: The well-proportioned 24'-long bridge is an elliptical closed-spandrel reinforced concrete arch. It is well detailed with a graceful blind arcade to suggest an open spandrel arch bridge. Faience tile set in a geometric pattern accents the posts that mark the limits of the span. The concrete parapet is set behind the blind arcade. The span is well preserved, and it represents the high quality designs the plastic medium of concrete affords.

Historical and Technological Significance: The handsome, well-proportioned 1916 reinforced concrete arch bridge is historically significant as an original element in a locally significant, picturesquely landscaped urban park. Bayonne Park, completed in 1916, is one of the five urban parks established about 1910 by the Hudson County Park Commission. It is one of two of those parks that was designed in the Olmsted style by landscape architect Charles Lowrie. The park is well preserved and is evaluated as significant because of its local civic and landscape architecture history. The bridge is an integral design element in the park, and it too is well preserved. In addition to associative significance with the park, the bridge is individually distinguished as a well-designed example of its type. No plans for the span were located, so the designer is not known. It is one of three bridges in Bayonne Park that are evaluated as contributing resources in the potential historic district (0900024,0900022).

Boundary Description and Justification: The bridge is located within an urban park that appears to have the history and integrity of original design to meet the criteria for inclusion in the National Register. Thus the bridge and its immediate setting are evaluated as significant.

PHOTO: 28:33-35 (06/07/91) REVISED BY (DATE): QUAD: Jersey City

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0900024 **CO** HUDSON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BAYONNE PARK ROAD OVER PARK FOOTPATH **FACILITY** BAYONNE PARK ROAD

TOWNSHIP BAYONNE CITY

TYPE ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 24 ft **WIDTH** 30 ft

CONSTRUCTION DT 1916 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a two-lane park road over a paved park footpath in the pastoral landscape of a large park completed by the Hudson County Park Commission in 1916 and landscaped by architect Charles Lowrie. Bayonne Park is one of the five major Hudson County parks constructed as part of the City Beautiful movement of the early 20th century.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Potential Park Historic District. Contributing.

CONSULT DOCUMENTS SHPO Letter 03/12/01

SUMMARY The span is a representative example of an early-20th century concrete arch bridge, designed as an integral element of the landscaping plan for a large urban park in the Olmsted tradition. It is a well-proportioned elliptical arch with solid spandrels. Decoration consists of a concrete balustrade with quatrefoil piercing and colored geometric tiles set into excedrae projecting from the parapets of the bridge approaches. The bridge is not individually eligible for listing in the National Register, but would be a contributing element of an urban park historic district or a County - Wide Park Multiple Property listing should either of those be defined in the future.

INFOR MATION

Bibliography:

Second Report of the Hudson County Park Commission. 1910 (covering the period from June 23, 1908-November 30, 1910). Jersey City Printing Company.

Physical Description: The well-proportioned pedestrian bridge is an elliptical, closed spandrel, reinforced concrete arch bridge 24' long and 30' wide. Its decoration consists chiefly of the concrete balustrades with quatrefoil-shaped piercing and faience tiles set into the faces of the two octagonal-ended exedrae (overlooks) at the approaches. The bridge is well preserved.

Historical and Technological Significance: The handsome, well-proportioned 1916 reinforced concrete arch bridge is historically significant as an original element in a locally significant, picturesquely landscaped urban park. Bayonne Park, completed in 1916, is one of the five urban parks established about 1910 by the Hudson County Park Commission. It is one of two of those parks that was designed in the Olmsted style by landscape architect Charles Lowrie. The park is well preserved and is evaluated as significant because of its local civic and landscape architecture history. The bridge is an integral design element in the park, and it too is well preserved. No plans for the span were located, so the designer is not known.

Boundary Description and Justification: The bridge is located within an urban park that appears to have the history and integrity of original design to meet the criteria for inclusion in the National Register. Thus the bridge and its immediate setting are evaluated as significant.

PHOTO: 201: 25-27 (06/07/91) REVISED BY (DATE): QUAD: Jersey City

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0900025 **CO** HUDSON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED JFK BOULEVARD EAST OVER FISSURE IN CLIFF **FACILITY** JFK BOULEVARD EAST

TOWNSHIP GUTTENBERG TOWN

TYPE ARCH **DESIGN** BARREL **MATERIAL** Concrete

 # SPANS 1 **LENGTH** 65 ft **WIDTH** 50 ft

CONSTRUCTION DT 1920 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT Boulevard East runs along the eastern edge of Bergen Hill, a long ridge paralleling the Hudson and rising several hundred feet above it; the east cliff of this ridge is known as the Palisades. The bridge carries half of the boulevard over a fissure in the cliff. West of the bridge is an undistinguished neighborhood of modernized detached houses and late 20th century apartment buildings; the setting is without historic significance.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY To carry the street over the fissure, a mass of concrete was placed under the west half of the roadway while the east half and the east sidewalk are supported by a segmental arch of concrete, possibly unreinforced. The arch can be seen only from far below; from the street there is no evidence that one is on a bridge. As a result no effort was made to beautify the bridge in any way; its plain solid spandrel sides were left as rough concrete. It is not technologically innovative.

INFOR MATION

PHOTO: 23:29-30,41;1s (04/28/91) REVISED BY (DATE): QUAD: Weehawken

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0901150 **CO** HUDSON **OWNER** NJDOT **MILEPOINT** 84.3

NAME & FEATURE INTERSECTED US 1&9 PULASKI SKYWAY OVER HACKENSACK MEADOWS **FACILITY** US 1&9

TOWNSHIP JERSEY CITY

TYPE CANTILEVER THRU TRUSS **DESIGN** PRATT **MATERIAL** Steel

 # SPANS 45 **LENGTH** 14900 ft **WIDTH** 47 ft

CONSTRUCTION DT 1932 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT NJ STATE HIGHWAY DEPT. **BUILDER** FOUR CONTRACTORS

SETTING / CONTEXT The Skyway carries a four-lane super highway high over the Hackensack Meadows, two navigable rivers, and industrial areas of Jersey City and Kearny. It is part of the Rt. 1\9 Corridor and was built as the highway approach to the Holland Tunnel. It no longer carries trucks, which use the alternate US 1&9T truck route. The Skyway is a multi-span structure several miles long.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Individually Eligible. US Routes 1&9 Historic District. Contributing.

CONSULT DOCUMENTS SHPO Finding 09/11/91, Letter 03/12/01.

SUMMARY The elevated continuous truss plus cantilever viaduct was the first major urban elevated highway in the U.S. and was an integral part of the first true limited-access highway in the U.S. It is generally considered one of the most handsome steel continuous truss bridges. Its construction was divided into four sections and let to four different contractor (from east to west): American Bridge, Phoenix Bridge, McClintic-Marshall, and Taylor-Fichter. The impressive structure is well preserved and It is individually eligible for listing in the National Register of Historic Places under Criteria A and C. It is also a contributing element of the US Routes 1&9 Historic District .

INFOR MATION

PHOTO: 203:12A-14A (08/16/91) REVISED BY (DATE): QUAD: Jersey City

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0902150 **CO** HUDSON **OWNER** NJDOT **MILEPOINT** 54.75

NAME & FEATURE INTERSECTED US 1&9 OVER NJ TRANSIT MORRISTOWN LINE **FACILITY** US 1&9 (TONNELE AVENUE)

TOWNSHIP JERSEY CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 109 ft **WIDTH** 50 ft

CONSTRUCTION DT 1938 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries a busy four-lane arterial highway over the NJT Morristown line, the former main line of the Lackawanna RR, electrified for commuter service circa 1930. The surrounding commercial neighborhood is undistinguished, except St. Peters Cemetery, with many old monuments, which dates from prior to 1887 and is northwest of the bridge. US 1&9 at this point is not part of the original Rt 1 corridor.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Delaware, Lackawanna & Western Railroad Old Main Line Historic District, Eligible, May contribute.

CONSULT DOCUMENTS SHPO Letter 6/30/95, Opinion 09/24/96.

SUMMARY The encased stringer bridge on a concrete substructure replaced an older bridge during a 1930s upgrading of Tonnele Ave. to serve as the US 1 approach to the George Washington Bridge. With its concrete balustrades, it is a representative example of the most common pre-World War II bridge type in the state. Although an important type, there are better examples elsewhere in New Jersey.

INFOR MATION

PHOTO: 25:26-29;21:29- (05/03/91) REVISED BY (DATE): QUAD: Jersey City

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0902151 **CO** HUDSON **OWNER** NJDOT **MILEPOINT** 54.82

NAME & FEATURE INTERSECTED US 1&9 (TONNELE AVENUE) OVER CONRAIL (ERIE-LACKAWANNA) **FACILITY** US 1&9 (TONNELE AVENUE)

TOWNSHIP JERSEY CITY

TYPE DECK GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 205 ft **WIDTH** 50 ft

CONSTRUCTION DT 1931 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries a busy four-lane arterial highway over the former Erie RR approaches to the Jersey City waterfront. The surrounding area is an undistinguished commercial area with modern buildings, except for St. Peter's Cemetery southwest of the bridge, which predates 1887 and has many old monuments. This portion of US 1&9 is not part of the original Rt. 1 Corridor.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The concrete-encased deck plate girder bridge, with its pierced concrete balustrade and concrete pylons, is supported on a concrete substructure. It was built to upgrade Tonnele Avenue as the US 1 approach to the George Washington Bridge. A representative example of an ubiquitous pre-World War II bridge type, it is not noteworthy, nor is it a contributing resource to a historically significant highway. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 25:17-20;1s (05/17/91) REVISED BY (DATE): QUAD: Jersey City

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0902152 **CO** HUDSON **OWNER** NJDOT **MILEPOINT** 57.08

NAME & FEATURE INTERSECTED US 1&9 (TONNELE AVENUE) OVER AMTRAK NORTHEAST CORRIDOR **FACILITY** US 1&9 (TONNELE AVENUE)

TOWNSHIP JERSEY CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 81 ft **WIDTH** 50 ft

CONSTRUCTION DT 1929 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge carries a major four-lane arterial highway over Amtrak's busy Northeast Corridor route from New York to Washington that was constructed circa 1905 and electrified circa 1935. The surrounding neighborhood is composed of undistinguished "strip" commercial and light industrial structures. To the east of the bridge is a patch of scrub woods. The rail line was originally built by the Pennsylvania RR.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased stringer bridge with a concrete substructure was built to upgrade Tonnele Ave. to become the US 1 approach to the George Washington Bridge, constructed 1927-1931. It is an example of the most common type of pre-World War II bridge in the state, and it is one of over 15 in Hudson County alone. It is not technologically innovative nor is the span of historical interest.

INFOR MATION

PHOTO: 203:1A-6A;41A-4 (07/28/91) REVISED BY (DATE): QUAD: Weehawken

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US
November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0903150 **CO** HUDSON **OWNER** NJDOT **MILEPOINT** 58.44

NAME & FEATURE INTERSECTED US 1&9 (TONNELE AVENUE) OVER CONRAIL RIVER LINE **FACILITY** US 1&9 (TONNELE AVENUE)

TOWNSHIP NORTH BERGEN TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 69 ft **WIDTH** 44 ft

CONSTRUCTION DT 1937 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge carries a busy four-lane arterial highway over ConRail's River Line, formerly the West Shore Railroad. The landscape surrounding it includes an undistinguished post-WW II commercial and light industrial area to the northeast, a major rail yard to the northwest, a mobile home community to the southeast, and a campground to the southwest.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The concrete-encased steel stringer bridge is supported on the ashlar abutments of an earlier span. The metal fence-like railing appears to be original. The bridge is not technologically or historically significant. It is one of over 15 stringer spans in Hudson County that date from before World War II.

INFOR MATION

PHOTO: 203:22A,23A,25A (07/28/91) REVISED BY (DATE): QUAD: Weehawken

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US
November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0904150 **CO** HUDSON **OWNER** NJDOT **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED JFK BLVD (NJ 501) OVER NJ 139 **FACILITY** JFK BOULEVARD (NJ 501)

TOWNSHIP JERSEY CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 102 ft **WIDTH** 60 ft

CONSTRUCTION DT 1932 **ALTERATION DT** **SOURCE** INSCRIBED

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT This bridge carries JFK Boulevard (formerly Hudson Boulevard) over NJ 139, the highway approach to the Holland Tunnel. The surrounding area contains undistinguished recent commercial structures. The bridge crosses a historically and technologically important highway (US 1&9, the Holland Tunnel approach).

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Not Individually Eligible. US Routes 1&9 Historic District, Eligible. Contributing.

CONSULT DOCUMENTS SHPO Finding 09/11/91, Letter 03/12/01.

SUMMARY With its concrete-encased steel stringers and geometric pierced concrete balustrade, the bridge is a representative example of the most common type of bridge built in the state prior to World War II. It is not technologically innovative. However, it is a contributing, original element of historic Rt. 1, the approach to the Holland Tunnel that is the first true limited-access highway in the United States which is eligible for listing in the National Register of Historic Places under Criteron A. The chain link pedestrian fence is a 1980's addition. This structure is within the boundary, although not a contributing resource to, the NRHP eligible Erie Railroad Bergen Archways / Bergen Hill Tunnel Historic District.

INFOR MATION

PHOTO: 21: 31-32 (04/26/91) REVISED BY (DATE): QUAD: Jersey City

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0904151 **CO** HUDSON **OWNER** NJDOT **MILEPOINT** 0.35

NAME & FEATURE INTERSECTED NJ 139 OVER CONRAIL BERGEN ARCHWAYS LINE **FACILITY** NJ 139

TOWNSHIP JERSEY CITY

TYPE DECK TRUSS **DESIGN** PRATT ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 485 ft **WIDTH** 57.4 ft

CONSTRUCTION DT 1927 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries NJ 139, the approach highway to the Holland Tunnel. It is part of the Rt. 1&9 Corridor, and it is over the Bergen Archways, the 4-track approach to the Jersey City waterfront built through Bergen Hill by the Erie RR 1907-10. The bridge is within the walls of the Bergen Archways cut, except on the west, where the highway opens onto Tonnele Circle, that is surrounded by modern commercial structures & some 1920s factories.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible. Erie RR Bergen Archway / Bergen Hill Tunnel and US Routes1&9 Historic Districts. Contributing.

CONSULT DOCUMENTS SHPO Finding 09/11/91, Letter 03/12/01.

SUMMARY The skewed, deep, concrete-encased Pratt deck truss bridge on a concrete substructure has its original concrete balustrade and pylon defining the middle of the span. It ranks as one of the impressive examples of its type in the state, and is well-preserved. The bridge is individually eligible for listing in the National Register of Historic Places. In addition, the bridge is an original and thus contributing element of the U.S. Routes 1 & 9 Historic District comprised of intact portions of the country's first true super highway, and the Erie Railroad Bergen Archways / Bergen Hill Tunnel Historic District under Criteria A and C..

INFOR MATION

PHOTO: 21:33,34;25:23; (04/26/91) REVISED BY (DATE): QUAD: Jersey City

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0904152 **CO** HUDSON **OWNER** NJDOT **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED LOCAL STREETS OVER NJ 139 DEPRESSED ROADWAY **FACILITY** HOBOKEN AVE, CENTRAL AVE, AND OTHER LOCAL STREETS

TOWNSHIP JERSEY CITY

TYPE DECK GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 190 **LENGTH** 3380 ft **WIDTH** 27 ft

CONSTRUCTION DT 1927 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER** PUBLIC SERVICE PROD. CO.

SETTING / CONTEXT This structure carries the local streets of an urban commercial and residential area over a portion of NJ 139 (the approach to the Holland Tunnel) that is depressed into a cut through the bedrock of Bergen Hill. This structure is part of the historic Routes 1 & 9 highway. South of the highway is the Bergen Archways, a tunnel-cut built by the Erie Railroad 1907-1910 and part of the NRHP eligible Erie Railroad Bergen Archways / Bergen Hill Tunnel Historic District.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Erie RR Bergen Archways / Bergen Hill Tunnel and US Routes 1&9 Historic Districts, Eligible. Contributing.

CONSULT DOCUMENTS SHPO Finding 09/11/91, Letter 03/12/01.

SUMMARY The long complex span founded on solid rock and carrying local roads overhead is a contributing element of the US1&9 historic district. It consists of one encased Warren half thru truss span carrying one side of a street and a series of 190 transverse encased deck girders. The north ends of the girders rest on a concrete retaining wall/abutments while the south ends rest on encased steel columns. The upper level that carries the local streets has a concrete balustrade on the open side. The bridge is not individually eligible for listing in the National Register of Historic Places. However, the bridge is an original, and thus contributing, element of the U.S. Routes 1 & 9 Historic District, comprised of intact portions of the country's first true super highway, and the Erie Railroad Bergen Archways / Bergen Hill Tunnel Historic District under Criteria A and C.

INFOR MATION

PHOTO: 21:35;22:20,25- (05/26/91 JPH (5/96)) REVISED BY (DATE): QUAD: Jersey City

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0904153 **CO** HUDSON **OWNER** NJDOT **MILEPOINT** 1.3

NAME & FEATURE INTERSECTED NJ 139 EB (12TH STREET VIADUCT) DOWN TO STREET LEVEL **FACILITY** NJ 139 EASTBOUND

TOWNSHIP JERSEY CITY

TYPE DECK TRUSS & DECK GIRDER **DESIGN** PRATT ENCASED **MATERIAL** Steel

 # SPANS 24 **LENGTH** 1702 ft **WIDTH** 48.5 ft

CONSTRUCTION DT 1927 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER** F. SNARO, INC, CONTRACTOR

SETTING / CONTEXT The viaduct carries former US 1 & NJ 139, the Holland Tunnel approach routes, from a depressed cut across Bergen Hill down to lower Jersey City. Underneath its upper reaches is mainly abandoned land (formerly extensive Erie RR yards). As it descends, the eastbound ramp of the 1960 New Jersey Turnpike Extension joins it on the south side. At its lower end, it is adjacent to 1920s and 1930s industrial structures.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Individually Eligible. US Routes 1&9 Historic District. Contributing.

CONSULT DOCUMENTS SHPO Finding 09/11/91, Letter 03/12/01.

SUMMARY In addition to its significance as a contributing element of the Rt 1&9 district, the long viaduct is a technologically complex and significant structure in itself. Four of its spans are concrete-encased Pratt deck trusses while 20 spans are encased deck girders on steel and concrete pier bents. The east end contains concrete slab spans. The predominantly elevated Rt. 1&9 is America's first super highway, built as the approach to the Holland Tunnel in 1927-1932. This span is individually eligible for listing in the National Register of Historic Places under Criterion C. and is a contributing element of the US Route 1&9 Historic District under Criteria A and C.

INFOR MATION

PHOTO: 25:32-35;27:8-1 (05/17/91) REVISED BY (DATE): QUAD: Jersey City

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0905150 **CO** HUDSON **OWNER** NJDOT **MILEPOINT** 0.0
NAME & FEATURE INTERSECTED CENTRAL AVENUE OVER US 1&9T **FACILITY** CENTRAL AVENUE
TOWNSHIP KEARNY TOWN
TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel
 # SPANS 2 **LENGTH** 114 ft **WIDTH** 50.3 ft

CONSTRUCTION DT 1938 **ALTERATION DT** **SOURCE** INSCRIPTION
DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge takes four-lane Central Avenue over US 1&9T, a busy arterial route to Jersey City and the Holland Tunnel. It is located in an area of large industrial complexes and bulk storage facilities interspersed unmaintained vacant land.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No
CONSULT STATUS Not Individually Eligible.
CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The concrete-encased stringer bridge with concrete balustrades and a concrete substructure is representative of many bridges designed and built by the state in the 1930s. The encasing was to protect the steel from deterioration. The span is undistinguished technologically and is without historic significance. It is one of over 15 stringer bridges in Hudson County.

INFOR MATION

Bibliography:
Annual Reports of the NJ State Highway Commission.
Freeman, Leslie E. : "The New Jersey Railroad and Transportation Company" in bulletin no. 88 of the Railway and Locomotive Historical Society, pp. 100-159. "Two heavy spans floated into place to complete Hackensack River bridges" in Engineering news - Record. Nov. 1, 1930, pp. 778-780.
"New Jersey State Highway Department Hackensack River Bridge Route No. 10", May 1929 bridge drawings in microfilm, 0904.

Physical Description: The 2169'-long bridge consists of a vertical lift span with several approach spans. The lift span towers are skewed. The approach spans consist of two camelback (Pratt) thru trusses, one modified thru Pratt truss span acting as a continuous span between its neighbors, a fixed tower truss span of modified Pratt form whose top chord rises from portal to tower face, a Pratt lift span with flat top chord, another fixed tower span, and five deck girder spans forming the west approach. The piers are reinforced concrete. The bridge, which originally carried a double line of trolley tracks, crosses the river at an angle, and the towers of the vertical lift are skewed to give maximum channel width.

The Pratt thru truss lift span has the lifting machinery and operator's house located on the lift span itself, with uphaul and downhaul cables going from the house to both towers. Compensation for the changing weight of the cable supported by the lift span consists of a heavy chain suspended from the counterweights and attached at its other end to the towers at about mid-height. As the span rises less and less of the chain is directly suspended from the counterweight, counterbalancing the additional weight of cable between the counterweight and the top sheaves.

Historical and Technological Significance: The Wittpenn Bridge, named for H. Otto Wittpenn, member of State Highway Commission 1929-1931, is a large and complete example of mid-20th century movable bridge technology that remains essentially in its original condition. Its design and construction required solution of a number of difficult engineering problems. One of only two road crossings of the Hackensack River west from Jersey City, it is located on the old Newark Turnpike, and the Belleville Turnpike, another old road, diverges north from the Newark Turnpike just west of the bridge. This route probably originally crossed the river as a ferry, but in 1790 a charter was given to "The Proprietors of the Bridges over the Rivers Hackensack and Passaic" to build a bridge at this location. The charter was bought out by the New Jersey Railroad & Transportation Co. in 1833 so that its tracks could share the bridge with the road. The bridge was rebuilt more than once, and was a wooden two span truss structure. In 1846 the railroad built a separate bridge, leaving the Turnpike alone to cross on the old bridge. In 1886 the Pennsylvania Railroad (successor to the New Jersey Railroad & Transportation Co.) built a second bridge so that it could use one for passenger trains and one for freight trains (Freeman, 1953). This arrangement remains to this day, though the bridges have been rebuilt since then.

The route across the bridge and on west via the Belleville Turnpike was designated as Route 10 (later changed to Route 7) in the 1927 expansion of state highways (Annual Report 1927, p. 403). Its purpose was to take traffic from Jersey City, including from the Holland Tunnel, west through Kearny, Harrison, northern Newark, and on west to intersect Rt 6 (now NJ 46) near Dover (Morris County). In the automobile age the traffic across this bridge increased greatly in the 1920s, although after 1932 it declined for a time, due to the opening of the Pulaski Skyway.

In 1926 the U.S. War Department required the NJ State Highway Department to replace the swing bridge in order to permit 35' vertical clearance when the bridge was in the closed position. This meant constructing a new bridge parallel to the old one so as not to block the highway during construction. The approaches also had to be raised to provide for the new, higher vertical clearance. In addition the channel was to be relocated to the easterly side of the river while the previous channel had been on the west side. This meant that the construction of the new bridge had to proceed without the spans over the old channel so the latter could continue in service while the new channel was being prepared. Those spans, which were deck girders, were floated into place over a weekend when the channels could be closed temporarily during the final phase of construction. At this time the old bridge's fixed spans over the new channel were removed (Eng. News-Record, pp. 778-780).

Meanwhile the Pennsylvania RR was also required to modify, its two bridges in the vicinity. An agreement was reached with the railroad

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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that one of the railroad bridges (carrying a freight line) would be built parallel and adjacent to the Highway bridge, and that to save on the cost one set of piers would be built to carry both bridges, the costs of the piers to be divided proportionately. The railroad followed essentially the same procedure for floating the new spans into place and removing the old spans, at the same time (Eng. News-Record, 778-780; Annual Report 1927, p. 403). The highway was opened for traffic on Nov. 5, 1930, and the previous bridge was removed (Annual Report, 1930, p. 480, 483).

W.J. Sloan was chief engineer for the State Highway Department, and he gave final approval to all plans for the bridge while Sigvald Johannesson was the "engineer of design," according to Engineering News-Record. Consulting engineers for the lift bridge portion were Harrington, Howard and Ash of Kansas City and New York. The firm was noted for its vertical lift bridges, and they designed many in the state built between 1925 and 1942. The contractor for the bridge superstructure (river spans and east approach) were Stroebel Steel Construction Co. (1929 AR, p. 527). It was fabricated by Mt. Vernon Bridge Co. (Ohio).

PHOTO: 21:13-15;27-34 (04/26/91) REVISED BY (DATE): QUAD: Jersey City

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0905151 **CO** HUDSON **OWNER** RAILROAD **MILEPOINT** 1.2

NAME & FEATURE INTERSECTED CONRAIL MEADOWS BRANCH 1 OVER US 1&9T **FACILITY** CONRAIL MEADOWS BRANCH 1 (PENNSYLVANIA RR)

TOWNSHIP KEARNY TOWN

TYPE THRU GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 2 **LENGTH** 191 ft **WIDTH** 12.6 ft

CONSTRUCTION DT 1918-post **ALTERATION DT** **SOURCE** JOURNAL REFERENCE

DESIGNER/PATENT **BUILDER** AMERICAN BRIDGE COMPANY

SETTING / CONTEXT The bridge takes an active Conrail industrial spur across US 1&9T, a busy arterial route, in an area of sprawling modern industrial plants and overgrown vacant land. A modern firehouse is to the northeast. It is the southernmost of two closely spaced spans that originally crossed the Morris Canal (abandoned in 1924 and subsequently drained and filled) as well as the eastbound lanes of US 1&9T.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 2 simple span thru girder bridge with floor beams is supported on a concrete substructure and decorative concrete pylons at the girder ends. It has a ballasted deck. Not original to this location, the bridge was moved here for the rail spur which was built quickly to service the WW I federal shipyard. The yard has been redeveloped and does not retain its historic character. While the bridge has historical association with WW I, it is a an example of a common type and is distinguished.

INFOR MATION

Bibliography:
"Temporary bridge of old girders has suspended floor." Engineering News-Record. Vol. 81, pp. 538-39.
Parsons, Floyd W., ed: New Jersey: Life, Industries and Resources of a Great State. Newark, NJ: New Jersey State Chamber of Commerce, 1928.

Physical Description: The bridge consists of two thru riveted girder spans with a total span of 191 ft. The bridge is built for heavy railroad loads and has a ballasted deck. The pier and abutments are of concrete. The sides of the abutments continue up in concrete pylons about 6-8 ft. above the deck of the bridge; these four pylons serve no functional purpose and are decorative features unusual for a bridge carrying an industrial rail siding. The bridge is an apparently unaltered example of the thru girder type as built by and for a railroad. The bridge carries an industrial branch of the former Pennsylvania RR over what was then called the Lincoln Highway, now US 1&9T, a busy arterial highway. The surroundings were originally the open marshes of the Hackensack Meadows, but by this date these had been diked and filled to form a low-lying, largely vacant area.

Historical and Technological Significance: In 1917, U.S. Steel began the emergency construction of the Federal Shipbuilding Yard at Kearny, a 160-acre facility intended to produce large numbers of ocean-going cargo vessels to assist the war effort in WW I. The facility included a number of large brick buildings a few hundred feet south of the Lincoln Highway. Some of these buildings remain, but the facility, which achieved its historical significance during World War I, is not well preserved, and does not have the integrity to be evaluated as a potential historic district.

At the time the shipyard was under construction, the Morris Canal was still in limited use. In this area the canal had been constructed in 1836, and it ran along the south side of the Lincoln Highway. The southern span of the railroad bridge therefore had to be long enough to span the canal as well as the eastbound lanes of the highway. In 1922, the canal was officially abandoned, and not long thereafter it was filled in. Presently a billboard stands just east of the bridge in the filled-in canal bed. A casual observer would not be aware that the Canal was once here, and might therefore wonder why the bridge is so much longer than necessary to span the three eastbound highway lanes.

The Federal Shipbuilding Yard at Kearny was built quickly, and 30 vessels of 10,000 ton capacity were constructed in a short time (it performed the same function in WW II). The urgent measures that had to be undertaken by the United States following our entry into WW I in 1917 included the construction of large numbers of cargo vessels to replace those lost to German submarines, in order to ,convey quantities of war material and supplies to Europe.

Such a large industrial enterprise naturally required railroad service, both to provide construction materials for original construction of the shipyard and to supply it with raw materials for its operations. The Pennsylvania RR built a spur south from Meadows Yard in Kearny toward the shipyard. The spur had to bridge the Lincoln Highway to get access to the new ship yard. In order to complete the spur as quickly as possible, the railroad constructed a temporary bridge of 85' span with trestle approaches using, in an ingenious way, some old bridge girders it had. This bridge was to be replaced as soon as possible by a more permanent structure (the site and the temporary bridge are described in Engineering News-Record. 1918).

The present bridge was built after 1918, but almost certainly before 1924, the year the Morris Canal was officially abandoned. The girders of the new bridge, were not new but had been built by the American Bridge Co. in 1915, according to a plate mounted on the girders. It is not known how or where they were used before being incorporated into the present bridge. The thru girder bridge is not a technologically distinguished example of its type and is thus not individually noteworthy.

The bridge can be considered one of the last remnants of the Canal era in Hudson County, as when built it was made long enough to span the still existing Canal adjacent to the highway. The Federal Shipbuilding Yard is now closed, but south of it is a BASF chemical facility that still requires regular rail service using the bridge.

In summary, neither the site nor the structure appear to meet National Register criteria. The bridge is a representative example of a common type, and the shipyard does not retain its historic appearance, including the filling of the Morris Canal. Much of the site has been

redeveloped for modern industrial purposes.

PHOTO: 27:25-33 (05/31/91) REVISED BY (DATE): QUAD: Jersey City

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0906150 **CO** HUDSON **OWNER** NJDOT **MILEPOINT**

NAME & FEATURE INTERSECTED PEDESTRIAN PATH OVER US 1&9T **FACILITY** PEDESTRIAN PATH

TOWNSHIP JERSEY CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 65 ft **WIDTH** 12 ft

CONSTRUCTION DT 1929 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge carries a park footpath over the busy Lincoln Highway. It is surrounded by the flat landscape of Lincoln Park (formerly West Side Park), one of the major parks of Hudson County, laid out in 1906 on old fill in Newark Bay by the Hudson County Park Commission. The park is contiguous with 1950s housing projects.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased stringer bridge supported on concrete abutments is a representative example of its type. Multi-flight concrete steps at either end provide pedestrian access to the span, and the steps and bridge are both finished with a plain concrete balustrade. The bridge is not technologically or historically distinguished, and it is not an original feature of the park, which was bisected by the 4-lane Lincoln Highway in the 1930s.

INFOR MATION

PHOTO: 21:21-23 (04/26/91) REVISED BY (DATE): QUAD: Jersey City

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0906151 **CO** HUDSON **OWNER** NJDOT **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED LINCOLN PARK SERVICE ROAD OVER US 1&9T **FACILITY** LINCOLN PARK SERVICE ROAD

TOWNSHIP JERSEY CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 65 ft **WIDTH** 30 ft

CONSTRUCTION DT 1929 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT This bridge carries a two-lane park drive in Lincoln Park (formerly West Side Park) over US 1&9T, a busy arterial highway that bisects the park. The park in this area is mainly flat open fields and is built on old fill in Newark Bay. It is a large park that was laid out ca. 1906 by the Hudson County Park Commission. The park is contiguous with 1950s low-income housing projects.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The concrete-encased stringer bridge with arched fascia stringers and concrete balustrades on a concrete substructure is representative of the many bridges of this type built by the state in the pre-World War II era. The bridge is not technologically distinguished, and it is not an original element of the ca. 1906 park. It is one of over 15 stringer bridges in Hudson County. Bridges in several other Hudson County parks have been evaluated as eligible (0900020, 0900023).

INFOR MATION

PHOTO: 21:18-20 (04/26/91) REVISED BY (DATE): QUAD: Jersey City

NEW JERSEY DEPARTMENT OF TRANSPORTATION

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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0906152 **CO** HUDSON **OWNER** **MILEPOINT**

NAME & FEATURE INTERSECTED PARK FOOTPATH OVER US 1&9T **FACILITY** PARK FOOTPATH

TOWNSHIP JERSEY CITY

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 65 ft **WIDTH** No Data

CONSTRUCTION DT 1929 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge carries a park footpath over busy Lincoln Highway. It is surrounded by the flat landscape of Lincoln Park (formerly West Side Park), a large park laid out in 1906 by the Hudson County Park Commission on old fill in Newark Bay. The park is continuous with a 1950s housing project.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge is representative of the steel stringer type, one of the most common types of short span bridges. It is not technologically innovative. It is not an original element of the park, and is not historic in any way.

INFOR MATION

PHOTO: 21:16,17 (04/26/91) REVISED BY (DATE): QUAD: Jersey City

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0906154 **CO** HUDSON **OWNER** RAILROAD **MILEPOINT** 3.69

NAME & FEATURE INTERSECTED PATH AND CONRAIL OVER US 1&9T **FACILITY** PATH AND CONRAIL JERSEY CITY BRANCH

TOWNSHIP JERSEY CITY

TYPE THRU GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 69 ft **WIDTH** 56 ft

CONSTRUCTION DT 1931 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT PA RR OFFICE OF ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries 4 tracks of a busy freight branch and PATH, a very busy rapid transit line, over US 1&9T, a regional arterial highway. The surrounding area is composed of undistinguished modern and modernized industrial and commercial buildings and a steel scrap yard. The bridge was installed by the Pennsylvania RR as part of an upgrading of the various approaches to the then-new Holland Tunnel.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The thru girder with floor beams bridge is composed of 5 girders on a concrete substructure, and it has a ballasted deck. Its design is typical of the period when thru girders were ubiquitously used for rail-carrying overpasses. The span is well preserved, but it is not technologically or historically distinguished. It is historically associated with the regional corridors that the state highway department designed and built to expedite access to the 1927-1931 Holland Tunnel.

INFOR MATION

PHOTO: 203:7A-10A;2s (07/28/91) REVISED BY (DATE): QUAD: Jersey City

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0906155 **CO** HUDSON **OWNER** NJDOT **MILEPOINT** 3.77

NAME & FEATURE INTERSECTED US 1&9T WB OVER JERSEY CITY WATER MAINS **FACILITY** US 1&9T WESTBOUND

TOWNSHIP JERSEY CITY

TYPE RIGID FRAME **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 121 ft **WIDTH** 40.3 ft

CONSTRUCTION DT 1938 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT This bridge is apparently located beneath the approaches to the Holland Tunnel in the Tonnele Circle area, but is not visible.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY This bridge is not visible from above ground, hence it was not photographed or researched. It is a subterranean structure.

INFOR MATION

PHOTO: none (04/20/91) REVISED BY (DATE): QUAD: Jersey City

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0906156 **CO** HUDSON **OWNER** NJDOT **MILEPOINT** 3.92

NAME & FEATURE INTERSECTED US 1&9T OVER ST PAUL AVE & CONRAIL **FACILITY** US 1&9T

TOWNSHIP JERSEY CITY

TYPE THRU TRUSS **DESIGN** PRATT **MATERIAL** Steel

 # SPANS 2 **LENGTH** 862 ft **WIDTH** 38.5 ft

CONSTRUCTION DT 1928 **ALTERATION DT** **SOURCE** 1975 INSPECTION REPT

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is part of an arterial 4-lane highway just west of Tonnele Circle. It is contiguous to a similar bridge on the Pulaski Skyway, and it shares some columns and bents with the latter. Both bridges were constructed as part of the approach road to the Holland Tunnel. The surroundings are urban industrial, including a large 1920s factory, commercial, and some late-19th century row houses.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Historic District Status Unresolved.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The heavy, skewed 2-span Pratt thru truss bridge with encased lower members is of riveted construction and is supported on encased bents and a concrete pier. Rolled section is used for the diagonals and verticals. The bridge is not distinguished based on its age and type and the fact that a Pratt thru truss bridge of similar size, construction, and preservation located immediately to the south has been determined eligible as part of the technologically and historically significant Pulaski Skyway.

INFOR MATION

PHOTO: 20:1-3,44 (04/20/91 JPH (5/96)) REVISED BY (DATE): QUAD: Jersey City

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0906158 **CO** HUDSON **OWNER** NJDOT **MILEPOINT** 4.14

NAME & FEATURE INTERSECTED RAMP FROM NJ 139 TO US1&9T OVER TONNELE AVE **FACILITY** US 1&9T RAMP

TOWNSHIP JERSEY CITY

TYPE DECK GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 6 **LENGTH** 347 ft **WIDTH** 24 ft

CONSTRUCTION DT 1938 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is part of a multiple-component intersection of elevated and surface routes approaching Holland Tunnel. Its surroundings are urban industrial, including a large 1920s factory and some modern one story commercial buildings.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 6-span encased built-up deck girder with floor beams viaduct is supported on concrete columns and abutments. The encasing and columns are finished in a stylized Neo-Classical mode, and the roadway is enclosed by a concrete balustrade. The cantilevered overhang is carried on encased brackets. The viaduct is a non-technologically distinguished element of a surface road improved as an approach to the Lincoln Tunnel. It connects to the Rt 1&9 district, the approach to the Holland Tunnel.

INFOR MATION

PHOTO: 21: 24-28 (04/26/91) REVISED BY (DATE): QUAD: Jersey City

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0908153 **CO** HUDSON **OWNER** NJDOT **MILEPOINT** 10.7

NAME & FEATURE INTERSECTED NJ 3 OVER CONRAIL, NYS&W RR, AND RAMP A **FACILITY** NJ 3

TOWNSHIP NORTH BERGEN TOWNSHIP

TYPE MULTI GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 4 **LENGTH** 195 ft **WIDTH** 50 ft

CONSTRUCTION DT 1929 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries NJ 3, a divided four-lane state highway, over two active railroads to a junction with Tonnele Ave (US 1). It is located on the east edge of the Hackensack Meadows. East of the bridge is an area of undistinguished modern commercial structures.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge is composed of two spans of built-up encased deck girders supported on concrete pier bents and 2 encased stringer approach spans on concrete abutments. The fascia girders are finished with flat panels, and the roadway is enclosed by a standard-design concrete balustrade. The bridge is unaltered, but it is a representative example of a common pre-World War II bridge type and design. It is not historically or technologically distinguished.

INFOR MATION

PHOTO: 24:1-3 (05/03/91) REVISED BY (DATE): QUAD: Weehawken

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0909150 **CO** HUDSON **OWNER** NJDOT **MILEPOINT** 0.34

NAME & FEATURE INTERSECTED NJ 7 OVER HACKENSACK RIVER **FACILITY** NJ 7 WITTPENN BRIDGE

TOWNSHIP JERSEY CITY

TYPE VERTICAL LIFT **DESIGN** **MATERIAL** Steel

 # SPANS 6 **LENGTH** 2169 ft **WIDTH** 40 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** ENGINEERING NEWS-REC

DESIGNER/PATENT S. JOHANNESSON **BUILDER** STROEBEL STEEL (SUPERST)

SETTING / CONTEXT The bridge crosses a major navigable river in the Hackensack Meadows, while the east approaches are surrounded by an urban industrial district. It shares common piers with an adjacent railroad bridge of the same type built at the same time; all were built in response to a requirement to provide a minimum 35' vertical clearance when closed. It was named for Otto Wittpenn, member of the State Highway Commission, 1929-31.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Individually Eligible. Potential Hackensack River Bridges Historic District and Penn. Railroad Harsimus Branch Historic District. Contributing.

CONSULT DOCUMENTS SHPO Letter 03/12/01

SUMMARY The bridge is a major movable lift bridge which is especially impressive in the context of three such bridges. The vertical lift span is a skewed Parker truss, and the east approach spans are two camelback thru trusses and a modified Pratt thru truss span. Sources credit Stroebel Steel with building all the superstructure; Harrington, Howard & Ash with consulting on the movable span; Johanneson as design engineer. W.J. Sloan was chief engineer of the NJ State Highway Department. It is individually eligible for listing in the National Register of Historic Places under Criteria A and C, and may be a contributing element to two potentially eligible historic districts -- Hackensack River Bridges and Pennsylvania Railroad Harsimus Branch (Jersey City to Kearny). These districts would focus on transportation and bridge historic resources.

INFOR MATION

PHOTO: 20:37-43 (04/20/91) REVISED BY (DATE): QUAD: Jersey City

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0910152 **CO** HUDSON **OWNER** UNKNOWN **MILEPOINT** 5.29

NAME & FEATURE INTERSECTED AMTRAK NORTHEAST CORRIDOR OVER NJ 7 **FACILITY** AMTRAK NORTHEAST CORRIDOR RAIL LINE

TOWNSHIP KEARNY TOWN

TYPE DECK PLATE GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 2 **LENGTH** 90 ft **WIDTH** No Data

CONSTRUCTION DT 1907 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT PA RR OFFICE OF ENGINEER **BUILDER** PENNSYLVANIA STEEL COMPANY

SETTING / CONTEXT The bridge carries Amtrak's high speed double track passenger railroad over NJ 7 in the midst of the Hackensack Meadows, with some undistinguished modern industrial structures among the reeds surrounding the bridge. The northernmost of the structure's two spans bridges the Jersey City water supply aqueduct.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY Although built as part of the Pennsylvania RR's 1905-1910 extension to New York City via a "high line" over the Hackensack Meadows, the bridge is a representative example of a common type. It consists of a deck plate girders with floor beams and is supported on concrete abutments and pier with ashlar cap stones, a common ca. 1905 detail. The span appears to be in its original state, but the metal railing does not appear to date to 1907. The bridge is not technologically significant.

INFOR MATION

Bibliography:
Temple, E.B. "The New York Tunnel Extension of the Pennsylvania RR Meadows Division and Harrison Transfer Yard." Transactions of the American Society of Civil Engineers. Vol. 68 (1909), pp.75-90.

Physical Description: The 2-span built-up deck girder with built-up floor beams bridge carries Amtrak's electrified double-track Northeast Corridor line toward the tunnels under the Hudson River. It is supported on concrete abutments with stone caps. The abutments were built wide enough for more sets of girders, but the were never added. The deck is ballasted and is enclosed by low pipe railings affixed to the top flanges of the girders. The span appears unaltered, and it has no distinguishing details.

Historical and Technological Significance: The technologically undistinguished built-up deck plate girder bridge was built in 1907 as part of the development of the Pennsylvania Railroad's New York Extension project. One of the largest and most costly construction projects ever undertaken by a private company, the project, part of the development of Pennsylvania Station, consisted of an elevated double-track line from Harrison across the Jersey Meadows to Bergen Hill (the Palisades) and then under the Hudson river to the massive new through station being built in Manhattan. The extension line then continued under Manhattan and the East River to a large new passenger station train-servicing yard on Long Island. The line is still in operation and is part of the busiest and most significant passenger rail corridor on the East Coast.

Despite its historical association with the development of the line and its continued use, the span and most sections of the right-of-way are not technologically significant. While there are some technologically distinguished features to the New York Extension, like the subaqueous tunnels and the subterranean right-of-way in Manhattan, this stretch of road and the bridge over NJ 7 are not. The bridge is a representative example of a common bridge type and design.

The basis for the 1935 date of construction assigned to the span by NJDOT is unknown. The span was designed by the Pennsylvania Railroad Office of Engineer of Bridges and Buildings. H. R. Leonard signed the plans which are dated 1907. The Pennsylvania Steel Company was the fabricator (bridge plaque).

PHOTO: 203:15A-21A (07/28/91) REVISED BY (DATE): QUAD: Weehawken

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0910153 **CO** HUDSON **OWNER** NJDOT **MILEPOINT** 2.45

NAME & FEATURE INTERSECTED NJ 7 OVER CONRAIL NEWARK BRANCH **FACILITY** NJ 7

TOWNSHIP KEARNY TOWN

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 21 **LENGTH** 1224 ft **WIDTH** 40 ft

CONSTRUCTION DT 1937 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The viaduct carries a busy 2-lane arterial highway over a single-track Conrail industrial branch line. Its undeveloped setting is dominated by the reed plants common in the marshy Hackensack Meadows.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The viaduct is composed of stringer main spans and slab approach spans supported on reinforced concrete pier bents. The fascia stringers are faced with concrete, and the span is enclosed by a concrete balustrade. The span is historically and technologically undistinguished.

INFOR MATION

PHOTO: 20:35-36 (04/20/91) REVISED BY (DATE): QUAD: Weehawken

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0910154 **CO** HUDSON **OWNER** NJDOT **MILEPOINT** 2.86

NAME & FEATURE INTERSECTED NJ 7 OVER NJ TRANSIT BOONTON LINE **FACILITY** NJ 7

TOWNSHIP KEARNY TOWN

TYPE THRU GIRDER; STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 23 **LENGTH** 1328 ft **WIDTH** 40 ft

CONSTRUCTION DT 1937 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The viaduct carries a two-lane arterial highway over a double track New Jersey Transit commuter line. It is located in the Hackensack Meadows near the New Jersey Turnpike in an undeveloped, reed-choked section of the New Jersey Meadowlands.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The viaduct consists of a thru girder main span and stringer approach spans supported on concrete pier bents. It is enclosed by a standard-design concrete balustrade. Modern concrete barriers have been placed at the inside of each girder. The structure is a representative example of both the stringer and thru girder bridge types, and it is not technologically innovative. It is also historically undistinguished.

INFOR MATION

PHOTO: 20: 30-34 (04/20/91) REVISED BY (DATE): QUAD: Weehawken

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0910155 **CO** BERGEN **OWNER** STATE AGENCY **MILEPOINT** 2.4

NAME & FEATURE INTERSECTED NEW JERSEY TRANSIT HARRISON BRANCH OVER NJ 7 **FACILITY** HARRISON BRANCH

TOWNSHIP NORTH ARLINGTON BOROUGH

TYPE THRU GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 75 ft **WIDTH** 37 ft

CONSTRUCTION DT 1925 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT ERIE-LACKAWANNA RAILROAD CO. **BUILDER** AMERICAN BRIDGE COMPANY

SETTING / CONTEXT The bridge carries an inactive railroad track over a 2-lane arterial road with a shoulder adjacent to a landfill in a light industrial area. A second track that crossed the span has been removed. In the 1920s the branch line was part of the Erie-Lackawanna Railroad system.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 1-span bridge is composed of three thru girders with floorbeams supported on a concrete substructure. An example of a common overpass type, the deep thru girder span is not associated with a significant period of railroad development. It is one of over 23 pre-WWII thru girder bridges in the county, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 209:39-40 (02/92) REVISED BY (DATE): QUAD: Orange

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0913151 **CO** HUDSON **OWNER** OTHER FEDERA **MILEPOINT** 6.32

NAME & FEATURE INTERSECTED EAST 40TH STREET OVER CONRAIL & NJ 169 **FACILITY** EAST 40TH STREET

TOWNSHIP BAYONNE CITY

TYPE STRINGER **DESIGN** PARTIALLY ENCASED **MATERIAL** Steel

 # SPANS 5 **LENGTH** 208 ft **WIDTH** 30 ft

CONSTRUCTION DT 1942 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries a two-lane city street over a major truck route and a Conrail freight branch. East of the bridge is the Bayonne Naval Depot, now the Military Ocean Terminal. West of the bridge is an urban area of mixed use including modern industrial structures to the northwest and modernized row houses to the southwest.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The stringer overpass with concrete abutments and pier bents was built during WW-II as part of the construction of the Bayonne Naval Depot, to which it provided access. It is representative of the most common pre-1947 bridge type in the state, and it is not technologically innovative. The span is enclosed by an uncommon style concrete fence-like railing. The naval terminal has been converted to civilian use and does not have historic district potential.

INFOR MATION

PHOTO: 28:24-27 (05/31/91) REVISED BY (DATE): QUAD: Jersey City

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0917150 **CO** HUDSON **OWNER** NJDOT **MILEPOINT** 0.9

NAME & FEATURE INTERSECTED NJ 495 OVER US 1&9 (TONNELE AVENUE) AND CONRAIL **FACILITY** NJ 495

TOWNSHIP NORTH BERGEN TOWNSHIP

TYPE DECK GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 9 **LENGTH** 1152 ft **WIDTH** 92.5 ft

CONSTRUCTION DT 1939 **ALTERATION DT** 1956 **SOURCE** NJDOT

DESIGNER/PATENT PORT OF NEW YORK AUTHORITY **BUILDER** AMERICAN BRIDGE COMPANY

SETTING / CONTEXT The bridge is at the edge of the Hackensack Meadows that is crisscrossed with interconnecting highways. It carries the approach from the west toward the Lincoln Tunnel, taking traffic from the Meadows level up to a cut through Bergen Hill. This viaduct is an integral part of the Lincoln Tunnel approach route built in the late 1930s, a historic and vital artery in the region's highway transportation network.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Individually Eligible. Rt 3 (I-495) Highway Approach to Lincoln Tunnel Historic District, Eligible. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95 11/17/99.

SUMMARY The bridge consists of nine deck plate girder spans, two of which include cantilevered sections. The longer spans have haunched girders. The bents are rigid frame steel arches. The structure was widened in 1956, but the original design is well preserved, and it is an eligible resource as an innovative design to the problem of carrying an important traffic artery from one general level (the Hackensack Meadows) to another (the surface of Bergen Hill, also known as the Palisades).

INFOR MATION

Bibliography:
Ammann, O.H. "Planning the Lincoln Tunnel Under the Hudson," Civil Engineering, 7, June, 1937, pp. 387-391.
Port Authority of New York. Annual Report. 1956.
Dunham, Clarence. "Viaduct Approach to Lincoln Tunnel," Engineering News-Record. Vol. 124 (20 Feb. 1940), pp. 311-314.

Physical Description: The viaduct consists of a 1,152,,-long straight section and a 2-lane ramp at the east end and a curved ramp off the north side near the center of the span. Clarence Dunham, one of the engineers who helped design and build the viaduct, called it "an unusual structure and a rather striking departure from the types of viaduct that have been used in the past" (Dunham, p. 41). According to him the reason for its unusual design was twofold: toe foundations could not be designed for heavy loads, and at the same time it was desired to "give the most pleasing aesthetic effect possible" (Ibid.).

Most of the viaduct was to rest on the clay of the Jersey Meadows, which was not suitable for heavy foundations unless they were supported on piles or caissons going down to rock. Instead the engineers chose to use the lightest practical type of construction, with relatively long spans. Where rock was less than 50' from the surface at the easterly end of the viaduct, the foundations went down to rock. Elsewhere they were supported on piles. It was expected that differential settlement would occur under the piles, and the western abutment. Intermediate piers and the superstructure itself were carefully designed so the bridge would not be endangered by possible movements of the foundations, and adjustments were allowed for the expected settlement of the embankment connecting to the viaduct at its western end.

The viaduct is a series of spans combining continuous rigid frame and simple beam spans, all composed of deck girders. These are not of constant depth but rather vary according to the bending moment; they have curved bottom flanges which are deepest at the joints with the piers. This was done both for technical reasons and for a graceful appearance, according to Dunham. In the two rigid frames the pier legs are securely fastened to the deck girders between the rigid frames are suspended spans. The other piers are arranged in one of two ways: either as two-hinged bents or with a fixed top connection (to the adjacent deck girders) but with a hinge at the bottom. The piers that are part of the rigid frames are also hinged at their bases (Dunham, p. 41-43).

In addition to the main viaduct, the structure includes two off-ramps, one forming three quarters of a circle as it descends toward southbound Route 1.

Aesthetic considerations in the design of the viaduct include emphasis of the flanges of the girders by use of a secondary angle on the outside web of the exterior girders, giving appearance of deep, wide chords instead of a plain girder. Also, the legs of the piers are tapered from B" at top to 2' at bottom. This together with their flanges and the vertical angles at their centers are intended to give them pleasing lines. Another contribution to pleasing lines is the replacement of cross-bracing with portal bracing, which has double webs and diaphragms for torsional resistance (Dunham, p. 42).

An extra lane has been added in each direction in 1956, the time the third tube was being added to the Lincoln Tunnel. The exit ramps from the north side prevented expanding in that direction, so all the space was added on the south side, where an additional leg was added south of each pier to support an additional girder along the south side, braced to the original external girder. In addition, new floor beams were added with great cantilevered overhang on the east side, giving additional space. The sidewalks were modified as well. Efforts were made during the reconstruction to maintain the original appearances of the structure. The deck was reconstructed in the mid- to late-1980s.

Historical and Technological Significance: The viaduct is an original element of an approximately 2.8-mile long major transportation artery built 1938-1939 to serve as the main approach to the recently completed Lincoln Tunnel (first tube). Technologically the viaduct is a significant engineering solution of a difficult problem of carrying an important traffic artery over the soft Jersey Meadows up to the level of Bergen Hill. It was done in a successful and visually pleasing manner. The road itself is also technologically and historically significant as a major engineering solution to building a highway that was both limited access and local through a congested area with significant geological considerations. The problem was solved in an innovative and aesthetic manner that retains its integrity of design and setting. It

was designated Route 3 when built, and it became the heaviest-used single commuter line into the city, by virtue of serving the vast majority of the bus lines into New York City from the west. The structure is individually distinguished as well as a contributing resource to the potential historic route (Criterion C). Twenty-one structures were identified as being contributing resources along the right-of-way that stretches from US 1 & 9 to the Lincoln Tunnel.

The Palisades (called Bergen Hill locally) forms a ridge parallel to and just west of the Hudson River for several miles. The rock ridge is a barrier that must be crossed in some fashion by every transportation artery approaching New York City from the west in Bergen and Hudson counties. The oldest crossing of Bergen Hill is that now occupied by the PATH system and built by a predecessor of the Pennsylvania RR 1830-1834. The approach to the Lincoln Tunnel was the last major crossing of the Palisades (unless one counts the upgrading of the George Washington Bridge approaches in the 1960s). The Port of New York Authority built both the tunnel and the Route 3 New Jersey approach to the tunnel in close cooperation with state, county, and local officials. O.H. Ammann was the Director of Engineering on the project, and J.C. Evans served as Chief Engineer.

To get past Bergen Hill an open cut was decided upon, partly because it would be cheaper than a tunnel (which would require expensive equipment to remove exhaust gases), and also because local officials wanted the approach highway to be usable also as an arterial route across the ridge for local traffic. This decision required structures to carry the approach highway from the low meadows west of Bergen Hill up to the level of the cut through the Hill, and then back down to the tunnel mouth east of Bergen Hill. Major bridges were required for both of these tasks (Ammann, 391). In addition numerous bridges had to be built to take pre-existing local streets over the cut, and for the crossing of Hudson Boulevard (now JFK Boulevard) a very special type of grade separation structure was designed. The cut itself was, however, quite conventional, and most of the bridges were also conventional, if highly refined in their details (cut stone coverings for parts of their abutments, haunched fascia deck girders with patterned stiffeners, Art Moderne railings, and the like). When viewed as a whole, the entire roadway is a remarkable engineering accomplishment with visual cohesiveness achieved by repetition of bridge type and uniform Moderne detailing along the length of the project.

Boundary Description and Justification: The structure is one element of road development that is historically and technologically noteworthy. Because of the commonality of design, type, setting, and history that the structures on the route share and the state of preservation of the resource, the right-of-way of NJ 495 from the intersection with US 1 & 9 and the Lincoln Tunnel is evaluated as a potential historic district. This structure is along that right-of-way, so it is a contributing resource. The significant boundary is limited to the actual right-of-way between the aforementioned points.

PHOTO: 24:4-12,19;25:8 (05/03/91) REVISED BY (DATE): QUAD: Weehawken

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0917151 **CO** HUDSON **OWNER** NJDOT **MILEPOINT**

NAME & FEATURE INTERSECTED PEDESTRIAN WALKWAY OVER NJ 495 **FACILITY** PEDESTRIAN WALKWAY

TOWNSHIP NORTH BERGEN TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 4 **LENGTH** 160 ft **WIDTH** 11 ft

CONSTRUCTION DT 1942 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a pedestrian walkway over NJ 495 and its surface approach ramps. NJ-495 is the divided six-lane highway approach to the Lincoln Tunnel. To the north and south of the bridge are modern, one-story structures.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 4-span stringer pedestrian overpass on concrete abutments and pier bents was constructed after NJ 495 was completed. Although the abutments have elements of the same Art Deco ornament used extensively on other bridges built as part of the late-1930s Lincoln Tunnel approach road, the superstructure itself and metal railing are plain, and they do not resemble the other steel bridges on the corridor. It is thus evaluated as a noncontributing resource to the Lincoln Tunnel approach road.

INFOR MATION

PHOTO: 24:16-18 (05/03/91) REVISED BY (DATE): QUAD: Weehawken

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0917152 **CO** HUDSON **OWNER** NJDOT **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED KENNEDY BLVD SECOND LEVEL SOUTHBOUND OVER NJ 495 **FACILITY** KENNEDY BOULEVARD SECOND LEVEL SOUTHBOUND

TOWNSHIP NORTH BERGEN TOWNSHIP

TYPE RIGID FRAME **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 2 **LENGTH** 79 ft **WIDTH** 30 ft

CONSTRUCTION DT 1938 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT PORT OF NEW YORK AUTHORITY **BUILDER**

SETTING / CONTEXT The bridge carries part of the intermediate level of an unusual 3-level interchange between a local street and a depressed section of the Lincoln Tunnel approach road. The intermediate level serves as a kind of circle for vehicles changing from one road to another. The bridge carries a ramp over NJ 495, as does the identical span (0915155) to which it is connected via short roadways built on bedrock.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Not Individually Eligible. Rt 3 (I-495) Highway Approach to Lincoln Tunnel Historic District, Eligible. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95, Comments 11/17/99.

SUMMARY The 2-span rigid frame bridge with scored exposed concrete and stone-faced concrete wingwalls is detailed like other bridges on the corridor designed and built for the Port of New York Authority in 1938 as the approach to the Lincoln Tunnel. The bridge is significant as part of an innovative 3-level grade separation structure, with turning lanes forming a traffic circle located vertically between intersecting roadways, that accommodates both through and local traffic. It is well preserved.

INFORMATION

Bibliography:
Ammann, O.H. "Planning the Lincoln Tunnel Under the Hudson," Civil Engineering, 7, June, 1937, pp. 387-391.
Port Authority of New York. Annual Report. 1956.

Physical Description: The bridge is a 2-span reinforced concrete rigid frame. It is one of eight similarly detailed rigid frame spans on the limited access highway, and it is finished with a random ashlar stone veneer on the abutments, granite facing on the fascia and the ends of the pier, scored exposed concrete and pipe railings in an Art Moderne style on the parapets. The pedestrian fence is a recent addition. The bridge is well preserved.

Historical and Technological Significance: The rigid frame bridge is an original element of an approximately 2.8-mile long major transportation artery built 1938-1939 to serve as the main approach to the recently completed Lincoln Tunnel (first tube). The road is technologically and historically significant as a major engineering solution to building a highway that was both limited access and local through a congested area with significant geological considerations. The problem was solved in an innovative and aesthetic manner that retains its integrity of design and setting. It was designated Route 3 when built, and it became the heaviest-used single commuter line into the city, by virtue of serving the vast majority of the bus lines into New York City from the west. The structure is not individually distinguished, but it is a contributing resource to the potential historic route and thus has been evaluated as significant (Criterion C). Twenty-one structures were identified as being contributing resources along the right-of-way that stretches from US 1 & 9 to the Lincoln Tunnel.

The Palisades (called Bergen Hill locally) forms a ridge parallel to and just west of the Hudson River for several miles. The rock ridge is a barrier that must be crossed in some fashion by every transportation artery approaching New York City from the west in Bergen and Hudson counties. The oldest crossing of Bergen Hill is that now occupied by the PATH system and built by a predecessor of the Pennsylvania RR 1830-1834. The approach to the Lincoln Tunnel was the last major crossing of the Palisades (unless one counts the upgrading of the George Washington Bridge approaches in the 1960s). The Port of New York Authority built both the tunnel and the Route 3 New Jersey approach to the tunnel in close cooperation with state, county, and local officials. O.H. Ammann was the Director of Engineering on the project, and J.C. Evans served as Chief Engineer.

To get past Bergen Hill an open cut was decided upon, partly because it would be cheaper than a tunnel (which would require expensive equipment to remove exhaust gases), and also because local officials wanted the approach highway to be usable also as an arterial route across the ridge for local traffic. This decision required structures to carry the approach highway from the low meadows west of Bergen Hill up to the level of the cut through the Hill, and then back down to the tunnel mouth east of Bergen Hill. Major bridges were required for both of these tasks (Ammann, 391). In addition numerous bridges had to be built to take pre-existing local streets over the cut, and for the crossing of Hudson Boulevard (now JFK Boulevard) a very special type of grade separation structure was designed. The cut itself was, however, quite conventional, and most of the bridges were also conventional, if highly refined in their details (cut stone coverings for parts of their abutments, haunched fascia deck girders with patterned stiffeners, Art Moderne railings, and the like). When viewed as a whole, the entire roadway is a remarkable engineering accomplishment with visual cohesiveness achieved by repetition of bridge type and uniform Moderne detailing along the length of the project.

Boundary Description and Justification: The structure is one element of road development that is historically and technologically noteworthy. Because of the commonality of design, type, setting, and history that the structures on the route share and the state of preservation of the resource, the right-of-way of NJ 495 from the intersection with US 1 & 9 and the Lincoln Tunnel is evaluated as a potential historic district. This structure is along that right-of-way, so it is a contributing resource. The significant boundary is limited to the actual right-of-way between the aforementioned points.

PHOTO: 24:20-22 (05/03/91) REVISED BY (DATE): QUAD: Weehawken

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0917155 **CO** HUDSON **OWNER** NJDOT **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED KENNEDY BLVD SECOND LEVEL NORTHBOUND OVER NJ 495 **FACILITY** KENNEDY BOULEVARD SECOND LEVEL NORTHBOUND

TOWNSHIP UNION CITY

TYPE RIGID FRAME **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 2 **LENGTH** 79 ft **WIDTH** 30 ft

CONSTRUCTION DT 1938 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT PORT OF NEW YORK AUTHORITY **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a ramp from a depressed section of the Lincoln Tunnel approach road to the middle level of a 3 level intersection between NJ 495 and JFK Boulevard, a city street. It is really part of a mid-level circle that links the two roads, and it is paired with an identical span (0917152) that carries south bound traffic across the depressed roadway. They are connected by short roadways built on bedrock.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Not Individually Eligible. Rt 3 (I-495) Highway Approach to Lincoln Tunnel Historic District, Eligible. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95, Comments 11/17/99.

SUMMARY The 2-span rigid frame bridge with a sleek metal railing is finished with scoring in the exposed concrete and dressed stone facing on the concrete wingwalls that is common to all spans on the roadway, designed and built by the Port Authority to access the 1937 Lincoln Tunnel. The bridge is part of an unusual grade separation design where turning lanes form part of a traffic circle located vertically between the intersecting arteries. It is technologically and historically significant.

INFOR MATION

Bibliography:
Ammann, O.H. "Planning the Lincoln Tunnel Under the Hudson," Civil Engineering, 7, June, 1937, pp. 387-391.
Port Authority of New York. Annual Report. 1956.

Physical Description: The bridge is a 2-span reinforced concrete rigid frame. It is part of a three-level bridge. The bridge carries the southbound part of the intermediate level of an unusual type of grade separated traffic interchange between JFK Boulevard and NJ 495, the Lincoln Tunnel approach highway, in which the intermediate level serves as kind of circle for all vehicles making turns from one route to the other. It carries this traffic over NJ 495.

Examples of aesthetic considerations in building this bridge include cut stone facings on the abutments, granite facing on the fascia and the ends of the pier, and pipe railings in an Art Moderne style on the parapets. It is detailed in the same mode as the eight other rigid frame spans on the limited-access highway.

Historical and Technological Significance: The rigid frame bridge is an original element of an approximately 2.8-mile long major transportation artery built 1938-1939 to serve as the main approach to the recently completed Lincoln Tunnel (first tube). The road is technologically and historically significant as a major engineering solution to building a highway that was both limited access and local through a congested area with significant geological considerations. The problem was solved in an innovative and aesthetic manner that retains its integrity of design and setting. It was designated Route 3 when built, and it became the heaviest-used single commuter line into the city, by virtue of serving the vast majority of the bus lines into New York City from the west. The structure is not individually distinguished, but it is a contributing resource to the potential historic route and thus has been evaluated as significant (Criterion C). Twenty-one structures were identified as being contributing resources along the right-of-way that stretches from US 1 & 9 to the Lincoln Tunnel.

The Palisades (called Bergen Hill locally) forms a ridge parallel to and just west of the Hudson River for several miles. The rock ridge is a barrier that must be crossed in some fashion by every transportation artery approaching New York City from the west in Bergen and Hudson counties. The oldest crossing of Bergen Hill is that now occupied by the PATH system and built by a predecessor of the Pennsylvania RR 1830-1834. The approach to the Lincoln Tunnel was the last major crossing of the Palisades (unless one counts the upgrading of the George Washington Bridge approaches in the 1960s). The Port of New York Authority built both the tunnel and the Route 3 New Jersey approach to the tunnel in close cooperation with state, county, and local officials. O.H. Ammann was the Director of Engineering on the project, and J.C. Evans served as Chief Engineer.

To get past Bergen Hill an open cut was decided upon, partly because it would be cheaper than a tunnel (which would require expensive equipment to remove exhaust gases), and also because local officials wanted the approach highway to be usable also as an arterial route across the ridge for local traffic. This decision required structures to carry the approach highway from the low meadows west of Bergen Hill up to the level of the cut through the Hill, and then back down to the tunnel mouth east of Bergen Hill. Major bridges were required for both of these tasks (Ammann, 391). In addition numerous bridges had to be built to take pre-existing local streets over the cut, and for the crossing of Hudson Boulevard (now JFK Boulevard) a very special type of grade separation structure was designed. The cut itself was, however, quite conventional, and most of the bridges were also conventional, if highly refined in their details (cut stone coverings for parts of their abutments, haunched fascia deck girders with patterned stiffeners, Art Moderne railings, and the like). When viewed as a whole, the entire roadway is a remarkable engineering accomplishment with visual cohesiveness achieved by repetition of bridge type and uniform Moderne detailing along the length of the project.

Boundary Description and Justification: The structure is one element of road development that is historically and technologically noteworthy. Because of the commonality of design, type, setting, and history that the structures on the route share and the state of preservation of the resource, the right-of-way of NJ 495 from the intersection with US 1 & 9 and the Lincoln Tunnel is evaluated as a potential historic district. This structure is along that right-of-way, so it is a contributing resource. The significant boundary is limited to the actual right-of-way between the aforementioned points.

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US
November 12, 2002

PHOTO: 24:24-25;2s (05/03/91) REVISED BY (DATE): QUAD: Weehawken

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0917156 **CO** HUDSON **OWNER** NJDOT **MILEPOINT** 0.0
NAME & FEATURE INTERSECTED SUMMIT AVENUE OVER NJ 495 **FACILITY** SUMMIT AVENUE
TOWNSHIP UNION CITY
TYPE RIGID FRAME **DESIGN** **MATERIAL** Reinforced Concrete
 # SPANS 2 **LENGTH** 131 ft **WIDTH** 40 ft
CONSTRUCTION DT 1938 **ALTERATION DT** **SOURCE** NJDOT
DESIGNER/PATENT PORT OF NEW YORK AUTHORITY **BUILDER**

SETTING / CONTEXT The bridge carries a 2-lane city street, shoulders, and sidewalks over NJ 495, the six lane highway approach to the Lincoln Tunnel. It is located in an urban mixed residential and commercial area, with modernized row houses of various ages and one-story commercial structures. This section of the 2.8-mile long highway is an open cut through the west side of the Palisades through a congested area with a grid street pattern.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes
CONSULT STATUS Not Individually Eligible. Rt 3 (I-495) Highway Approach to Lincoln Tunnel Historic District, Eligible. Contributing.
CONSULT DOCUMENTS SHPO Letter 6/30/95, Comments 11/17/99.

SUMMARY The 2-span rigid frame bridge supporting a concrete slab roadway and parapets and pipe railings exhibits Art Moderne detailing common to the other spans on the historically and technologically significant approach to the 1937 Lincoln Tunnel. Exposed concrete is scored, and the wingwalls are faced with random-coursed stone. One of 8 rigid frame spans on the route, the bridge is not individually distinguished, but it is a contributing element to the historic route.

INFOR MATION

Bibliography:
Ammann, O.H. "Planning the Lincoln Tunnel Under the Hudson," Civil Engineering, 7, June, 1937, pp. 387-391.
Port Authority of New York. Annual Report. 1956.

Physical Description: The bridge is a 2-span reinforced concrete rigid frame. It is one of eight similarly detailed rigid frame spans on the limited access highway, and it is finished with a random ashlar stone veneer on the abutments, granite facing on the fascia and the ends of the pier, scored exposed concrete and pipe railings in an Art Moderne style on the parapets. The pedestrian fence is a recent addition. The bridge is well preserved.

Historical and Technological Significance: The rigid frame bridge, one of eight on the route, is an original element of an approximately 2.8-mile long major transportation artery built 1938-1939 to serve as the main approach to the recently completed Lincoln Tunnel (first tube). The road is technologically and historically significant as a major engineering solution to building a highway that was both limited access and local through a congested area with significant geological considerations. The problem was solved in an innovative and aesthetic manner that retains its integrity of design and setting. It was designated Route 3 when built, and it became the heaviest-used single commuter line into the city, by virtue of serving the vast majority of the bus lines into New York City from the west. The structure is not individually distinguished, but it is a contributing resource to the potential historic route and thus has been evaluated as significant (Criterion C). Twenty-one structures were identified as being contributing resources along the right-of-way that stretches from US 1 & 9 to the Lincoln Tunnel.

The Palisades (called Bergen Hill locally) forms a ridge parallel to and just west of the Hudson River for several miles. The rock ridge is a barrier that must be crossed in some fashion by every transportation artery approaching New York City from the west in Bergen and Hudson counties. The oldest crossing of Bergen Hill is that now occupied by the PATH system and built by a predecessor of the Pennsylvania RR 1830-1834. The approach to the Lincoln Tunnel was the last major crossing of the Palisades (unless one counts the upgrading of the George Washington Bridge approaches in the 1960s). The Port of New York Authority built both the tunnel and the Route 3 New Jersey approach to the tunnel in close cooperation with state, county, and local officials. O.H. Ammann was the Director of Engineering on the project, and J.C. Evans served as Chief Engineer.

To get past Bergen Hill an open cut was decided upon, partly because it would be cheaper than a tunnel (which would require expensive equipment to remove exhaust gases), and also because local officials wanted the approach highway to be usable also as an arterial route across the ridge for local traffic. This decision required structures to carry the approach highway from the low meadows west of Bergen Hill up to the level of the cut through the Hill, and then back down to the tunnel mouth east of Bergen Hill. Major bridges were required for both of these tasks (Ammann, 391). In addition numerous bridges had to be built to take pre-existing local streets over the cut, and for the crossing of Hudson Boulevard (now JFK Boulevard) a very special type of grade separation structure was designed. The cut itself was, however, quite conventional, and most of the bridges were also conventional, if highly refined in their details (cut stone coverings for parts of their abutments, haunched fascia deck girders with patterned stiffeners, Art Moderne railings, and the like). When viewed as a whole, the entire roadway is a remarkable engineering accomplishment with visual cohesiveness achieved by repetition of bridge type and uniform Moderne detailing along the length of the project.

Boundary Description and Justification: The structure is one element of road development that is historically and technologically noteworthy. Because of the commonality of design, type, setting, and history that the structures on the route share and the state of preservation of the resource, the right-of-way of NJ 495 from the intersection with US 1 & 9 and the Lincoln Tunnel is evaluated as a potential historic district. This structure is along that right-of-way, so it is a contributing resource. The significant boundary is limited to the actual right-of-way between the aforementioned points.

PHOTO: 24:26-7,29 (05/03/91) REVISED BY (DATE): QUAD: Weehawken

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0917157 **CO** HUDSON **OWNER** NJDOT **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CENTRAL AVENUE OVER NJ 495 **FACILITY** CENTRAL AVENUE

TOWNSHIP UNION CITY

TYPE RIGID FRAME **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 2 **LENGTH** 79 ft **WIDTH** 30 ft

CONSTRUCTION DT 1938 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT PORT OF NEW YORK AUTHORITY **BUILDER**

SETTING / CONTEXT The bridge carries a wide, 2-lane city street over NJ 495, the six-lane highway approach to the Lincoln Tunnel. The limited access approach road was built through a congested 20th-century residential area in 1938, and it is a combination of open cuts and elevated sections. The route, old NJ 3, is a well-preserved and technologically significant engineering solution to mid-20th century highway development. It has district potential.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Not Individually Eligible. Rt 3 (I-495) Highway Approach to Lincoln Tunnel Historic District, Eligible. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95, Comments 11/17/99.

SUMMARY The 2-span rigid frame bridge with a plain metal railing and stone-faced concrete wing walls is part of the late-1930s cut that carries the approach road to the Lincoln Tunnel through established areas. The span has the same Moderne detailing found on other bridges along the corridor. Exposed concrete is scored, and the stone veneer is crisp and devoid of embellishment which is in the sleek Modern taste. It is one of eight rigid frame overpasses on the technologically significant corridor.

INFORMATION

Bibliography:

Ammann, O.H. "Planning the Lincoln Tunnel Under the Hudson," Civil Engineering, 7, June, 1937, pp. 387-391.
Port Authority of New York. Annual Report. 1956.

Physical Description: The bridge is a 2-span reinforced concrete rigid frame. It is one of nine similarly detailed rigid frame spans on the limited access highway, and it is finished with a random ashlar stone veneer on the abutments, granite facing on the fascia and the ends of the pier, scored exposed concrete and pipe railings in an Art Moderne style on the parapets. The pedestrian fence is a recent addition. The bridge is well preserved.

Historical and Technological Significance: The rigid frame bridge, one of seven on the route, is an original element of an approximately 2.8-mile long major transportation artery built 1938-1939 to serve as the main approach to the recently completed Lincoln Tunnel (first tube). The road is technologically and historically significant as a major engineering solution to building a highway that was both limited access and local through a congested area with significant geological considerations. The problem was solved in an innovative and aesthetic manner that retains its integrity of design and setting. It was designated Route 3 when built, and it became the heaviest-used single commuter line into the city, by virtue of serving the vast majority of the bus lines into New York City from the west. The structure is not individually distinguished, but it is a contributing resource to the potential historic route and thus has been evaluated as significant (Criterion C). Twenty-one structures were identified as being contributing resources along the right-of-way that stretches from US 1 & 9 to the Lincoln Tunnel.

The Palisades (called Bergen Hill locally) forms a ridge parallel to and just west of the Hudson River for several miles. The rock ridge is a barrier that must be crossed in some fashion by every transportation artery approaching New York City from the west in Bergen and Hudson counties. The oldest crossing of Bergen Hill is that now occupied by the PATH system and built by a predecessor of the Pennsylvania RR 1830-1834. The approach to the Lincoln Tunnel was the last major crossing of the Palisades (unless one counts the upgrading of the George Washington Bridge approaches in the 1960s). The Port of New York Authority built both the tunnel and the Route 3 New Jersey approach to the tunnel in close cooperation with state, county, and local officials. O.H. Ammann was the Director of Engineering on the project, and J.C. Evans served as Chief Engineer.

To get past Bergen Hill an open cut was decided upon, partly because it would be cheaper than a tunnel (which would require expensive equipment to remove exhaust gases), and also because local officials wanted the approach highway to be usable also as an arterial route across the ridge for local traffic. This decision required structures to carry the approach highway from the low meadows west of Bergen Hill up to the level of the cut through the Hill, and then back down to the tunnel mouth east of Bergen Hill. Major bridges were required for both of these tasks (Ammann, 391). In addition numerous bridges had to be built to take pre-existing local streets over the cut, and for the crossing of Hudson Boulevard (now JFK Boulevard) a very special type of grade separation structure was designed. The cut itself was, however, quite conventional, and most of the bridges were also conventional, if highly refined in their details (cut stone coverings for parts of their abutments, haunched fascia deck girders with patterned stiffeners, Art Moderne railings, and the like). When viewed as a whole, the entire roadway is a remarkable engineering accomplishment with visual cohesiveness achieved by repetition of bridge type and uniform Moderne detailing along the length of the project.

Boundary Description and Justification: The structure is one element of road development that is historically and technologically noteworthy. Because of the commonality of design, type, setting, and history that the structures on the route share and the state of preservation of the resource, the right-of-way of NJ 495 from the intersection with US 1 & 9 and the Lincoln Tunnel is evaluated as a potential historic district. This structure is along that right-of-way, so it is a contributing resource. The significant boundary is limited to the actual right-of-way between the aforementioned points.

PHOTO: 25:2-3,28;1s (05/03/91) REVISED BY (DATE): QUAD: Weehawken

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0917158 **CO** HUDSON **OWNER** NJDOT **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BERGENLINE AVE OVER NJ 495 **FACILITY** BERGENLINE AVENUE

TOWNSHIP UNION CITY

TYPE RIGID FRAME **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 2 **LENGTH** 79 ft **WIDTH** 41.5 ft

CONSTRUCTION DT 1938 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT PORT OF NEW YORK AUTHORITY **BUILDER**

SETTING / CONTEXT The bridge carries a 2-lane city street, shoulders, and sidewalks over NJ 495, the six-lane limited-access approach to the Lincoln Tunnel. It is located in a densely developed urban mixed residential and commercial area, with old but modernized row houses and modern commercial structures. The approach road is a combination of open cut and elevated sections that was integrated into an existing street pattern.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Not Individually Eligible. Rt 3 (I-495) Highway Approach to Lincoln Tunnel Historic District, Eligible. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95, Comments 11/17/99.

SUMMARY The 2-span rigid frame bridge with a plain metal railing and modern pedestrian barrier has stone-faced concrete wingwalls and scored Moderne detailing to the exposed concrete. It is one of 8 rigid frame spans built as part of the historically and technologically significant route that utilizes a variety of steel and concrete bridge types to carry local roads over the limited-access approach. While not individually distinguished, the span is eligible because of its historical associations.

INFOR MATION

Bibliography:
Ammann, O.H. "Planning the Lincoln Tunnel Under the Hudson," Civil Engineering, 7, June, 1937, pp. 387-391.
Port Authority of New York. Annual Report. 1956.

Physical Description: The bridge is a 2-span reinforced concrete rigid frame. It is one of eight similarly detailed rigid frame spans on the limited access highway, and it is finished with a random ashlar stone veneer on the abutments, granite facing on the fascia and the ends of the pier, scored exposed concrete and pipe railings in an Art Moderne style on the parapets. The pedestrian fence is a recent addition. The bridge is well preserved.

Historical and Technological Significance: The 1938 rigid frame bridge is an original element of an approximately 2.8-mile long major transportation artery built 1938-1939 to serve as the main approach to the recently completed Lincoln Tunnel (first tube). The road is technologically and historically significant as a major engineering solution to building a highway that was both limited access and local through a congested area with significant geological considerations. The problem was solved in an innovative and aesthetic manner that retains its integrity of design and setting. It was designated Route 3 when built, and it became the heaviest-used single commuter line into the city, by virtue of serving the vast majority of the bus lines into New York City from the west. The structure is not individually distinguished, but it is a contributing resource to the potential historic route and thus has been evaluated as significant (Criterion C). Twenty-one structures were identified as being contributing resources along the right-of-way that stretches from US 1 & 9 to the Lincoln Tunnel.

The Palisades (called Bergen Hill locally) forms a ridge parallel to and just west of the Hudson River for several miles. The rock ridge is a barrier that must be crossed in some fashion by every transportation artery approaching New York City from the west in Bergen and Hudson counties. The oldest crossing of Bergen Hill is that now occupied by the PATH system and built by a predecessor of the Pennsylvania RR 1830-1834. The approach to the Lincoln Tunnel was the last major crossing of the Palisades (unless one counts the upgrading of the George Washington Bridge approaches in the 1960s). The Port of New York Authority built both the tunnel and the Route 3 New Jersey approach to the tunnel in close cooperation with state, county, and local officials. O.H. Ammann was the Director of Engineering on the project, and J.C. Evans served as Chief Engineer.

To get past Bergen Hill an open cut was decided upon, partly because it would be cheaper than a tunnel (which would require expensive equipment to remove exhaust gases), and also because local officials wanted the approach highway to be usable also as an arterial route across the ridge for local traffic. This decision required structures to carry the approach highway from the low meadows west of Bergen Hill up to the level of the cut through the Hill, and then back down to the tunnel mouth east of Bergen Hill. Major bridges were required for both of these tasks (Ammann, 391). In addition numerous bridges had to be built to take pre-existing local streets over the cut, and for the crossing of Hudson Boulevard (now JFK Boulevard) a very special type of grade separation structure was designed. The cut itself was, however, quite conventional, and most of the bridges were also conventional, if highly refined in their details (cut stone coverings for parts of their abutments, haunched fascia deck girders with patterned stiffeners, Art Moderne railings, and the like). When viewed as a whole, the entire roadway is a remarkable engineering accomplishment with visual cohesiveness achieved by repetition of bridge type and uniform Moderne detailing along the length of the project.

Boundary Description and Justification: The structure is one element of road development that is historically and technologically noteworthy. Because of the commonality of design, type, setting, and history that the structures on the route share and the state of preservation of the resource, the right-of-way of NJ 495 from the intersection with US 1 & 9 and the Lincoln Tunnel is evaluated as a potential historic district. This structure is along that right-of-way, so it is a contributing resource. The significant boundary is limited to the actual right-of-way between the aforementioned points.

PHOTO: 24:30-31;25:4;1 (05/03/91) REVISED BY (DATE): QUAD: Weehawken

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0917159 **CO** HUDSON **OWNER** NJDOT **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED NEW YORK AVE OVER NJ 495 **FACILITY** NEW YORK AVENUE

TOWNSHIP UNION CITY

TYPE RIGID FRAME **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 2 **LENGTH** 79 ft **WIDTH** 45.2 ft

CONSTRUCTION DT 1938 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT PORT OF NEW YORK AUTHORITY **BUILDER**

SETTING / CONTEXT The bridge carries a wide, 2-lane city street and sidewalks over NJ 495, the six lane highway approach to the Lincoln Tunnel. It is located in an urban mixed residential and commercial area, with buildings from 1900 to the 1980s. The roadway itself was built using open cuts and elevated sections to get through a congested area built atop the Palisades. It had to be integrated into an existing grid pattern of city streets.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Not Individually Eligible. Rt 3 (I-495) Highway Approach to Lincoln Tunnel Historic District, Eligible. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95, Comments 11/17/99.

SUMMARY The 2-span rigid frame bridge with a plain metal railing is detailed in the Moderne style with scoring to the exposed concrete and random-coursed stone veneer at the concrete wing walls. Such styling is common to all structures on the old Rt 3 approach to the Lincoln Tunnel designed and built for the Port of New York Authority. The bridge is one of 8 rigid frame bridges that carry local streets over the open-cut portion of the highway. It is well preserved and is a contributing resource.

INFOR MATION

Bibliography:
Ammann, O.H. "Planning the Lincoln Tunnel Under the Hudson," Civil Engineering, 7, June, 1937, pp. 387-391.
Port Authority of New York. Annual Report. 1956.

Physical Description: The bridge is a 2-span reinforced concrete rigid frame. It is one of eight similarly detailed rigid frame spans on the limited access highway, and it is finished with a random ashlar stone veneer on the abutments, granite facing on the fascia and the ends of the pier, scored exposed concrete and pipe railings in an Art Moderne style on the parapets. The pedestrian fence is a recent addition. The bridge is well preserved.

Historical and Technological Significance: The rigid frame bridge is an original element of an approximately 2.8-mile long major transportation artery built 1938-1939 to serve as the main approach to the recently completed Lincoln Tunnel (first tube). The road is technologically and historically significant as a major engineering solution to building a highway that was both limited access and local through a congested area with significant geological considerations. The problem was solved in an innovative and aesthetic manner that retains its integrity of design and setting. It was designated Route 3 when built, and it became the heaviest-used single commuter line into the city, by virtue of serving the vast majority of the bus lines into New York City from the west. The structure is not individually distinguished, but it is a contributing resource to the potential historic route and thus has been evaluated as significant (Criterion C). Twenty-one structures were identified as being contributing resources along the right-of-way that stretches from US 1 & 9 to the Lincoln Tunnel.

The Palisades (called Bergen Hill locally) forms a ridge parallel to and just west of the Hudson River for several miles. The rock ridge is a barrier that must be crossed in some fashion by every transportation artery approaching New York City from the west in Bergen and Hudson counties. The oldest crossing of Bergen Hill is that now occupied by the PATH system and built by a predecessor of the Pennsylvania RR 1830-1834. The approach to the Lincoln Tunnel was the last major crossing of the Palisades (unless one counts the upgrading of the George Washington Bridge approaches in the 1960s). The Port of New York Authority built both the tunnel and the Route 3 New Jersey approach to the tunnel in close cooperation with state, county, and local officials. O.H. Ammann was the Director of Engineering on the project, and J.C. Evans served as Chief Engineer.

To get past Bergen Hill an open cut was decided upon, partly because it would be cheaper than a tunnel (which would require expensive equipment to remove exhaust gases), and also because local officials wanted the approach highway to be usable also as an arterial route across the ridge for local traffic. This decision required structures to carry the approach highway from the low meadows west of Bergen Hill up to the level of the cut through the Hill, and then back down to the tunnel mouth east of Bergen Hill. Major bridges were required for both of these tasks (Ammann, 391). In addition numerous bridges had to be built to take pre-existing local streets over the cut, and for the crossing of Hudson Boulevard (now JFK Boulevard) a very special type of grade separation structure was designed. The cut itself was, however, quite conventional, and most of the bridges were also conventional, if highly refined in their details (cut stone coverings for parts of their abutments, haunched fascia deck girders with patterned stiffeners, Art Moderne railings, and the like). When viewed as a whole, the entire roadway is a remarkable engineering accomplishment with visual cohesiveness achieved by repetition of bridge type and uniform Moderne detailing along the length of the project.

Boundary Description and Justification: The structure is one element of road development that is historically and technologically noteworthy. Because of the commonality of design, type, setting, and history that the structures on the route share and the state of preservation of the resource, the right-of-way of NJ 495 from the intersection with US 1 & 9 and the Lincoln Tunnel is evaluated as a potential historic district. This structure is along that right-of-way, so it is a contributing resource. The significant boundary is limited to the actual right-of-way between the aforementioned points.

PHOTO: 24:32;25:5 (05/03/91) REVISED BY (DATE): QUAD: Weehawken

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0917160 **CO** HUDSON **OWNER** NJDOT **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PALISADE AVE AND HACKENSACK PLANK ROAD OVER NJ 495 **FACILITY** PALISADE AVENUE AND HACKENSACK PLANK ROAD

TOWNSHIP UNION CITY

TYPE RIGID FRAME **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 2 **LENGTH** 79 ft **WIDTH** 40 ft

CONSTRUCTION DT 1938 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT PORT OF NEW YORK AUTHORITY **BUILDER**

SETTING / CONTEXT The bridge structure carries a perpendicular 2-lane city street and a diagonally oriented city street plus two paved plazas over NJ 495, the six-lane highway approach to the Lincoln Tunnel. The limited access road the bridge crosses is located in a densely developed 20th-century residential area on the Palisades or Bergen Hill in Weehawken.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Not Individually Eligible. Rt 3 (I-495) Highway Approach to Lincoln Tunnel Historic District, Eligible. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95, Comments 11/17/99.

SUMMARY The oddly shaped 2-span rigid frame bridge of reinforced concrete has slab supported on concrete column extensions on each side to accommodate a diagonally crossing street. The extensions are finished with the same arched soffit and scored concrete as the rigid frame portion of the bridge. The wingwalls are faced with the same random-ashlar stone veneer as the rest of the 2.8-long limited access route. While not individually distinguished, the span is part of a historically significant route.

INFORMATION

Bibliography:
Ammann, O.H. "Planning the Lincoln Tunnel Under the Hudson," Civil Engineering, 7, June, 1937, pp. 387-391.
Port Authority of New York. Annual Report. 1956.

Physical Description: The bridge is a 2-span reinforced concrete rigid frame with slab extensions supported on concrete columns at each side to accommodate a diagonally crossing street. The areas of the extensions not used as roadway are concrete-paved plazas. It is one of eight similarly detailed rigid frame spans on the limited access highway, and it is finished with a random ashlar stone veneer on the abutments, granite facing on the fascia and the ends of the pier, scored exposed concrete and pipe railings in an Art Moderne style on the parapets. The pedestrian fence is a recent addition. The bridge is well preserved.

Historical and Technological Significance: The rigid frame bridge is an original element of an approximately 2.8-mile long major transportation artery built 1938-1939 to serve as the main approach to the recently completed Lincoln Tunnel (first tube). The road is technologically and historically significant as a major engineering solution to building a highway that was both limited access and local through a congested area with significant geological considerations. The problem was solved in an innovative and aesthetic manner that retains its integrity of design and setting. It was designated Route 3 when built, and it became the heaviest-used single commuter line into the city, by virtue of serving the vast majority of the bus lines into New York City from the west. The structure is not individually distinguished, but it is a contributing resource to the potential historic route and thus has been evaluated as significant (Criterion C). Twenty-one structures were identified as being contributing resources along the right-of-way that stretches from US 1 & 9 to the Lincoln Tunnel.

The Palisades (called Bergen Hill locally) forms a ridge parallel to and just west of the Hudson River for several miles. The rock ridge is a barrier that must be crossed in some fashion by every transportation artery approaching New York City from the west in Bergen and Hudson counties. The oldest crossing of Bergen Hill is that now occupied by the PATH system and built by a predecessor of the Pennsylvania RR 1830-1834. The approach to the Lincoln Tunnel was the last major crossing of the Palisades (unless one counts the upgrading of the George Washington Bridge approaches in the 1960s). The Port of New York Authority built both the tunnel and the Route 3 New Jersey approach to the tunnel in close cooperation with state, county, and local officials. O.H. Ammann was the Director of Engineering on the project, and J.C. Evans served as Chief Engineer.

To get past Bergen Hill an open cut was decided upon, partly because it would be cheaper than a tunnel (which would require expensive equipment to remove exhaust gases), and also because local officials wanted the approach highway to be usable also as an arterial route across the ridge for local traffic. This decision required structures to carry the approach highway from the low meadows west of Bergen Hill up to the level of the cut through the Hill, and then back down to the tunnel mouth east of Bergen Hill. Major bridges were required for both of these tasks (Ammann, 391). In addition numerous bridges had to be built to take pre-existing local streets over the cut, and for the crossing of Hudson Boulevard (now JFK Boulevard) a very special type of grade separation structure was designed. The cut itself was, however, quite conventional, and most of the bridges were also conventional, if highly refined in their details (cut stone coverings for parts of their abutments, haunched fascia deck girders with patterned stiffeners, Art Moderne railings, and the like). When viewed as a whole, the entire roadway is a remarkable engineering accomplishment with visual cohesiveness achieved by repetition of bridge type and uniform Moderne detailing along the length of the project.

Boundary Description and Justification: The structure is one element of road development that is historically and technologically noteworthy. Because of the commonality of design, type, setting, and history that the structures on the route share and the state of preservation of the resource, the right-of-way of NJ 495 from the intersection with US 1 & 9 and the Lincoln Tunnel is evaluated as a potential historic district. This structure is along that right-of-way, so it is a contributing resource. The significant boundary is limited to the actual right-of-way between the aforementioned points.

PHOTO: 24:33-34;25:6;2 (05/03/91) REVISED BY (DATE): QUAD: Weehawken

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US
November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0917161 **CO** HUDSON **OWNER** NJDOT **MILEPOINT** 0.0
NAME & FEATURE INTERSECTED HUDSON AVENUE OVER NJ 495 **FACILITY** HUDSON AVE
TOWNSHIP UNION CITY
TYPE RIGID FRAME **DESIGN** **MATERIAL** Reinforced Concrete
 # SPANS 2 **LENGTH** 81 ft **WIDTH** 74.2 ft
CONSTRUCTION DT 1938 **ALTERATION DT** **SOURCE** NJDOT
DESIGNER/PATENT PORT OF NEW YORK AUTHORITY **BUILDER**

SETTING / CONTEXT The bridge carries a city street over NJ 495, the six lane highway approach to the Lincoln Tunnel. It is located in a mixed urban residential and commercial neighborhood with a variety of structures, ranging from an 1880s brick brewery a couple of blocks north to a modern used car lot, with row houses and tenements of all ages as well. The span is part of an open-cut corridor.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes
CONSULT STATUS Not Individually Eligible. Rt 3 (I-495) Highway Approach to Lincoln Tunnel Historic District, Eligible. Contributing.
CONSULT DOCUMENTS SHPO Letter 6/30/95, Comments 11/17/99.

SUMMARY The 2-span rigid frame bridge has a plain metal railing and severe Moderne-style detailing to the concrete and stone facing on the concrete wing walls. While not individually significant, it is one of 8 rigid frame spans used on the Port Authority's approach to the 1937 Lincoln Tunnel. The bridge is well preserved, and it is detailed like other spans on the historic route, which relies on standard period bridge types crossing a deep open cut right-of-way through urban areas.

INFORMATION

Bibliography:
Ammann, O.H. "Planning the Lincoln Tunnel Under the Hudson," Civil Engineering, 7, June, 1937, pp. 387-391.
Port Authority of New York. Annual Report. 1956.

Physical Description: The bridge is a 2-span reinforced concrete rigid frame with slab extensions supported on concrete columns at each side to accommodate a diagonally crossing street. The areas of the extensions not used as roadway are concrete-paved plazas. It is one of eight similarly detailed rigid frame spans on the limited access highway, and it is finished with a random ashlar stone veneer on the abutments, granite facing on the fascia and the ends of the pier, scored exposed concrete and pipe railings in an Art Moderne style on the parapets. The pedestrian fence is a recent addition. The bridge is well preserved.

Historical and Technological Significance: The rigid frame bridge is an original element of an approximately 2.8-mile long major transportation artery built 1938-1939 to serve as the main approach to the recently completed Lincoln Tunnel (first tube). The road is technologically and historically significant as a major engineering solution to building a highway that was both limited access and local through a congested area with significant geological considerations. The problem was solved in an innovative and aesthetic manner that retains its integrity of design and setting. It was designated Route 3 when built, and it became the heaviest-used single commuter line into the city, by virtue of serving the vast majority of the bus lines into New York City from the west. The structure is not individually distinguished, but it is a contributing resource to the potential historic route and thus has been evaluated as significant (Criterion C). Twenty-one structures were identified as being contributing resources along the right-of-way that stretches from US 1 & 9 to the Lincoln Tunnel.

The Palisades (called Bergen Hill locally) forms a ridge parallel to and just west of the Hudson River for several miles. The rock ridge is a barrier that must be crossed in some fashion by every transportation artery approaching New York City from the west in Bergen and Hudson counties. The oldest crossing of Bergen Hill is that now occupied by the PATH system and built by a predecessor of the Pennsylvania RR 1830-1834. The approach to the Lincoln Tunnel was the last major crossing of the Palisades (unless one counts the upgrading of the George Washington Bridge approaches in the 1960s). The Port of New York Authority built both the tunnel and the Route 3 New Jersey approach to the tunnel in close cooperation with state, county, and local officials. O.H. Ammann was the Director of Engineering on the project, and J.C. Evans served as Chief Engineer.

To get past Bergen Hill an open cut was decided upon, partly because it would be cheaper than a tunnel (which would require expensive equipment to remove exhaust gases), and also because local officials wanted the approach highway to be usable also as an arterial route across the ridge for local traffic. This decision required structures to carry the approach highway from the low meadows west of Bergen Hill up to the level of the cut through the Hill, and then back down to the tunnel mouth east of Bergen Hill. Major bridges were required for both of these tasks (Ammann, 391). In addition numerous bridges had to be built to take pre-existing local streets over the cut, and for the crossing of Hudson Boulevard (now JFK Boulevard) a very special type of grade separation structure was designed. The cut itself was, however, quite conventional, and most of the bridges were also conventional, if highly refined in their details (cut stone coverings for parts of their abutments, haunched fascia deck girders with patterned stiffeners, Art Moderne railings, and the like). When viewed as a whole, the entire roadway is a remarkable engineering accomplishment with visual cohesiveness achieved by repetition of bridge type and uniform Moderne detailing along the length of the project.

Boundary Description and Justification: The structure is one element of road development that is historically and technologically noteworthy. Because of the commonality of design, type, setting, and history that the structures on the route share and the state of preservation of the resource, the right-of-way of NJ 495 from the intersection with US 1 & 9 and the Lincoln Tunnel is evaluated as a potential historic district. This structure is along that right-of-way, so it is a contributing resource. The significant boundary is limited to the actual right-of-way between the aforementioned points.

PHOTO: 24:35-36;25:7;1 (05/03/91) REVISED BY (DATE): QUAD: Weehawken

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0917162 **CO** HUDSON **OWNER** NJDOT **MILEPOINT** 1.95

NAME & FEATURE INTERSECTED SOUTH MARGINAL STREET OVER PARK AVENUE **FACILITY** SOUTH MARGINAL STREET

TOWNSHIP WEEHAWKEN TOWNSHIP

TYPE DECK GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 116 ft **WIDTH** 30.1 ft

CONSTRUCTION DT 1938 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT PORT OF NEW YORK AUTHORITY **BUILDER**

SETTING / CONTEXT The bridge carries a service road and sidewalks for NJ 495 over a busy avenue. It is part of the Lincoln Tunnel approach and is part of a 5-component structure that carries 3 levels of NJ 495 over Park Avenue. It is contiguous to 3800021 that takes eastbound traffic from S. Margin St. up to elevated NJ 495. The area around the structure is dominated by 20th-century townhouses and apartment buildings.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Not Individually Eligible. Rt 3 (I-495) Highway Approach to Lincoln Tunnel Historic District, Eligible. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95, Comments 11/17/99.

SUMMARY The well-detailed haunched deck girder with floor beams bridge is supported on a Moderne-style stone veneer concrete substructure. The concrete parapet is topped by a plain metal railing. The detailing is identical to other spans on the old Rt 3 approach to the 1937 Lincoln Tunnel. The 116'-long bridge is not technologically distinguished, but it is historically noteworthy as part of an important, well-preserved mid-20th century highway built in a developed setting.

INFOR MATION

Bibliography:
Ammann, O.H. "Planning the Lincoln Tunnel Under the Hudson," Civil Engineering, 7, (June, 1937), pp. 387-391.
Port Authority of New York. Annual Report. 1956.

Physical Description: The deck girder bridge is the south-side, middle level of a 5-component, interconnecter span. This section, which carries a service road and ramp parallel to the limited-access portion of the route, is composed of a built-up deck girders with floor beams supported on concrete abutments with engaged bearing columns. The wingwalls are ashlar-faced to match the stonework used all along the route. The fascia girders are detailed with a geometric pattern to the stiffeners and a secondary flange to provide a shadow line. The outside girder is topped by a three-high metal railing. The span is contiguous to 3800021, and it, as well as the entire interconnected structure are well preserved.

Historical and Technological Significance: The deck girder bridge is an original element of an approximately 2.8-mile long major transportation artery built 1938-1939 to serve as the main approach to the recently completed Lincoln Tunnel (first tube). The road is technologically and historically significant as a major engineering solution to building a highway that was both limited access and local through a congested area with significant geological considerations. The problem was solved in an innovative and aesthetic manner that retains its integrity of design and setting. It was designated Route 3 when built, and it became the heaviest-used single commuter line into the city, by virtue of serving the vast majority of the bus lines into New York City from the west. The structure is not individually distinguished, but it is a contributing resource to the potential historic route and thus has been evaluated as significant (Criterion C). Twenty-one structures were identified as being contributing resources along the right-of-way that stretches from US 1 & 9 to the Lincoln Tunnel.

The Palisades (called Bergen Hill locally) forms a ridge parallel to and just west of the Hudson River for several miles. The rock ridge is a barrier that must be crossed in some fashion by every transportation artery approaching New York City from the west in Bergen and Hudson counties. The oldest crossing of Bergen Hill is that now occupied by the PATH system and built by a predecessor of the Pennsylvania RR 1830-1834. The approach to the Lincoln Tunnel was the last major crossing of the Palisades (unless one counts the upgrading of the George Washington Bridge approaches in the 1960s). The Port of New York Authority built both the tunnel and the Route 3 New Jersey approach to the tunnel in close cooperation with state, county, and local officials. O.H. Ammann was the Director of Engineering on the project, and J.C. Evans served as Chief Engineer.

To get past Bergen Hill an open cut was decided upon, partly because it would be cheaper than a tunnel (which would require expensive equipment to remove exhaust gases), and also because local officials wanted the approach highway to be usable also as an arterial route across the ridge for local traffic. This decision required structures to carry the approach highway from the low meadows west of Bergen Hill up to the level of the cut through the Hill, and then back down to the tunnel mouth east of Bergen Hill. Major bridges were required for both of these tasks (Ammann, 391). In addition numerous bridges had to be built to take pre-existing local streets over the cut, and for the crossing of Hudson Boulevard (now JFK Boulevard) a very special type of grade separation structure was designed. The cut itself was, however, quite conventional, and most of the bridges were also conventional, if highly refined in their details (cut stone coverings for parts of their abutments, haunched fascia deck girders with patterned stiffeners, Art Moderne railings, and the like). When viewed as a whole, the entire roadway is a remarkable engineering accomplishment with visual cohesiveness achieved by repetition of bridge type and uniform Moderne detailing along the length of the project.

Boundary Description and Justification: The structure is one element of road development that is historically and technologically noteworthy. Because of the commonality of design, type, setting, and history that the structures on the route share and the state of preservation of the resource, the right-of-way of NJ 495 from the intersection with US 1 & 9 and the Lincoln Tunnel is evaluated as a potential historic district. This structure is along that right-of-way, so it is a contributing resource. The significant boundary is limited to the actual right-of-way between the aforementioned points.

PHOTO: 26:23,25,27;201 (05/17/91) REVISED BY (DATE): QUAD: Weehawken

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0917163 **CO** HUDSON **OWNER** NJDOT **MILEPOINT** 1.95
NAME & FEATURE INTERSECTED NORTH MARGINAL STREET OVER PARK AVENUE **FACILITY** NORTH MARGINAL STREET
TOWNSHIP WEEHAWKEN TOWNSHIP
TYPE DECK GIRDER **DESIGN** **MATERIAL** Steel
 # SPANS 1 **LENGTH** 130 ft **WIDTH** 30 ft
CONSTRUCTION DT 1938 **ALTERATION DT** **SOURCE** NJDOT
DESIGNER/PATENT PORT OF NEW YORK AUTHORITY **BUILDER**

SETTING / CONTEXT The bridge carries a 3-lane service road parallel to the north side NJ 495 over a busy city street. It is an element in a 5-component 3-level structure that takes local traffic to and from elevated NJ 495, the 1937 Lincoln Tunnel approach. The bridge is contiguous to 3800024. The densely developed surrounding area is dominated by 20th-century town houses and apartment buildings.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes
CONSULT STATUS Not Individually Eligible. Rt 3 (I-495) Highway Approach to Lincoln Tunnel Historic District, Eligible. Contributing.
CONSULT DOCUMENTS SHPO Letter 6/30/95, Comments 11/17/99.

SUMMARY A skewed haunched deck plate girder with built-up floor beams span is supported on engaged columns set into stone-faced concrete abutments. The nicely detailed girder is finished with a plain steel railing on the outside while the inside girder carries rolled section columns that support, in part, the rolled beam with stiffeners of 3800024, the parallel span. The bridge is an element in a 5-component 3-level structure. It is a contributing element to the technologically significant highway.

INFORMATION

Bibliography:
Ammann, O.H. "Planning the Lincoln Tunnel Under the Hudson," Civil Engineering, 7, (June, 1937), pp. 387-391.
Port Authority of New York. Annual Report. 1956.

Physical Description: The deck girder bridge is the north-side, middle level of a 5-component, interconnecter span. This section, which carries a service road parallel to the limited-access portion of the route, is composed of a built-up deck girders with floor beams supported on ashlar-faced concrete abutments. The fascia girders are detailed with a geometric pattern to the stiffeners and a secondary flange to provide a shadow line. The inside girder supports rolled I-section columns of 3800024. The outside girder is topped by a three-high metal railing. The span and the entire interconnected structure are well preserved.

Historical and Technological Significance: The deck girder bridge is an original element of an approximately 2.8-mile long major transportation artery built 1938-1939 to serve as the main approach to the recently completed Lincoln Tunnel (first tube). The road is technologically and historically significant as a major engineering solution to building a highway that was both limited access and local through a congested area with significant geological considerations. The problem was solved in an innovative and aesthetic manner that retains its integrity of design and setting. It was designated Route 3 when built, and it became the heaviest-used single commuter line into the city, by virtue of serving the vast majority of the bus lines into New York City from the west. The structure is not individually distinguished, but it is a contributing resource to the potential historic route and thus has been evaluated as significant (Criterion C). Twenty-one structures were identified as being contributing resources along the right-of-way that stretches from US 1 & 9 to the Lincoln Tunnel.

The Palisades (called Bergen Hill locally) forms a ridge parallel to and just west of the Hudson River for several miles. The rock ridge is a barrier that must be crossed in some fashion by every transportation artery approaching New York City from the west in Bergen and Hudson counties. The oldest crossing of Bergen Hill is that now occupied by the PATH system and built by a predecessor of the Pennsylvania RR 1830-1834. The approach to the Lincoln Tunnel was the last major crossing of the Palisades (unless one counts the upgrading of the George Washington Bridge approaches in the 1960s). The Port of New York Authority built both the tunnel and the Route 3 New Jersey approach to the tunnel in close cooperation with state, county, and local officials. O.H. Ammann was the Director of Engineering on the project, and J.C. Evans served as Chief Engineer.

To get past Bergen Hill an open cut was decided upon, partly because it would be cheaper than a tunnel (which would require expensive equipment to remove exhaust gases), and also because local officials wanted the approach highway to be usable also as an arterial route across the ridge for local traffic. This decision required structures to carry the approach highway from the low meadows west of Bergen Hill up to the level of the cut through the Hill, and then back down to the tunnel mouth east of Bergen Hill. Major bridges were required for both of these tasks (Ammann, 391). In addition numerous bridges had to be built to take pre-existing local streets over the cut, and for the crossing of Hudson Boulevard (now JFK Boulevard) a very special type of grade separation structure was designed. The cut itself was, however, quite conventional, and most of the bridges were also conventional, if highly refined in their details (cut stone coverings for parts of their abutments, haunched fascia deck girders with patterned stiffeners, Art Moderne railings, and the like). When viewed as a whole, the entire roadway is a remarkable engineering accomplishment with visual cohesiveness achieved by repetition of bridge type and uniform Moderne detailing along the length of the project.

Boundary Description and Justification: The structure is one element of road development that is historically and technologically noteworthy. Because of the commonality of design, type, setting, and history that the structures on the route share and the state of preservation of the resource, the right-of-way of NJ 495 from the intersection with US 1 & 9 and the Lincoln Tunnel is evaluated as a potential historic district. This structure is along that right-of-way, so it is a contributing resource. The significant boundary is limited to the actual right-of-way between the aforementioned points.

PHOTO: 26:28-29;1s (05/17/91) REVISED BY (DATE): QUAD: Weehawken

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0917164 **CO** HUDSON **OWNER** PRIVATE **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED SOUTH MARGINAL STREET VIADUCT OVER VACANT LAND **FACILITY** SOUTH MARGINAL STREET

TOWNSHIP WEEHAWKEN TOWNSHIP

TYPE T BEAM **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 4 **LENGTH** 90 ft **WIDTH** 30 ft

CONSTRUCTION DT 1938 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT PORT OF NEW YORK AUTHORITY **BUILDER**

SETTING / CONTEXT The bridge carries a local access service road that parallels an elevated section of NJ 495, the six-lane limited access approach highway to the Lincoln Tunnel, over vacant land. The viaduct is located on the south side of the elevated highway in a residential area dominated by 3-story row houses. The structure is a part of the historically and technologically significant roadway.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Not Individually Eligible. Rt 3 (I-495) Highway Approach to Lincoln Tunnel Historic District, Eligible. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95, Comments 11/17/99.

SUMMARY The reinforced concrete T-beams with a slab deck bridge is supported on concrete columns. Its south face is covered by a random ashlar stone veneer wall set with a flight of steps, and the north side is occupied by a viaduct that carries the ramp from S. Margin Street up to NJ 495. 0917164 is hardly discernible as a separate structure, but it is an original element in the development of the significant Lincoln Tunnel approach road and its interfacing with the existing urban street pattern.

INFOR MATION

Bibliography:
Ammann, O.H. 'Planning the Lincoln Tunnel Under the Hudson," Civil Engineering, 7, June, 1937, pp. 387-391.
Port Authority of New York. Annual Report. 1956.

Physical Description: The 4-span T-beam bridge with a slab deck is supported on concrete columns. It is a component of a 5 element structure that links local streets with an elevated limited-access highway. Its south face is covered by a random ashlar stone wall set with a flight of steps. The masonry matches that used all along the 1.5-mile long route. The original lamp standard is in place, but the luminaire is gone. The north side is occupied by a viaduct that carries a ramp from a local street up to the level of the limited-access highway. A modern flight of steps has been added to the west side of the structure.

Historical and Technological Significance: The T-beam viaduct is an original element of an approximately 2.8-mile long major transportation artery built 1938-1939 to serve as the main approach to the recently completed Lincoln Tunnel (first tube). The road is technologically and historically significant as a major engineering solution to building a highway that was both limited access and local through a congested area with significant geological considerations. The problem was solved in an innovative and aesthetic manner that retains its integrity of design and setting. It was designated Route 3 when built, and it became the heaviest-used single commuter line into the city, by virtue of serving the vast majority of the bus lines into New York City from the west. The structure is not individually distinguished, but it is a contributing resource to the potential historic route and thus has been evaluated as significant (Criterion C). Twenty-one structures were identified as being contributing resources along the right-of-way that stretches from US 1 & 9 to the Lincoln Tunnel.

The Palisades (called Bergen Hill locally) forms a ridge parallel to and just west of the Hudson River for several miles. The rock ridge is a barrier that must be crossed in some fashion by every transportation artery approaching New York City from the west in Bergen and Hudson counties. The oldest crossing of Bergen Hill is that now occupied by the PATH system and built by a predecessor of the Pennsylvania RR 1830-1834. The approach to the Lincoln Tunnel was the last major crossing of the Palisades (unless one counts the upgrading of the George Washington Bridge approaches in the 1960s). The Port of New York Authority built both the tunnel and the Route 3 New Jersey approach to the tunnel in close cooperation with state, county, and local officials. O.H. Ammann was the Director of Engineering on the project, and J.C. Evans served as Chief Engineer.

To get past Bergen Hill an open cut was decided upon, partly because it would be cheaper than a tunnel (which would require expensive equipment to remove exhaust gases), and also because local officials wanted the approach highway to be usable also as an arterial route across the ridge for local traffic. This decision required structures to carry the approach highway from the low meadows west of Bergen Hill up to the level of the cut through the Hill, and then back down to the tunnel mouth east of Bergen Hill. Major bridges were required for both of these tasks (Ammann, 391). In addition numerous bridges had to be built to take pre-existing local streets over the cut, and for the crossing of Hudson Boulevard (now JFK Boulevard) a very special type of grade separation structure was designed. The cut itself was, however, quite conventional, and most of the bridges were also conventional, if highly refined in their details (cut stone coverings for parts of their abutments, haunched fascia deck girders with patterned stiffeners, Art Moderne railings, and the like). When viewed as a whole, the entire roadway is a remarkable engineering accomplishment with visual cohesiveness achieved by repetition of bridge type and uniform Moderne detailing along the length of the project.

Boundary Description and Justification: The structure is one element of road development that is historically and technologically noteworthy. Because of the commonality of design, type, setting, and history that the structures on the route share and the state of preservation of the resource, the right-of-way of NJ 495 from the intersection with US 1 & 9 and the Lincoln Tunnel is evaluated as a potential historic district. This structure is along that right-of-way, so it is a contributing resource. The significant boundary is limited to the actual right-of-way between the aforementioned points.

PHOTO: 201:24,26,44,45 (06/07/91) REVISED BY (DATE): QUAD: Weehawken

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0950163 **CO** HUDSON **OWNER** **MILEPOINT** 2.21

NAME & FEATURE INTERSECTED OCEAN AVE OVER CONRAIL (CENTRAL RR OF NJ) **FACILITY** OCEAN AVE

TOWNSHIP JERSEY CITY

TYPE DECK GIRDER **DESIGN** OPEN WEB **MATERIAL** Wrought Iron

 # SPANS 1 **LENGTH** 50 ft **WIDTH** 40 ft

CONSTRUCTION DT 1890ca **ALTERATION DT** Demolished **SOURCE** PLANS

DESIGNER/PATENT CNJ RR OFF OF CHIEF ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The setting consists of modernized single family homes and some 20th century apartment houses and small stores. The bridge crosses a deep cut through the city built in 1869 by the former Central RR of NJ as its Newark & New York Branch. This bridge is not the original bridge over the cut. The railroad is now abandoned and the cut is overgrown with brush and trees.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Bridge was Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 03/12/01

SUMMARY The bridge is composed of six rivet-connected open web deck girders supported on ashlar abutments with concrete caps. The outermost girders have verticals while the inside ones do not. The diagonals are composed of wrought iron T sections. The railings date to 1913 as does the flooring system and concrete abutment caps. The girders were in place in 1913, and they date stylistically to ca. 1890. They represent a rare and complete example of an early railroad overpass bridge type. The bridge is individually eligible for listing in the National Register of Historic Places under Criteria A and C.

INFOR MATION

Bibliography:
Schmidt, W.H.: "Costliest Railroad Now Half Abandoned." Trains Magazine. November 1948, p. 52.
Schreiber, Mike: "Hudson County Trolley Lines" in Branford Electric Railway Journal. Vol. 26, (March-April 1980), p.8.

Physical Description: Rusticated ashlar abutments with concrete caps added in 1913 support six ca. 1890 rivet-connected wrought iron Howe truss open web deck girders, each composed of a top and bottom flange joined with riveted connections by diagonal cast or rolled T-section members. The fascia girders have verticals, built up with an unusual spacer in the center, while the inside girders do not. The flooring system of rolled floor beams and a concrete deck were part of the 1913 reconditioning of the span. The cantilevered sidewalks with iron fence-like railings were also added in 1913. A trolley line ran across the bridge until about 1938 (Schreiber, p. 8). The bridge and ashlar abutments are well preserved.

Historical and Technological Significance: When the rare wrought iron lattice deck girder bridge was constructed is not known, but it was in place in 1913, the year the structure was "reconditioned" by the Central Railroad of New Jersey (NJ). The flooring system, sidewalks, and railings were added that year as were the concrete abutment caps. The girders themselves were in place in 1913. They date stylistically to ca. 1890, and they represent a rare remaining example of a 19th-century bridge type. Another lattice or open web deck girder bridge is located at Bergen Avenue (0900011), also built over the same line. The Ocean Ave. span is technologically and historically significant as a rare example of a once-frequent bridge type (Criterion C). Approximately six of the open-web deck girders, all thought to be wrought iron, have been identified in the state, and all but one are railroad related. Other examples are located in Warren, Hunterdon, and Middlesex counties. Only three still function as deck girders.

The bridge carries a four-lane city street over a mile-long double track cut built in 1869 for the Newark & New York RR, a subsidiary of the CNJ, through Bergen Hill, a long rock ridge separating the waterfront of Hudson County from the land to the west. The Newark & New York RR was built to give the shortest, fastest route between Newark and the CNJ ferry terminal at Communipaw. In the 1920s, 38 local passenger trains traversed this route each way every weekday, stopping at four stations in the single mile of this cut in Jersey City. Passenger service ended in 1948 and the line was single tracked and used for freight only (Trains, p. 52). When Conrail took over the NJ's property in 1976, the line became the West Side Avenue Branch, but was abandoned by the mid-1980s. Track has been removed, and the right-of-way is now overgrown.

PHOTO: 29:12,23-27 (05/31/91) REVISED BY (DATE): QUAD: Jersey City

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0950164 **CO** HUDSON **OWNER** UNKNOWN **MILEPOINT** 2.14

NAME & FEATURE INTERSECTED CLERK STREET OVER CONRAIL (EX-CENTRAL RR OF NJ) **FACILITY** CLERK STREET

TOWNSHIP JERSEY CITY

TYPE THRU GIRDER **DESIGN** PARTIALLY ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 85 ft **WIDTH** 30 ft

CONSTRUCTION DT 1938 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The neighborhood is residential with many early-20th century structures, most of them with modern siding. It carries 2-lane street over a deep railroad cut constructed through Jersey City in 1869 by the Central Railroad of New Jersey as its Newark & New York branch. It is now abandoned and heavily overgrown with brush and trees. The original Belgian block paver wearing surface survives.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Rt 3 (I-495) Highway Approach to Lincoln Tunnel Historic District, Eligible. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95, Comments 11/17/99.

SUMMARY The skewed thru girders with floor beams bridge has encased floor beams, but the bottom flanges are exposed. The abutments are concrete, but they may be simply a concrete skin over earlier ashlar abutments. The wing walls are stone. The bridge is a representative example of a very common rail-carrying overpass type, and it is not technologically innovative or historically distinguished.

INFOR MATION

PHOTO: 29:20-22,29-30 (05/31/91) REVISED BY (DATE): QUAD: Jersey City

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0951165 **CO** HUDSON **OWNER** RAILROAD **MILEPOINT** 1.24

NAME & FEATURE INTERSECTED PALISADE AVENUE OVER CONRAIL BERGEN ARCHWAYS **FACILITY** PALISADE AVE

TOWNSHIP JERSEY CITY

TYPE ARCH **DESIGN** BARREL **MATERIAL** Reinforced Concrete

 # SPANS 2 **LENGTH** 97 ft **WIDTH** 40 ft

CONSTRUCTION DT 1910 **ALTERATION DT** 1997 **SOURCE** NJDOT

DESIGNER/PATENT ERIE RR OFFICE OF ENGINEER **BUILDER** MILLARD CONST CO (PHILA)

SETTING / CONTEXT The bridge is adjacent to NR-listed 1904-12 Dickinson High School. It bridges the Bergen Archways, a deep railroad cut built through Jersey City by the Erie RR 1907 - 1910 but now abandoned. The south arch spans an old trolley grade, parallel to but not as deep as the railroad cut. Stairs go from deck level to trolley grade level, suggesting the bridge served as shelter for a trolley stop.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible. Erie RR Main Line Historic District, Eligible. Erie RR Bergen Archway / Bergen Hill Tunnel Historic District, Eligible. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95, Opinion 02/20/98, Comments 3/10/99 4/27/00.

SUMMARY The 2-span reinforced concrete arch bridge is historically noteworthy as an original component of the Bergen Archways. It is also associated with Jersey City's former trolley network. It retains its concrete balustrade plus an old iron railing, and it is well preserved. The reinforcing is in the Monier tradition. The span ranks as the most ambitious early concrete arch bridge in the county. The bridge is individually eligible for listing in the National Register of Historic Places and is also an element of the Erie RR's technologically significant Bergen Archway / Bergen Hill Tunnel Historic District under Criteria A and C.

INFOR MATION

Bibliography:

"Beginning of Erie's Terminal Improvements," Railway Age. Vol. 46,(28 Dec. 1906), pp. 831-834.
"The New Four-Track Entrance of the Erie Railroad into Jersey City," Engineering Record. Vol. 57, (18 April 1908), pp. 516-518.
Mike Schreiber: "Hudson County Trolley Lines," Branford Electric Railway Journal, Vol. 26 (March-April, 1980).
"Erie Terminal Improvements in Jersey City" The Railroad Gazette Vol. XLIV, No. 20, May 15, 1908 pp. 669-672
"The New Four-Track Line of the Erie Railroad Through Bergen Hill, Jersey City" Engineering News Vol. 58, No. 8 February 21, 1907 pp. 204-205

Physical Description: The bridge consists of two spans of reinforced concrete arches. It retains its original concrete parapets topped by a tall iron picket fence, also apparently original. Field inspection revealed that the bridge's reinforcing is visible where concrete has spalled on the intrados. The pattern revealed suggests that the reinforcement consists of a grid of steel rods fairly close to the surface. This type of reinforcement is reminiscent of that of the early concrete pioneer Monier, and also of present day practice. It is much lighter and more efficient than the Melan system in vogue at the time. The bridge is in deteriorating but unaltered condition.

Historical and Technological Significance: The 1910 reinforced concrete bridge is a representative example of its type, but it is historically important as an original element of the Bergen Archways, the open cut with interspersed tunnels that traverses Bergen Hill (also known as the Palisades) in Jersey City. The Bergen Archways was built 1907-1910 as a solution to the problem of getting a large quantity of commuter passenger trains from several different rail lines west of Bergen Hill to the Erie Railroad's passenger terminal on the waterfront of the Hudson River east of the hill. The Archways was a major engineering work in which more rock was removed than in any other such project up to that time; it was 4400' long, 60' wide at the bottom, and 40' to 75' deep. The bridge is individually historically significant due to its construction technology and its association with both the Bergen Archways and the trolley line it also spanned, and it is significant as a contributing resource to the potential Bergen Archways Historic District (Criterion C).

The bridges for Baldwin and Palisade Avenues were built while temporary bridges carried their traffic over the partially excavated cut. It is possible the same form work was used for the bridges as was used for the tunnel linings, since the latter was meant to be reused after each section was completed. Originally it was expected that the Palisade Avenue bridge would be a plate girder span of 80 foot, while the Baldwin Avenue bridge would be either of steel or concrete. By 1908 it had been decided to use reinforced concrete for the Baldwin Avenue bridge but the Palisade Avenue bridge was still to be of steel. In the end the Palisade Avenue bridge was also built as a reinforced concrete arch. Evidently these were the pioneering concrete arches for the Erie RR, and mark this project as a transition between the two materials. The result was a four-track route with four tunnels under major streets and street intersections, but open for most of its route to allow smoke and fumes from locomotives to escape. The route drew its name from the dramatic effect created by the "bridges of living rock" left standing over the cut, an effect emphasized by the width of the tunnels and the sheerness of the walls of the cut (Erie Railroad Magazine, P. 15).

The Archways ceased to be used for passenger trains in 1956-57 with the transfer of all Erie RR passenger trains to the Lackawanna RR's Hoboken Terminal. It continued to be used for freight trains until the mid-1980s, but is now abandoned and has become overgrown with trees and brush.

The Bergen Archways was an innovative solution to the problem of inserting a railroad corridor to accommodate a high volume of passenger traffic into a built-up urban area and through a solid rock barrier. It has two pioneering reinforced concrete arch bridges and its four-track tunnels carrying streets over the cut are probably the largest "tunnel bridges" (a tunnel primarily dug to serve instead of a bridge) in the state. It was designed by the engineering department of the Erie RR, G.H. Burgess, Principal Assistant Engineer, A.L. Moorehead, Resident Engineer, and F.L. Stuart, Chief Engineer. Millard Construction Company of Philadelphia was the contractor. The bridge is one of six structures on the Archways route (0951165-0951170), and all have been evaluated as significant because of their historic and technical associations with the significant right-of-way.

Boundary Description and Justification: The tunnel is significant within the historic context of the ambitious railroad right-of-way

development. It is part of a right-of-way that has visual, historical, and technical cohesiveness. The setting of the right-of-way is also fairly well preserved. Thus the tunnel and the entire 4400'-long Bergen Archways right-of-way are evaluated as a district with this structure being an individually eligible and a contributing resource.

PHOTO: 22:17-18 (04/26/91) REVISED BY (DATE): QUAD: Jersey City

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0951166 **CO** HUDSON **OWNER** RAILROAD **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BALDWIN AVENUE OVER CONRAIL BERGEN ARCHWAYS **FACILITY** BALDWIN AVENUE

TOWNSHIP JERSEY CITY

TYPE ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 60 ft **WIDTH** 30 ft

CONSTRUCTION DT 1910 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT ERIE RR OFFICE OF ENGINEER **BUILDER** MILLARD CONST CO (PHILA)

SETTING / CONTEXT The bridge carries a city street over a deep cut made by the former Erie RR 1907-1910 to provide a new passenger line approach to the Hudson River waterfront (the Bergen Archways), now abandoned and overgrown with brush and trees. It is located in an undistinguished urban mixed residential and commercial area, including modernized row houses and one-story modern commercial structures.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Not Individually Eligible. Erie RR Main Line Historic District, Eligible. Erie RR Bergen Archway / Bergen Hill Tunnel Historic District, Eligible. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95, Opinion 02/20/98, Comments 3/10/99 4/27/00.

SUMMARY The high rise reinforced concrete arch bridge has concrete parapets topped by a high decorative iron fence. The bridge is a single-span duplicate of 0951165 (located to the north), and it is an original element of the Bergen Archways route developed by the Erie RR 1907-1910. While the bridge is not individually eligible for listing in the National Register of Historic Places, the railroad route is technologically and historically significant, and the unaltered bridge is a contributing resource to the route and is eligible under Criteria A and C. It was built at the same time as 095116.

INFOR MATION

Bibliography:

"Beginning of Erie's Terminal Improvements," Railway Age. Vol. 46, (28 Dec. 1906), pp. 831-834.
"The New Four-Track Entrance of the Erie Railroad into Jersey City," Engineering Record. Vol.57, (18 April 1908), pp. 516-518.
"Erie Terminal Improvements in Jersey City" The Railroad Gazette Vol. XLIV, No. 20, May 15, 1908 pp. 669-672
"The New Four-Track Line of the Erie Railroad Through Bergen Hill, Jersey City" Engineering News Vol. 58, No. 8 February 21, 1907 pp. 204-205

Physical Description: The bridge consists of one reinforced concrete arch. It retains its concrete balustrade topped by a tall metal picket railing. The design or pattern of the reinforcement is not known. Since it was built as part of the same project as 0951165, the Monier-type reinforcing system of a gird of reinforcing rods was probably used for this span as well. This type of reinforcement is reminiscent of that of Monier, and also of present day practice. The span appears to be unaltered.

Historical and Technological Significance: In addition to being a well-preserved example of a reinforced concrete arch bridge reinforcing system, the 1910 overpass is historically important as an original element of the Bergen Archways, the open cut with interspersed tunnels that traverses as the Palisades in Jersey City. The 1907-1910 as a solution to the problem of getting a large quantity of commuter passenger trains from several different rail lines west of Bergen Hill to the Erie RR's passenger terminal on the waterfront of the Hudson River east of the hill. The Archways was a major engineering work in which more rock was removed than in any other such project up to that time; it was 4400' long, 60' wide at the bottom, and 40' to 75' deep (Criterion C). It is evaluated as significant because it is a contributing resource to the potential Bergen Archways Historic District.

The bridges for Baldwin and Palisade Avenues were built while temporary bridges carried their traffic over the partially excavated cut. It is possible the same centering was used for the bridges as was used for the tunnel linings, since the latter was meant to be reused after each section was completed. Originally it was expected that the Palisade Avenue bridge would be a plate girder bridge of 80 foot span, while the Baldwin Avenue bridge would be either of steel or concrete (Railway Age, p. 834). Reinforced concrete bridges were not very common at the time this project was planned. By 1908 it had been decided to use reinforced concrete for the Baldwin Avenue Bridge but the Palisade Avenue Bridge was still to be of steel, In the end, the Palisade Avenue bridge was also built as a reinforced concrete arch. Evidently, then, these were the pioneering concrete arches for the Erie RR, and mark this project as a transition between the two materials.

The result was a four-track route with four tunnels under major streets and street intersections, but open for most of its route to allow smoke and fumes from locomotives to escape. The route drew its name from the dramatic effect created by the "bridges of living rock" left standing over the cut, an effect emphasized by the width of the tunnels and the sheerness of the walls of the cut (Erie Railroad Magazine, p. 15).

The Archways ceased to be used for passenger trains in 1956-57 with the transfer of all Erie RR passenger trains to the Lackawanna RR's Hoboken Terminal. It continued to be used for freight trains until the mid-1980s, but is now abandoned and has become overgrown with trees and brush.

The 1907-1910 Bergen Archways was an innovative solution to the problem of inserting a railroad corridor to accommodate a high volume of passenger traffic into a built-up urban area and through a solid rock barrier. It has two pioneering reinforced concrete arch bridges and its four-track tunnels carrying streets over the cut are probably the largest "tunnel bridges" (a tunnel primarily dug to serve instead of a bridge) in the state. It was designed by the engineering department of the Erie Railroad and built by Millard Construction Company of Philadelphia. Their are six structures on the route (0951165-0961170), and all are evaluated as contributing resources to the historic right-of-way.

Boundary Description and Justification: The tunnel is significant within the historic context of the ambitious railroad right-of-way development. It is part of a right-of-way that has visual, historical, and technical cohesiveness. The setting of the right-of-way is also fairly

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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well preserved. Thus the tunnel and the entire 4400'-long Bergen Archways right-of-way are evaluated as a district with this structure being a contributing resource.

PHOTO: 22:22,23/154:14 (04/26/91 JPH (5/96)) REVISED BY (DATE): QUAD: Jersey City

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0951167 **CO** HUDSON **OWNER** NJDOT **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CENTRAL AVENUE OVER CONRAIL BERGEN ARCHWAYS **FACILITY** CENTRAL AVENUE

TOWNSHIP JERSEY CITY

TYPE TUNNEL **DESIGN** **MATERIAL** Concrete

 # SPANS 1 **LENGTH** 60 ft **WIDTH** 550 ft

CONSTRUCTION DT 1909 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT ERIE RR OFFICE OF ENGINEER **BUILDER** MILLARD CONST CO (PHILA)

SETTING / CONTEXT The structure carries three city streets over the Bergen Archways, a deep cut built by the Erie RR 1907-1910 to provide a new passenger line approach to the Jersey City waterfront. The railroad is now abandoned. Along the top of the rock supported by the tunnel is a mixed commercial and residential neighborhood including a modern 4-story office building and some 1-story warehouses.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Individually Eligible. Erie RR Main Line Historic District, Eligible. Erie RR Bergen Archway / Bergen Hill Tunnel Historic District, Eligible. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95, Opinion 02/20/98, Comments 3/10/99 4/27/00.

SUMMARY The bridge, best described as a tunnel lining, consists of a concrete arch (reinforced only near its portals) supporting solid rock above. The unaltered tunnel is cut through Bergen Hill (the Palisades) and is part of the Bergen Archways rail line developed by the Erie RR in 1907-10. A tunnel was used at the site instead of a bridge to minimize disruption of the streets and buildings above. The bridge is individually eligible for listing in the National Register of Historic Places. In addition, it is a contributing element of the Erie Railroad Bergen Archways / Bergen Hill Tunnel Historic District under Criteria A and C.

INFOR MATION

Bibliography:

"Beginning of Erie's Terminal Improvements," Railway Age. Vol. 46, (28 Dec. 1906), pp. 831-834.
"The New Four-Track Entrance of the Erie Railroad into Jersey City," Engineering Record. Vol. 57, (18 April 1908), pp. 516-518.
"The Bergen Hill Four-Track Tunnels, Erie RR," Engineering Record, Vol. 60 (18 Dec. 1909), pp. 687-88. Erie Railroad Magazine, Sept. 1957.
"Erie Terminal Improvements in Jersey City" The Railroad Gazette Vol. XLIV, No. 20, May 15, 1908 pp. 669-672
"The New Four-Track Line of the Erie Railroad Through Bergen Hill, Jersey City" Engineering News Vol. 58, No. 8 February 21, 1907 pp. 204-205

Physical Description: The structure consists of an unreinforced concrete-lined tunnel through solid (diabase) rock for 250', then 300' of additional tunnel constructed by the cut-and-cover method (west of the previous portion) lined with reinforced concrete and topped with fill. Both portals are tied back into the rest of the lining with steel reinforcement. It was originally intended to drive the whole tunnel by standard tunneling methods, but the rock above the westernmost 300 ft. of the tunnel was sufficiently shallow and weak that all of it had to be removed. Rather than making this section open cut the tunnel lining was constructed anyway, with steel reinforcement added, fill was added, and the surface was restored, with a retaining wall constructed over the portal. This was done to avoid the loss of rental income from the land above.

Historical and Technological Significance: The concrete-lined tunnel is an original element of the 1907-1910 Bergen Archways tunnel-cut, an impressive engineering work and a major urban transportation corridor. It was assigned and developed by the Erie Railroad. The tunnel-cut was an innovative solution to the problem of inserting a corridor to accommodate a high volume of passenger traffic into a built-up urban area and through a solid rock barrier. The driving and lining of the tunnel, unusually wide for railroad structure, was complicated by the wide span (sufficient for four tracks), the treacherous inclination of the rock strata, and the presence of the old tunnel running just north of the work. In addition, the Archways was a major engineering work in which more rock was removed than in any other such project up to that time; it was 4400' long, 60' wide at the bottom, and 40' to 75' deep (Criterion C). The structure is evaluated as a contributing resource to the potential Bergen Archways Historic District.

The result of the improvement program was a four-track route with four tunnels, all evaluated as contributing resources, under major streets and street intersections, but open for most of its route to allow smoke and fumes from locomotives to escape. The route drew its name from the dramatic effect created by the "bridges of living rock" left standing over the cut, an effect emphasized by the width of the tunnels and the sheerness of the walls of the cut" (Erie Railroad Magazine p. 15).

The Archways ceased to be used for passenger trains in 1956-57 with the transfer of all Erie RR passenger trains to the Lackawanna RR's Hoboken Terminal. It continued to be used for freight trains until the mid-1980s, but is was abandoned and has become overgrown with trees and brush.

The Bergen Archways was an innovative solution to the problem of inserting a railroad corridor to accommodate a high volume of passenger traffic into a built-up urban area and through a solid rock barrier. The historic route also includes two pioneering reinforced concrete arch bridges with the four-track tunnels carrying streets over the cut in what is probably the largest "tunnel bridges" (a tunnel primarily dug to serve as a substitute for a regular bridge) in the region. Six structures (four tunnels and two bridges) have been evaluated as contributing resources to the potentially eligible route (0951165-0951170).

Boundary Description and Justification: The tunnel is significant within the historic context of the ambitious railroad right-of-way development. It is part of a right-of-way that has visual, historical, and technical cohesiveness. The setting of the right-of-way is also fairly well preserved. Thus the tunnel and the entire 4400'-long Bergen Archways right-of-way are evaluated as a district with this structure being an individually eligible and a contributing resource.

PHOTO: 22:24,30,31 (04/26/91) REVISED BY (DATE): QUAD: Jersey City

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0951168 **CO** HUDSON **OWNER** NJDOT **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED SUMMIT AVENUE OVER CONRAIL BERGEN ARCHWAYS **FACILITY** SUMMIT AVENUE

TOWNSHIP JERSEY CITY

TYPE TUNNEL **DESIGN** **MATERIAL** Concrete

 # SPANS 1 **LENGTH** 60 ft **WIDTH** 43.5 ft

CONSTRUCTION DT 1908 **ALTERATION DT** **SOURCE** RAILWAY AGE

DESIGNER/PATENT ERIE RR OFFICE OF ENGINEER **BUILDER** MILLARD CONST CO (PHILA)

SETTING / CONTEXT This structure carries the Bergen Archways route in a tunnel beneath an undistinguished 20th-century commercial area. The tunnel cut was built by the former Erie RR as part of its 1907-1910 campaign to provide a new 4-track passenger approach through the higher sections of Jersey City to the waterfront and then New York City via ferry. The railroad is now abandoned, and the cut is overgrown with brush and trees.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Individually Eligible. Erie RR Main Line Historic District, Eligible. Erie RR Bergen Archway / Bergen Hill Tunnel Historic District, Eligible. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95, Opinion 02/20/98, Comments 3/10/99 4/27/00.

SUMMARY The structure is historically significant as an original element of the Bergen Archways. It is essentially unaltered from its original appearance and consists of a concrete-lined tunnel through rock supporting the road high above. A tunnel rather than a bridge was used at the crossing to minimize disruption to the existing neighborhood. The 1907-10 railroad route is a combination of open cuts, tunnels, and bridges over the open cuts through Bergen Hill. The bridge is individually eligible for listing in the National Register of Historic Places. In addition, it is a contributing element of the Erie Railroad Bergen Archways/Bergen Hill Tunnel Historic District under Criteria A and C.

INFOR MATION

Bibliography:

"Beginning of Erie's Terminal Improvements." Railway Age. Vol.46, 28 Dec. 1906, pp. 831-834.
"The New Four-track Entrance of the Erie Railroad into Jersey City." Engineering Record Vol. 57., 18 April 1908, pp. 516-518.
The Bergen Hill Four-Track Tunnels, Erie RR." Engineering Record. Vol. 60., 18 Dec. 1909, pp. 687-88.
Erie Railroad Magazine. Sept. 1957.
"Erie Terminal Improvements in Jersey City" The Railroad Gazette Vol. XLIV, No. 20, May 15, 1908 pp. 669-672
"The New Four-Track Line of the Erie Railroad Through Bergen Hill, Jersey City" Engineering News Vol. 58, No. 8 February 21, 1907 pp. 204-205

Physical Description: The structure consists of a 60'-long, 200'- wide tunnel lined with unreinforced concrete (except that the portal is tied back into the rest of the lining with steel reinforcement). The tunnel runs through solid rock (diabase). The tunnel and entire right-of-way are now abandoned.

Historical and Technological Significance: The concrete-lined tunnel, one of four on the line, is historically important as an original contributing element of the Bergen Archways, the open cut with interspersed tunnels and overpasses that traverses Bergen Hill (also known as the Palisades) in Jersey City. Designed by the engineering department of the Erie Railroad, the right-of-way was built 1907-1910 as a solution to the problem of getting a large quantity of commuter passenger trains from several different rail lines west of Bergen Hill to the Erie RR's passenger terminal on the waterfront of the Hudson River east of the hill. The Archways was a major engineering work in which more rock was removed than in any other such project up to that time. The Archways route is 4400' long, 60' wide at the bottom, and 40' to 75' deep. The driving and lining of the tunnel was complicated by the wide span (sufficient for four tracks), the treacherous inclination of the rock strata, and the presence of the old tunnel running just north of the 1907 work (Criterion C). The structure is evaluated as a contributing resource to the Bergen Archways Historic District.

The result of the improvement program was an open cut four-track route with four tunnels under major streets and street intersections. The open cut allowed smoke and fumes from locomotives to escape. The route drew its name from the dramatic effect created by the "bridges of living rock left standing over the cut, an effect emphasized by the width of the tunnels and the sheerness of the walls of the cut (Erie Railroad Magazine. p. 15). At this point the Archways route parallels the Erie Railroad's original 1858 route through Bergen Hill. By the 1890s that old route was not adequate to handle the traffic volume.

The Archways ceased to be used for passenger trains in 1956-57 with the transfer of all Erie RR passenger trains to the Lackawanna RR's Hoboken Terminal. It continued to be used for freight trains until the mid-1980s, but is now abandoned and has become overgrown with trees and brush.

The Bergen Archways was an innovative solution to the problem of inserting a railroad corridor to accommodate a high volume of passenger traffic into a built-up urban area and through a solid rock barrier. It has two pioneering reinforced concrete arch bridges and its four-track tunnels carrying streets over the cut are probably the largest "tunnel bridges" (a tunnel primarily dug to serve as a substitute for a regular bridge) in the state. Six structures (four tunnels and two concrete-arch overpasses) have been evaluated as contributing resources to the potentially eligible route (0951165-0951170).

Boundary Description and Justification: The tunnel is significant within the historic context of the ambitious railroad right-of-way development. It is part of a right-of-way that has visual, historical, and technical cohesiveness. The setting of the right-of-way is also fairly well preserved. Thus the tunnel and the entire 4400'-long Bergen Archways right-of-way are evaluated as a district with this structure being an individually eligible and a contributing resource.

PHOTO: 25:25; 1s (05/17/91) REVISED BY (DATE): QUAD: Jersey City

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0951169 **CO** HUDSON **OWNER** NJDOT **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BEVAN & ST PAUL AVE OVER CONRAIL BERGEN ARCHWAYS **FACILITY** BEVAN AND ST PAUL AVENUES

TOWNSHIP JERSEY CITY

TYPE TUNNEL **DESIGN** **MATERIAL** Concrete

 # SPANS 1 **LENGTH** 60 ft **WIDTH** 260 ft

CONSTRUCTION DT 1909 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT ERIE RR OFFICE OF ENGINEER **BUILDER** MILLARD CONST CO (PHILA)

SETTING / CONTEXT This structure carries the Bergen Archways route under a neighborhood of modern apartment houses above. The Archways tunnel-cut was built by the former Erie RR 1907-1910 to carry a new four-track passenger line through the higher sections of Jersey City to the waterfront. The railroad is now abandoned and the cut is overgrown with brush and trees.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Individually Eligible. Erie RR Main Line Historic District, Eligible. Erie RR Bergen Archway / Bergen Hill Tunnel Historic District, Eligible. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95, Opinion 02/20/98, Comments 3/10/99 4/27/00.

SUMMARY The structure is significant as an original element of the "Bergen Archways" corridor. It is essentially unaltered from its original appearance. It consists of a concrete lined tunnel through rock supporting buildings and streets above. A tunnel was chosen instead of a bridge to minimize disruption of the neighborhood above. The tunnel lining is part of the historically and technologically significant route developed by the Erie RR 1907-1910. The bridge is individually eligible for listing in the National Register of Historic Places. In addition, it is a contributing element of the Erie Railroad Bergen Archways/Bergen Hill Tunnel Historic District under Criteria A and C.

INFORMATION

Bibliography:

"Beginning of Erie's Terminal Improvements." Railway Age. Vol.46, 28 Dec. 1906, pp. 831-834.
"The New Four-track Entrance of the Erie Railroad into Jersey City." Engineering Record Vol. 57., 18 April 1908, pp. 516-518.
The Bergen Hill Four-Track Tunnels, Erie RR." Engineering Record. Vol. 60., 18 Dec. 1909, pp. 687-88.
Erie Railroad Magazine. Sept. 1957.
"Erie Terminal Improvements in Jersey City" The Railroad Gazette Vol. XLIV, No. 20, May 15, 1908 pp. 669-672
"The New Four-Track Line of the Erie Railroad Through Bergen Hill, Jersey City" Engineering News Vol. 58, No. 8 February 21, 1907 pp. 204-205

Physical Description: The structure consists of a 60'-long, 200'- wide tunnel lined with unreinforced concrete (except that the portal is tied back into the rest of the lining with steel reinforcement). The tunnel runs through solid rock (diabase). The tunnel and entire right-of-way are now abandoned.

Historical and Technological Significance: The concrete-lined tunnel, one of four on the route, is historically important as an original element of the Bergen Archways, the open cut with interspersed tunnels and overpasses that traverses Bergen Hill (also known as the Palisades) in Jersey City. Designed by the engineering department of the Erie Railroad, the right-of-way was built 1907-1910 as a solution to the problem of getting a large quantity of commuter passenger trains from several different rail lines west of Bergen Hill to the Erie RR's passenger terminal on the waterfront of the Hudson River east of the hill. The Archways was a major engineering work in which more rock was removed than in any other such project up to that time. The Archways route is 4400' long, 60' wide at the bottom, and 40' to 75' deep. The driving and lining of the tunnel was complicated by the wide span (sufficient for four tracks), the treacherous inclination of the rock strata, and the presence of the old tunnel running just north of the 1907 work (Criterion C). The structure is evaluated as a contributing resource to the Bergen Archways Historic District.

The result of the improvement program was an open cut four-track route with four tunnels under major streets and street intersections. The open cut allowed smoke and fumes from locomotives to escape. The route drew its name from the dramatic effect created by the "bridges of living rock left standing over the cut, an effect emphasized by the width of the tunnels and the sheerness of the walls of the cut (Erie Railroad Magazine. p. 15). At this point the Archways route parallels the Erie Railroad's original 1858 route through Bergen Hill. By the 1890s that old route was not adequate to handle the traffic volume.

The Archways ceased to be used for passenger trains in 1956-57 with the transfer of all Erie RR passenger trains to the Lackawanna RR's Hoboken Terminal. It continued to be used for freight trains until the mid-1980s, but is now abandoned and has become overgrown with trees and brush.

The Bergen Archways was an innovative solution to the problem of inserting a railroad corridor to accommodate a high volume of passenger traffic into a built-up urban area and through a solid rock barrier. It has two pioneering reinforced concrete arch bridges and its four-track tunnels carrying streets over the cut are probably the largest "tunnel bridges" (a tunnel primarily dug to serve as a substitute for a regular bridge) in the state. Six structures (four tunnels and two concrete-arch overpasses) have been evaluated as contributing resources to the potentially eligible route (0951165-0951170).

Boundary Description and Justification: The tunnel is significant within the historic context of the ambitious railroad right-of-way development. It has historical, and technical cohesiveness. The setting of the right-of-way is also fairly well preserved. Thus the tunnel and the entire 4400'-long Bergen Archways right-of-way are evaluated as a district with this structure being an individually eligible and a contributing resource.

PHOTO: 25:22,24 (05/17/91) REVISED BY (DATE): QUAD: Jersey City

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US
November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0951170 **CO** HUDSON **OWNER** NJDOT **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED JFK BLVD OVER CONRAIL BERGEN ARCHWAYS **FACILITY** JFK BOULEVARD

TOWNSHIP JERSEY CITY

TYPE TUNNEL **DESIGN** **MATERIAL** Concrete

 # SPANS 1 **LENGTH** 60 ft **WIDTH** 200 ft

CONSTRUCTION DT 1908 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT ERIE RR OFFICE OF ENGINEER **BUILDER** MILLARD CONST CO (PHILA)

SETTING / CONTEXT The structure carries the Bergen Archways route under an arterial street. The Archways is a tunnel-cut built by the former Erie RR 1907-1910 to provide a new four-track passenger line through the higher portions of Jersey City to the waterfront. Surrounding the structure is a mid-20th century urban commercial area. The railroad is now abandoned and the cut is overgrown with brush and trees.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Individually Eligible. Erie RR Main Line Historic District, Eligible. Erie RR Bergen Archway / Bergen Hill Tunnel Historic District, Eligible. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95, Opinion 02/20/98, Comments 3/10/99 4/27/00.

SUMMARY The concrete-lined tunnel is significant as an original element of the Bergen Archways route. It retains its original appearance unaltered. It consists of a concrete-lined tunnel with concrete retaining wall with the boulevard above. It is one of four concrete lined tunnels the Erie RR built on the Bergen Archways route 1907-1910. The rail line is historically significant in its approach to solving a difficult crossing of Bergen Hill to get to Hudson River and New York City. The bridge is individually eligible for listing in the National Register of Historic Places. In addition, it is a contributing element of the Erie Railroad Bergen Archways/Bergen Hill Tunnel Historic District under Criteria A and C.

INFOR MATION

Bibliography:
"Beginning of Erie's Terminal Improvements." Railway Age. Vol.46, 28 Dec. 1906, pp. 831-834.
"The New Four-track Entrance of the Erie Railroad into Jersey City." Engineering Record Vol. 57., 18 April 1908, pp. 516-518.
The Bergen Hill Four-Track Tunnels, Erie RR." Engineering Record. Vol. 60., 18 Dec. 1909, pp. 687-88.
Erie Railroad Magazine. Sept. 1957.
"Erie Terminal Improvements in Jersey City" The Railroad Gazette Vol. XLIV, No. 20, May 15, 1908 pp. 669-672
"The New Four-Track Line of the Erie Railroad Through Bergen Hill, Jersey City" Engineering News Vol. 58, No. 8 February 21, 1907 pp. 204-205

Physical Description: The structure consists of a 60'-long, 200'- wide tunnel lined with unreinforced concrete (except that the portal is tied back into the rest of the lining with steel reinforcement). The tunnel runs through solid rock (diabase). A concrete retaining wall above the west tunnel portal retains fill. The tunnel is immediately south of the Erie Railroad's original 1858 double-track tunnel which was not within the scope of this survey. The western portal of the 1858 tunnel is adjacent to the western portal of the 1907 tunnel.

Historical and Technological Significance: The concrete-lined tunnel, one of four on the line, is historically important as an original contributing element of the Bergen Archways, the open cut with interspersed tunnels and overpasses that traverses Bergen Hill (also known as the Palisades) in Jersey City. Designed by the engineering department of the Erie Railroad, the right-of-way was built 1907-1910 as a solution to the problem of getting a large quantity of commuter passenger trains from several different rail lines west of Bergen Hill to the Erie RR's passenger terminal on the waterfront of the Hudson River east of the hill. The Archways was a major engineering work in which more rock was removed than in any other such project up to that time. The Archways route is 4400' long, 60' wide at the bottom, and 40' to 75' deep. The driving and lining of the tunnel was complicated by the wide span (sufficient for four tracks), the treacherous inclination of the rock strata, and the presence of the old tunnel running just north of the 1907 work (Criterion C). The structure is evaluated as significant because it is a contributing resource to the Bergen Archways Historic District.

The result of the improvement program was an open cut four-track route with four tunnels under major streets and street intersections. The open cut allowed smoke and fumes from locomotives to escape. The route drew its name from the dramatic effect created by the "bridges of living rock left standing over the cut, an effect emphasized by the width of the tunnels and the sheerness of the walls of the cut (Erie Railroad Magazine. p. 15). At this point the Archways route parallels the Erie Railroad's original 1858 route through Bergen Hill. By the 1890s that old route was not adequate to handle the traffic volume.

The Archways ceased to be used for passenger trains in 1956-57 with the transfer of all Erie RR passenger trains to the Lackawanna RR's Hoboken Terminal. It continued to be used for freight trains until the mid-1980s, but is now abandoned and has become overgrown with trees and brush.

The Bergen Archways was an innovative solution to the problem of inserting a railroad corridor to accommodate a high volume of passenger traffic into a built-up urban area and through a solid rock barrier. It has two pioneering reinforced concrete arch bridges and its four-track tunnels carrying streets over the cut are probably the largest "tunnel bridges" (a tunnel primarily dug to serve as a substitute for a regular bridge) in the state. Six structures (four tunnels and two concrete-arch overpasses) have been evaluated as contributing resources to the potentially eligible route (0951165-0951170).

Boundary Description and Justification: The tunnel is significant within the historic context of the ambitious railroad right-of-way development. It is part of a right-of-way that has visual, historical, and technical cohesiveness. The setting of the right-of-way is also fairly well preserved. Thus the tunnel and the entire 4400'-long Bergen Archways right-of-way are evaluated as a district with this structure being an individually eligible and a contributing resource.

PHOTO: 25:21 (05/17/91) REVISED BY (DATE): QUAD: Jersey City

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US
November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0953163 **CO** HUDSON **OWNER** UNKNOWN **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PERSHING ROAD OVER CONRAIL RIVER LINE **FACILITY** PERSHING ROAD

TOWNSHIP WEEHAWKEN TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 5 **LENGTH** 175 ft **WIDTH** 33.2 ft

CONSTRUCTION DT 1928 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT Pershing Road comes down the face of the cliffs of the Palisades and at the bottom turns 90 degrees toward the Hudson River to cross this bridge over rail lines, now Conrail but formerly West Shore RR. It forms the main approach to a former rail yard now being redeveloped with new buildings for mixed uses. With the cliff as a backdrop the bridge's setting is visually impressive, but it does not include historic structures.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The stringer bridge supported on 3-column concrete bents and concrete abutments with earlier stone wingwalls is representative of the most common pre-World War II bridge type in the state. Concrete jack arches are set between the stringer, making this a late use of jack arches, which are seldom seen after World War I. The metal picket railing is original and is a standard period design, but the concrete barriers are modern. Despite the jack arches, the bridge is not technologically noteworthy.

INFOR MATION

PHOTO: 23:34-35 (04/28/91) REVISED BY (DATE): QUAD: Weehawken

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0954160 **CO** HUDSON **OWNER** UNKNOWN **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED TONNELE AVE OVER PATH & CONRAIL JERSEY CITY BRANCH **FACILITY** TONNELE AVENUE

TOWNSHIP JERSEY CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 90 ft **WIDTH** 35 ft

CONSTRUCTION DT 1936 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge carries a city street over 4 tracks of the PATH rapid-transit line and ConRail's Jersey City freight branch. It is located in an urban residential area with five-story 1920s apartment houses, modernized row houses, and some modern commercial structures.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 2-span encased stringer bridge with a concrete substructure is a representative example of the most common pre-World War II bridge type in the state. A high concrete parapet frames the sidewalks. The bridge is neither historically nor technologically distinguished.

INFOR MATION

PHOTO: 22:6,7 (04/26/91) REVISED BY (DATE): QUAD: Jersey City

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0954162 **CO** HUDSON **OWNER** UNKNOWN **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED SUMMIT AVENUE OVER PATH & CONRAIL JERSEY CITY BRANCH **FACILITY** SUMMIT AVENUE

TOWNSHIP JERSEY CITY

TYPE DECK GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 180 ft **WIDTH** 36 ft

CONSTRUCTION DT 1924 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge carries a city street over the Bergen Cut of the former Pennsylvania RR, which also contains the PATH rapid transit line. It is located in a modern commercial area with one story structures nearby and large office buildings beyond. From the bridge there is access via a pedestrian passageway to the PATH Journal Square station.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased deep built-up deck girder bridge is supported on scored concrete abutments and massive pier. The cantilevered sidewalks are enclosed by a concrete balustrade with shallow engaged posts, and the girder fascias are paneled. Although larger than most girder overpasses and dramatically sited over the deep Bergen Cut, the bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 22:8,9 (04/26/91) REVISED BY (DATE): QUAD: Jersey City

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0954163 **CO** HUDSON **OWNER** UNKNOWN **MILEPOINT** 2.75

NAME & FEATURE INTERSECTED BALDWIN AVENUE OVER PATH & CONRAIL JERSEY CITY BRANCH **FACILITY** BALDWIN AVENUE

TOWNSHIP JERSEY CITY

TYPE THRU GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 3 **LENGTH** 110 ft **WIDTH** 32 ft

CONSTRUCTION DT 1928 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge carries a city street over the Bergen Cut of the former Pennsylvania RR (now ConRail's Jersey City freight branch) as well as the PATH rapid transit line. It is located in a mixed urban neighborhood, with late 19th century and 1920s rowhouses to the north, with modern houses as infill next to the railroad cut. To the south are low commercial structures and large modern industrial buildings.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 3-span bridge, consisting of 2 built-up thru girders and a deck girder on the north end, is supported on a composite substructure of ashlar masonry with concrete extensions. The bridge is not an early or technologically distinguished example of its type. It was rehabilitated but not altered in 1991. It is one of over ten thru girder bridges in the county.

INFOR MATION

PHOTO: 22:10-11 (04/26/91) REVISED BY (DATE): QUAD: Jersey City

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0954164 **CO** HUDSON **OWNER** UNKNOWN **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CHESTNUT AVE OVER PATH & CONRAIL JERSEY CITY BRANCH **FACILITY** CHESTNUT AVENUE

TOWNSHIP JERSEY CITY

TYPE THRU GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 103 ft **WIDTH** 30 ft

CONSTRUCTION DT 1918 **ALTERATION DT** 1989 **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge carries a city street over the Bergen Cut, a railroad cut shared by an ex-Pennsylvania RR line (now a Conrail freight branch) and the PATH rapid transit line. The bridge is the only outlet for a residential section isolated on two sides by railroad cuts and on the east side by the side of the hill on which it is located. The residential sections surrounding the bridge are a mix of row houses of all eras, most modernized.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The thru girder with floor beams bridge is supported on concrete abutments. The cantilevered sidewalks are enclosed by a modern metal barrier. The span was rehabilitated circa 1989. This work included installation of steel corrugated flooring pans, concrete curbs at the inner face of the girders, and the pedestrian barrier. It is one of over ten thru girder bridges in the county. The span is not historically or technologically distinguished.

INFOR MATION

PHOTO: 22:12-14 (04/26/91) REVISED BY (DATE): QUAD: Jersey City

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0955160 **CO** HUDSON **OWNER** ARCORP **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED NEW FERRY ROAD OVER PRIVATE ACCESS ROAD **FACILITY** NEW FERRY ROAD

TOWNSHIP WEEHAWKEN TOWNSHIP

TYPE THRU GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 7 **LENGTH** 189 ft **WIDTH** 26.8 ft

CONSTRUCTION DT 1920 **ALTERATION DT** **SOURCE** OAD ANNUAL REPORTS

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT Located at the eastern base of Bergen Hill, the bridge was built to take NJ 505 over the former West Shore RR line to a ferry terminal on the Hudson River in the context of a large rail yard and various industries. All of these elements have been removed, and the road abandoned. A new access road has been built beneath the bridge replacing the rail line. The bridge is defunct and is closed to all traffic.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The main span of the curving 7-span viaduct is a partially encased built-up thru girder with floor beams. The five east approach spans that handle the grade transition are short concrete girders on concrete bents, and the short flared approach span on the west side is stringers supported on a concrete abutment and a steel bent. The bridge is not common in profile, but it is composed of common structural types and is technologically undistinguished. The closed road it carries is brick paved.

INFOR MATION

PHOTO: 23:32-33 (05/28/91) REVISED BY (DATE): QUAD: Weehawken

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0962154 **CO** HUDSON **OWNER** STATE AGENCY **MILEPOINT** 2.93

NAME & FEATURE INTERSECTED CHAPEL AVE OVER CONRAIL BAYONNE BRANCH **FACILITY** CHAPEL AVENUE

TOWNSHIP JERSEY CITY

TYPE THRU TRUSS **DESIGN** WARREN **MATERIAL** Steel

 # SPANS 4 **LENGTH** 251 ft **WIDTH** 22 ft

CONSTRUCTION DT 1910 **ALTERATION DT** 1985 **SOURCE** NJDOT

DESIGNER/PATENT CNJ RR OFFICE OF ENGINEER **BUILDER**

SETTING / CONTEXT The bridge carries a city street over the former main line of the CNJ RR, now reduced to a Conrail freight branch. At the west end of the bridge is a wooded cemetery. At the east end is an elevated section of the New Jersey Turnpike; no buildings are located at the west end of the bridge; the area was formerly occupied by railroad tracks.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The main span of the 4-span structure is a rivet-connected Warren thru truss bridge. To its north are a two span continuous thru girder span and then a stringer span. It is the newest of 3 Warren thru truss spans built by the CNJ 1901-1910 in the county to carry local streets over its main line. This one is very similar in design to 0962156. It was rehabed in 1985, and many of the elements, like the bottom chords, were replaced. The span has no distinctive details and is a common CNJ type.

INFOR MATION

PHOTO: 28:10-16;29:32- (05/31/91) REVISED BY (DATE): QUAD: Jersey City

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0962155 **CO** HUDSON **OWNER** STATE AGENCY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED LINDEN AVE OVER CONRAIL BAYONNE BRANCH **FACILITY** LINDEN AVENUE

TOWNSHIP JERSEY CITY

TYPE THRU TRUSS **DESIGN** WARREN **MATERIAL** Steel

 # SPANS 3 **LENGTH** 167 ft **WIDTH** 16.2 ft

CONSTRUCTION DT 1901 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT CNJ RR OFFICE OF ENGINEER **BUILDER**

SETTING / CONTEXT The bridge once carried a city street over the multi tracked main line of the CNJ railroad, but it is now closed to all but pedestrians. The rail line is now only a single-track Conrail industrial branch. East of the bridge are modern factory buildings; west of the bridge are apartment buildings with first-floor commercial uses, and modernized row houses. A utility pipe is also carried by the bridge.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 4/30/90

SUMMARY The Warren thru truss main span and continuous stringer 2-span approach is supported on an ashlar and concrete abutment on the west end, timber pile bents, and a timber abutment at the east end. The trusses are unaltered and are composed of angles riveted back-to-back. A cantilevered sidewalk with a modern metal railing is on one side only. A plank wearing surface is used, but the bridge, one of three built in the vicinity by the CNJ RR, is representative of a fairly common type in NJ.

INFOR MATION

PHOTO: 28:17-22 (05/31/91) REVISED BY (DATE): QUAD: Jersey City

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0962156 **CO** HUDSON **OWNER** STATE AGENCY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED GATES AVE OVER CONRAIL BAYONNE BRANCH **FACILITY** GATES AVENUE

TOWNSHIP JERSEY CITY

TYPE THRU TRUSS **DESIGN** WARREN **MATERIAL** Steel

 # SPANS 2 **LENGTH** 183 ft **WIDTH** 17.8 ft

CONSTRUCTION DT 1906 **ALTERATION DT** Demolished **SOURCE** NJDOT

DESIGNER/PATENT CNJ RR OFFICE OF ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carried a city street over the multi tracked main line of the CNJ railroad. It is now closed, and the railroad is reduced to a Conrail freight branch. The span is located on the east edge of an undistinguished urban residential area of late-19th and early-20th century rowhouses, all remodeled. To the east is vacant land formerly used for railroad purposes, and a busy highway (NJ 440).

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Bridge was Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 2-span rivet-connected bridge is composed of a Warren thru truss and a Warren pony truss supported on a stone abutment on the south and a concrete abutment on the north. Neither span exhibits unusual design details, but they are good, unaltered examples of their type and are thus technologically distinguished. The bridge is one of three thru trusses built in the vicinity by the CNJ RR between 1901 and 1910. Similar bridges built for the CNJ are in Union County.

INFOR MATION

Bibliography:
Anderson, Elaine. The Central Railroad of New Jersey's First 100 Years. Center for Canal History and Technology. 1984.

Physical Description: The slightly skewed 2-span bridge is composed of one 5-panel rivet-connected Warren thru truss span and a Warren pony truss approach span. The pony truss is unusual in that the end posts are not inclined. The southern abutment is stone while the one on the northern end is concrete. A built-up steel bent supports the middle portion. The verticals and diagonals of the thru truss are composed of laced back-to-back angles while the inclined end posts and top chord are built-up box sections. The portal braces are lattice, and the lateral braces are laced. The cantilevered sidewalk on one side only is enclosed with the original lattice railing. The bridge is closed to all traffic, but it appears to be in unaltered condition. Its details are not distinctive and are typical of the early 20th century.

Historical and Technological Significance: The 1906 two-span bridge is a representative example of common bridge types; the Warren thru truss and the Warren pony truss. Neither span exhibits any distinctive construction details. They are both typical of the type and details used by the CNJ throughout both Hudson and Union counties.

Historically the bridge chronicles Hudson County's important position in the transportation history of the greater metropolitan area, as do the four other metal trusses bridges the line built that survive in the county (0900003(demolished), 0962152(demolished), 0962154, 0962155). The county is rich in major rail corridors because of its location opposite New York City. The Central Railroad of New Jersey was chartered in 1847, after which it developed its route from Elizabeth to Jersey City and west to the anthracite coal region of eastern Pennsylvania. The route to Jersey City was completed in 1864. The bridge carries a city street over the former CNJ main line to an industrial area containing primarily the CNJ's locomotive facilities, once said to be the largest in the U.S. The yard, begun in the 1860s, was developed on filled land to handle passenger as well as freight trains. All elements of that facility were destroyed in the creation of Liberty State Park. This is one of four thru truss bridges the CNJ built in the area between 1901 and 1910. 0962152 (demolished Communipaw Avenue bridge built in 1908) has been evaluated as significant. CNJ thru truss bridges of similar age, type, and design are also extant in Union County.

PHOTO: 201:28-31 (06/07/91) REVISED BY (DATE): QUAD: Jersey City

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0963153 **CO** HUDSON **OWNER** STATE AGENCY **MILEPOINT** 5.8

NAME & FEATURE INTERSECTED CONRAIL BAYONNE BRANCH OVER EAST 22ND STREET **FACILITY** BAYONNE BRANCH

TOWNSHIP BAYONNE CITY

TYPE THRU PLATE GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 3 **LENGTH** 57 ft **WIDTH** 12.1 ft

CONSTRUCTION DT 1901 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT CNJ RR OFFICE OF ENGINEER **BUILDER**

SETTING / CONTEXT The bridge carries the former CNJ RR multi-track main line, now reduced to a single track Conrail industrial branch, over a city street. It is located in an undistinguished urban residential and commercial area, with a modern plumbing supply house and yard to the northwest. The neighborhood also contains modernized row houses of indeterminate age, and post-1950 brick houses and small apartment buildings.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 3-span thru girder bridge with built-up steel bents is composed of six girders, formerly carrying five tracks. The center four spans have the thru girder for only the main span with stringers for the approaches while the outermost spans are same-depth thru girders for all three spans. The abutments and wingwalls are concrete. The bridge is essentially identical to 0963154, and it is a relatively early but not technologically or historically distinguished example of its common type.

INFOR MATION

PHOTO: 28:31-32 (05/31/91) REVISED BY (DATE): QUAD: Jersey City

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0963154 **CO** HUDSON **OWNER** STATE AGENCY **MILEPOINT** 5.87

NAME & FEATURE INTERSECTED CONRAIL BAYONNE BRANCH OVER EAST 21ST STREET **FACILITY** BAYONNE BRANCH

TOWNSHIP BAYONNE CITY

TYPE THRU GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 3 **LENGTH** 57 ft **WIDTH** 12.1 ft

CONSTRUCTION DT 1901 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT CNJ RR OFFICE OF ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries the former CNJ RR multi-track main line, now reduced to a two-track Conrail industrial branch, over a city street. It is located in an undistinguished urban residential and commercial area, with modernized row houses and post-1950 brick houses and small brick apartment buildings, and a railroad yard.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 3-span bridge on built-up steel bents and concrete abutments is composed of six thru girders, formerly carrying 5 tracks. The center 4 spans have thru girders only for the main span, with stringers used for the approaches, while the outermost spans are same-depth girders from abutment to abutment. The bridge is nearly identical to nearby 0963153, also built in 1901. While a relatively early and unaltered bridge, it is a representative example of a very common bridge type.

INFOR MATION

PHOTO: 28:28-30 (06/07/91) REVISED BY (DATE): QUAD: Jersey City

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1000002 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 519 OVER HARIHOKAKE CREEK **FACILITY** CR 519

TOWNSHIP ALEXANDRIA TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 25 ft **WIDTH** 24.5 ft

CONSTRUCTION DT 1938 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT FRANK BOHREN, CO ENG **BUILDER** WM H SCHAAF, CONTRACTOR

SETTING / CONTEXT The single span two lane bridge carries moderate traffic on County Route 519 over Harihohake Creek. It is located in a thinly wooded rural setting. An altered 1812 stone house, open fields, and sparse modern housing are within sight of the bridge. Final draft 8/93.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The concrete encased steel stringer bridge is supported on concrete abutments and wingwalls. It has arch-pierced concrete balustrades. It is a representative example of a common design used by the county and the state in pre-WW II road expansion projects. It is not technologically or historically noteworthy.

INFOR MATION

PHOTO: 624:23,69:22 (03/92) REVISED BY (DATE): QUAD: Frenchtown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1000003 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 513 OVER TRIBUTARY SOUTH BRANCH RARITAN RIVER **FACILITY** CR 513

TOWNSHIP FRANKLIN TOWNSHIP

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 42 ft **WIDTH** 32 ft

CONSTRUCTION DT 1940 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane county road with narrow shoulders over a tributary of the South Branch of the Raritan River. It is located in a rural setting of open fields and a picturesque 19th-century church and cemetery.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The concrete earth-filled elliptical deck arch bridge with concrete wing walls and paneled parapets is unaltered. One of over five similar arches in the county built between 1914 and 1940, this span is simply representative of the type and is not technologically or historically significant.

INFOR MATION

PHOTO: 617:1-2 (02/92) REVISED BY (DATE): QUAD: Pittstown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1000004 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 513 OVER TRIBUTARY SOUTH BRANCH RARITAN RIVER **FACILITY** CR 513

TOWNSHIP LEBANON TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 25 ft **WIDTH** 30 ft

CONSTRUCTION DT 1925 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The two lane bridge carries County Route 513 over a tributary of the South Branch of the Raritan River. It is located in a wooded rural setting. It carries a moderately traveled highway. The land is used for agricultural purposes.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed concrete encased steel stringer bridge with paneled concrete parapet was widened circa 1930. Part of the abutment is fieldstone and the extension is concrete. One of over 75 such spans in the county, it is a representative altered example of a bridge type commonly used by the county and state in the post-WW I road improvement projects. It is technologically and historically undistinguished.

INFOR MATION

PHOTO: 68M: 41-42 (07/91) REVISED BY (DATE): QUAD: Califon

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1000005 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 513 OVER LITTLE BROOK **FACILITY** CR 513

TOWNSHIP CALIFON BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 26 ft **WIDTH** 30.1 ft

CONSTRUCTION DT 1925 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a two-lane county route and shoulders over Little Brook. It is located in a wooded rural setting. It carries moderately heavy highway traffic over a small stream.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The concrete encased stringer bridge with paneled concrete parapets was widened, circa 1930, and is now supported on fieldstone abutments with concrete extensions and wingwalls. It is a representative example of a bridge type used extensively by the county and state in the post WWI road expansion projects. It is not historically or technologically significant.

INFOR MATION

PHOTO: 68M:3-4 (07/91) REVISED BY (DATE): QUAD: Califon

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1000006 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 513 OVER SOUTH BR RARITAN RIVER **FACILITY** CR 513

TOWNSHIP LEBANON TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 133 ft **WIDTH** 30.2 ft

CONSTRUCTION DT 1925 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT UNKNOWN **BUILDER** J. W. ROGERS

SETTING / CONTEXT The bridge carries County Route 513 over the South Branch of the Raritan River. It is located in a wooded sparsely settled rural area and carries moderately heavy traffic.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed concrete encased steel stringer three span bridge has concrete abutments and piers with paneled concrete parapets. It is a representative example of the type commonly constructed by the county and state in post WWI road expansion projects. One of over seventy-five stringer spans in the county, it is technologically and historically undistinguished.

INFOR MATION

PHOTO: 63:31A-32A (06/91) REVISED BY (DATE): QUAD: Califon

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1000008 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 514 OVER NESHANIC RIVER **FACILITY** CR 514

TOWNSHIP EAST AMWELL TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 91 ft **WIDTH** 24 ft

CONSTRUCTION DT 1933 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT UNKNOWN **BUILDER** DELTA CONSTRUCTION

SETTING / CONTEXT The bridge carries two lanes of a lightly travelled county road over the Neshanic River in a pastoral setting of open fields and scattered farm buildings.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed concrete encased stringer bridge with concrete balustrades is supported on concrete abutments and pier. It is of the type commonly used by the county and state in the road expansion projects of the 1920s and 1930s. It is not technologically or historically noteworthy, and it one of over 75 pre-World War II stringer spans in the county.

INFOR MATION

PHOTO: 68:9A-10A (06/91) REVISED BY (DATE): QUAD: Hopewell

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1000010 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 519 OVER LOCKATONG CREEK **FACILITY** CR 519

TOWNSHIP KINGWOOD TOWNSHIP

TYPE STONE ARCH **DESIGN** BARREL **MATERIAL** Stone

 # SPANS 3 **LENGTH** 52 ft **WIDTH** 28.1 ft

CONSTRUCTION DT Unknown **ALTERATION DT** 1941 **SOURCE** INSCRIPTION

DESIGNER/PATENT F BOHREN, CO ENG **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries two lanes of a moderately traveled county road over a minor stream. The setting is wooded and rural with sparse housing. A marker identifies the adjacent structure as the 1830 tavern built to replace the 1750 log Kingswood Tavern located on the same site. The bridge is contiguous to a pony truss span (1000011) that crosses the main channel of the stream.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY According to county records, the now corrugated steel-lined arches of the 3-span bridge are concrete lined. The original date of construction is not known, nor is it known if the spans are stone or concrete arches. 1941 may well be the date of reconstruction. The structure, which has larger arches flanking the central arch, is finished with coursed ashlar spandrel walls and ringstones. The undocumented span is not known to be historically or technologically distinguished. No plans survive.

INFOR MATION

PHOTO: 67:35-36 (06/91) REVISED BY (DATE): QUAD: Lumberville, PA

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1000011 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 519 OVER LOCKATONG CREEK **FACILITY** CR 519

TOWNSHIP KINGWOOD TOWNSHIP

TYPE PONY TRUSS **DESIGN** WARREN **MATERIAL** Steel

 # SPANS 1 **LENGTH** 67 ft **WIDTH** 26.6 ft

CONSTRUCTION DT 1940 **ALTERATION DT** 1983 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** STACY WIDDICOMBE

SETTING / CONTEXT The bridge carries a 2-lane collector road over a minor stream in a wooded rural area with sparse housing. The bridge adjoins a stone arch span that crosses the flood channel (1000010).

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed 4-panel riveted Warren pony truss bridge is supported on random ashlar abutments that were reinforced with concrete at an unknown date. Dated 1940 by the county, the bridge exhibits no distinctive details. It was rehabilitated in 1983 and has numerous welded repairs and reinforcing of joints. If the 1940 date is accurate, it is a late example of its type. One of over 25 Warren pony truss spans in the county, the altered bridge is technologically and historically undistinguished.

INFOR MATION

PHOTO: 67:37-41 (06/91) REVISED BY (DATE): QUAD: Lumberville, PA

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1000014 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 519 OVER BRANCH HAKIHOKAKE CREEK **FACILITY** CR 519

TOWNSHIP MILFORD BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 46 ft **WIDTH** 27 ft

CONSTRUCTION DT 1933 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT WALTER ROBERTS, CO ENG **BUILDER** FREEMAN & ZELLERS

SETTING / CONTEXT The two lane bridge is located on the edge of the village of Milford. It carries heavily traveled County Route 519 over a branch of the Hakihokake Creek. A late eighteenth century home is adjacent to the bridge. The site is undistinguished.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The concrete encased steel stringer bridge is supported on a concrete substructure and is finished with standard-design concrete balustrades. It exhibits no unusual construction details and is a representative example of the over 75 stringer bridges from before World War II that remain in the county. The bridge is not technologically or historically noteworthy.

INFOR MATION

PHOTO: 67:18, 627:28 (07/91) REVISED BY (DATE): QUAD: Frenchtown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1000016 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 523 OVER MINE BROOK **FACILITY** CR 523

TOWNSHIP RARITAN TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 29 ft **WIDTH** 25.8 ft

CONSTRUCTION DT 1934 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT UNKNOWN **BUILDER** WPA CREW (?)

SETTING / CONTEXT The bridge carries a two-lane county road over a minor stream in a wooded suburban area on what was the main road into Flemington. The heaviest traffic now bypasses this road. The adjacent 18th-century farm and outbuildings and Greek Revival house are well maintained with spacious grounds. The bridge is included within the physical boundary of the National Register-listed Flemington Historic District, but it is was built after the district's period of significance.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible. Listed. Flemington Historic District. 09/17/1980. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased stringer bridge presents the facade of an elliptical stone arch. Low stone recessed mortar parapets end in stone end posts supporting cast iron lamp standards. Planters are recessed in both parapets. A plaque identifies the span as an WPA Work Project. Ornate design elements and entrance location link the span to the City Beautiful movement. Although built after the district achieved its significance, the well-preserved bridge is an eligible resource in its own right.

INFOR MATION

Bibliography:
Seely, Bruce. Building the American Highway System. 1987. Hunterdon County Engineer. Bridge File: Q-19.

Physical Description: The 29'-long encased stringer bridge on a concrete substructure is finished to appear as an arch. The rubble-coursed stone spandrel wall presents an arched waterway opening. The flared wingwalls, parapets, and end posts are similarly detailed, and planters are set into the tops of the parapets. The original cast iron light standards are still in place atop the end posts, but the luminaries are not. The bridge is well preserved.

Historical and Technological Significance: The 1934 encased stringer bridge is historically significant as an example of the City Beautiful philosophy and the product of Depression-era work relief projects that were used effectively to upgrade the nation's infrastructure in the 1930s (criterion A). The bridge is finished in the rustic mode, making it the most ambitiously detailed, county-built stringer span in Hunterdon County. It is located on what was the highway into Flemington, the county seat, which accounts for its custom detailing. it was designed to serve as a proper entryway into the community.

According to county records, the span was constructed as a federally funded Emergency Relief Administration project. Such projects were developed by the Roosevelt administration as a means of making work during the depths of the Depression. With the drop in local funds due to a marked decline in property taxes collected, the federal money allocated to counties made road and bridge work possible in New Jersey and every other state in the Union during the 1930s. The influx of federal money, administered through the Bureau of Public Roads, made it possible to continue the "golden age of highway construction" through the Depression. Such projects were accomplished with some federally mandated requirements to increase employment, like hand work as opposed to power equipment, and custom detailing, like stonework, that was labor intensive. This bridge ranks as one of the most distinctive examples of Depression-era federally-funded bridge projects in the state.

Boundary Description and Justification: The bridge is located within the boundary of the National Register-listed Flemington Historic District, but it was built after the 18th- and 19th-century period of significance of the district. It therefore is a noncontributing resource to the historic district. The bridge is evaluated as distinguished in its own right. Thus the bridge and its setting are significant. For a precise definition of the boundary of the historic district, refer to the National Register file at NJHPO.

PHOTO: 61:23A-24A (06/91) REVISED BY (DATE): QUAD: Flemington

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1000017 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 523 OVER THIRD NESHANIC RIVER **FACILITY** CR 523

TOWNSHIP DELAWARE TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 24 ft **WIDTH** 30 ft

CONSTRUCTION DT 1937 **ALTERATION DT** **SOURCE** PLAQUE/COUNTY RECORD

DESIGNER/PATENT FRANK W. BOHREN, CE **BUILDER** WM SCHAAF, BAPTISTOWN NJ

SETTING / CONTEXT The single span two lane bridge carries County Route 523 over the Third Branch of the Neshanic River. It is located in a wooded setting adjacent to a small village of mixed date residences. It carries moderately heavy traffic.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The concrete encased steel stringer bridge with concrete abutments was widened at an unknown date. The paneled concrete parapet, present on one side, has been replaced by a metal beam and post guide railing on the altered side. The bridge is an undistinguished example of a type which was commonly used by the county and state in the road expansion projects prior to WW II. The altered bridge is not technologically or historically noteworthy.

INFOR MATION

PHOTO: 610:21-22 (07/91) REVISED BY (DATE): QUAD: Stockton

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1000022 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 579 OVER TRIBUTARY 3RD NESHANIC RIVER **FACILITY** CR 579

TOWNSHIP EAST AMWELL TOWNSHIP

TYPE STONE ARCH **DESIGN** ELLIPTICAL **MATERIAL** Stone

 # SPANS 2 **LENGTH** 45 ft **WIDTH** 30.5 ft

CONSTRUCTION DT 1890ca **ALTERATION DT** 1974 **SOURCE** STYLE/INSCRIPTION

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane county road over a tributary of the Third Branch of the Neshanic River in an unspoiled agricultural setting.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The undocumented rubble-coursed 2-span stone arch bridge with corresponding parapets has been widened on the upstream side. The widening is a corrugated metal liner and is finished with a stone spandrel wall, but it does not have gauged ringstone like the original portion. The bridge has been repaired, repointed, and reinforced with concrete. The alterations have seriously compromised the design integrity of the bridge. It is too altered to be of historical or technological distinction.

INFOR MATION

PHOTO: 626:36-39 (06/91) REVISED BY (DATE): QUAD: Hopewell

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1000026 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 614 OVER TRIBUTARY OF HAKIHOKAKE CREEK **FACILITY** CR 614

TOWNSHIP HOLLAND TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 23 ft **WIDTH** 24.5 ft

CONSTRUCTION DT 1927 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT GRANT DAVIS, CO ENG **BUILDER** SNOOK BROTHERS

SETTING / CONTEXT The two-lane bridge carries County Route 614 over a tributary of Hakihohake Creek. It is located in a wooded rural setting near open fields and sparse housing. A 19th-century farmstead is adjacent to the bridge.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The concrete encased steel stringer bridge is supported on concrete abutments with wing walls. It has paneled concrete parapets. Concrete buttressing has been added to the original abutments. One of over 75 stringer bridges in the county, it was a design commonly employed by the county and state in post-WW I road improvement projects. It is not technologically or historically noteworthy.

INFOR MATION

PHOTO: 620:27-28 (02/92) REVISED BY (DATE): QUAD: Frenchtown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1000028 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 619 OVER HAKIHOHAKE CREEK **FACILITY** CR 619

TOWNSHIP ALEXANDRIA TOWNSHIP

TYPE RIGID FRAME **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 33 ft **WIDTH** 30 ft

CONSTRUCTION DT 1938 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT FRANK W. BOHREN, CO ENG **BUILDER** WM SCHAAF

SETTING / CONTEXT The bridge carries a 2-lane county road with shoulders over a minor stream. It carries moderate traffic and is located in a rural setting near the edge of Frenchtown. There is a scattering of mixed commercial and residential buildings. An oil storage facility is located next to the bridge.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The reinforced concrete rigid frame bridge has concrete wingwalls and standard design concrete balustrades. The fascia of the span has a slight arch form. A plaque identifies the span as the first of its type in the county, and it is the only one built by the county that remains. However, the form was in use in New York beginning in 1920, and was common by the 1930s. Although the type is unusual for the county, the technology is not innovative.

INFOR MATION

PHOTO: 624:17-18 (03/92) REVISED BY (DATE): QUAD: Frenchtown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1000029 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 633 OVER BEAVER BROOK C82 **FACILITY** CR 633

TOWNSHIP CLINTON TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 36 ft **WIDTH** 20.4 ft

CONSTRUCTION DT 1920 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a two-lane road over Beaver Brook. It is located in a wooded area of sparse housing, immediately adjacent to the approach to the interstate highway.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single span concrete encased steel stringer bridge is supported on random stone abutments widened with concrete extensions. One wing wall is stone, the others are concrete. The upstream stringer is not concrete encased. The bridge has paneled concrete parapets on either side. The bridge is an undistinguished example of the most common type of design used by the county and state in the pre-WW II highway expansion projects. It is not technologically or historically distinguished.

INFOR MATION

PHOTO: 612:25-26 (01/92) REVISED BY (DATE): QUAD: High Bridge

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1000035 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 523 OVER SECOND BRANCH NESHANIC RIVER **FACILITY** CR 523

TOWNSHIP RARITAN TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 30 ft **WIDTH** 28.1 ft

CONSTRUCTION DT 1923 **ALTERATION DT** 1950 **SOURCE** STYLE/COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries two lane County Route 523 over the Second Branch of the Neshanic River. It is located in a wooded sparsely developed rural area. It carries a moderately traveled arterial road. The setting is undistinguished.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single span bridge is constructed of concrete encased interior steel stringers and non-encased steel fascia stringers. It was widened with outer stringers in 1950 and is supported on stone masonry and concrete abutments with wingwalls. It has low paneled concrete parapets. A representative example of a common type used by the county and state in post WWI road expansion projects, it is not technologically or historically noteworthy.

INFOR MATION

PHOTO: 61:33A-34A (06/91) REVISED BY (DATE): QUAD: Stockton

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1000040 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MAIN STREET OVER NORTH BRANCH ROCKAWAY CREEK **FACILITY** MAIN STREET

TOWNSHIP TEWKSBURY TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 34 ft **WIDTH** 17.8 ft

CONSTRUCTION DT 1921 **ALTERATION DT** **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** SUTTON & ERNEST

SETTING / CONTEXT The narrow stringer bridge carries lightly traveled Main Street over a minor stream in a wooded setting on the edge of the village of Mountainville. It is immediately adjacent to a crossroads with Philhower Road.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed concrete encased steel stringer bridge with diaphragms is supported on older coursed stone abutments and wing walls. It has modern steel guide railings on both sides, but of different dates and styles. One of over seventy-five stringer bridges in the county, the design was commonly used by the county and state in post-WW I road improvement projects. It is not technologically or historically significant.

INFOR MATION

PHOTO: 66:7-8 622:5-6 (06/91) REVISED BY (DATE): QUAD: Califon

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1000042 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WATER STREET OVER TRIBUTARY NORTH BRANCH ROCKAWAY CREEK **FACILITY** WATER STREET

TOWNSHIP TEWKSBURY TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 35 ft **WIDTH** 24 ft

CONSTRUCTION DT 1938 **ALTERATION DT** **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries two-lane Water Street over a tributary of the North Branch of Rockaway Creek. It is located in a wooded setting on the edge of the village of Mountainville. A concrete and stone retaining wall channels the creek. Open fields and sparse modern housing is in view.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed concrete encased steel stringer bridge is supported on concrete abutments with wingwalls. Pipe and concrete post railings are present at each side. One of over seventy-five stringer bridges in the county, it is a representative example of a commonly used design employed by the county and the state in pre-WW II road improvement projects. It is not technologically or historically significant.

INFOR MATION

PHOTO: 66:19-20 622:1 (06/91) REVISED BY (DATE): QUAD: Califon

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1000043 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WATER STREET OVER TRIBUTARY NORTH BRANCH ROCKAWAY CREEK **FACILITY** WATER STREET

TOWNSHIP TEWKSBURY TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Concrete

 # SPANS 2 **LENGTH** 38 ft **WIDTH** 13.8 ft

CONSTRUCTION DT 1925(1991) **ALTERATION DT** **SOURCE** COUNTY

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries Water Street over a tributary of the North Branch of Rockaway Creek. It is located in a village of nineteenth and early twentieth century well-maintained homes.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY A new single span prestressed concrete bridge is currently being constructed to replace a 1963 two span steel stringer bridge. Photographs reveal the 1963 structure to have been a reconstruction of a 1925 bedstead pony truss. The new bridge is an undistinguished example of a common bridge type. It is not eligible.

INFOR MATION

PHOTO: (07/91) REVISED BY (DATE): QUAD: Califon

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1000044 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BOULDER HILL ROAD OVER TRIBUTARY NORTH BR ROCKAWAY CREEK **FACILITY** BOULDER HILL ROAD

TOWNSHIP TEWKSBURY TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 24 ft **WIDTH** 13.9 ft

CONSTRUCTION DT 1926 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT GRANT DAVIS, CO ENGINEER **BUILDER** STOUT & CRATER

SETTING / CONTEXT The one lane bridge carries gravel surfaced Boulder Hill Road over a tributary of the North Branch of Rockaway Creek. It is located in a wooded rural setting on a lightly traveled road immediately adjacent to an intersection. It is in view of open fields and sparse housing.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed concrete encased steel stringer bridge is supported on concrete encased stone abutments. Fieldstone wing walls are capped with concrete. It has paneled concrete parapets. One of over 75 stringer bridges in the county, it is a representative example of a design commonly used by the county and state in the post-WW I road improvement projects. It is not technologically or historically significant.

INFOR MATION

PHOTO: 66:15-16 (06/91) REVISED BY (DATE): QUAD: Califon

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1000045 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BURRELL ROAD OVER TRIBUTARY NORTH BRANCH ROCKAWAY CREEK **FACILITY** BURRELL ROAD

TOWNSHIP TEWKSBURY TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 34 ft **WIDTH** 17.5 ft

CONSTRUCTION DT 1926 **ALTERATION DT** 1988 **SOURCE** COUNTY RECORDS/INSCR

DESIGNER/PATENT UNKNOWN **BUILDER** STOUT & CRATER

SETTING / CONTEXT The narrow bridge carries Burrell Road over a tributary of the North Branch of the Rockaway Creek. It is located in a heavily wooded rural setting on a lightly traveled country road.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The concrete encased steel stringer bridge was widened in 1988. It is supported on one older repointed fieldstone abutment and one concrete abutment. It has metal pedestrian railings and beam guide railings, replacing the original concrete parapet. It is an altered and undistinguished example of a common bridge type that is not technologically innovative or historically noteworthy.

INFOR MATION

PHOTO: 66:13A-14A (07/91) REVISED BY (DATE): QUAD: Califon

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1000049 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED ROCKTOWN-LAMBERTVILLE ROAD OVER SWAN CREEK **FACILITY** ROCKTOWN LAMBERTVILLE ROAD

TOWNSHIP WEST AMWELL TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 34 ft **WIDTH** 27 ft

CONSTRUCTION DT 1923 **ALTERATION DT** 1975 **SOURCE** INSCRIPTION

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a two-lane road over the Swan Creek. It is located in a wooded rural setting on a lightly traveled country road.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single span steel stringer bridge with low paneled concrete parapet and concrete abutments has been extensively altered. Stringers have been replaced. It was widened in 1949 and 1975. One of over 75 pre-World War II stringer bridges in the county, it is an altered example of a common type. It is not technologically or historically significant.

INFOR MATION

PHOTO: 62:8,69:16 (06/91) REVISED BY (DATE): QUAD: Lambertville

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1000050 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 601 OVER TRIBUTARY ALEXAUKEN CREEK **FACILITY** CR 601

TOWNSHIP WEST AMWELL TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 31 ft **WIDTH** 24 ft

CONSTRUCTION DT 1938 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT FRANK BOHREN, CO ENG **BUILDER** WM H SCHAAF

SETTING / CONTEXT The bridge carries two-lane County Route 601 over a tributary of the Alexauken Creek. It is located in a wooded rural setting with sparse housing. The road is lightly traveled.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The short skewed single span concrete encased steel stringer bridge is supported on concrete abutments with wing walls. It is bordered by concrete balustrades. The bridge is a late example of a common design used by the county and state in the pre-WW II road improvement projects. One of over 75 such spans in the county, it is not technologically or historically noteworthy.

INFOR MATION

PHOTO: 612:43-44, 1 (01/92) REVISED BY (DATE): QUAD: Stockton

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1000051 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED ALEXAUKEN CREEK ROAD OVER ALEXAUKEN CREEK **FACILITY** ALEXAUKEN CREEK ROAD

TOWNSHIP WEST AMWELL TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 65 ft **WIDTH** 16.3 ft

CONSTRUCTION DT 1927 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT GRANT DAVIS, CO ENG **BUILDER** SNOOK BROTHERS

SETTING / CONTEXT The single lane stringer bridge carries Alexauken Creek Road over Alexauken Creek. It is located in a wooded rural setting. The land is used for agricultural purposes. The road carries light traffic.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two span skewed concrete encased steel stringer bridge is supported on concrete abutments and a concrete encased stone pier. It has paneled concrete parapets. The fieldstone wing walls also date from an earlier bridge. The bridge is a representative example of a type commonly used by the county and state in the post-WWI road expansion projects. It is technologically and historically undistinguished.

INFOR MATION

PHOTO: 612:5-6 (01/92) REVISED BY (DATE): QUAD: Stockton

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1000053 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WASHINGTON AVENUE OVER SOUTH BRANCH RARITAN RIVER **FACILITY** WASHINGTON AVENUE

TOWNSHIP HIGH BRIDGE BOROUGH

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 2 **LENGTH** 156 ft **WIDTH** 32.3 ft

CONSTRUCTION DT 1920 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT GRANT DAVIS, CO ENG **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane street and sidewalks over the South Branch of the Raritan River. It is located in a suburban setting, adjacent to a city park and baseball field. An industrial site, the historically significant Taylor-Wharton Foundry is nearby.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two span elliptical reinforced concrete deck arch bridge is finished with scored spandrel walls and concrete paneled parapets, one section of which has been replaced with beam guide railing. The bridge is well-proportioned, but it is not an early or technologically significant example of its type. It is not innovative or historically noteworthy. It is also not an early example of the bridge type.

INFOR MATION

PHOTO: 612:14-16 (01/92) REVISED BY (DATE): QUAD: High Bridge

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1000055 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED ARCH STREET OVER SOUTH BRANCH RARITAN **FACILITY** ARCH STREET

TOWNSHIP HIGH BRIDGE BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 93 ft **WIDTH** 26 ft

CONSTRUCTION DT 1934 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT UNKNOWN **BUILDER** C. A.SHARP & SON

SETTING / CONTEXT The bridge carries a two-lane road over the South Branch of the Raritan River. It is located in a suburban setting of mixed houses. The road carries moderately heavy traffic.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two span concrete encased steel stringer bridge is supported on concrete abutments and a concrete cutwater pier. It has concrete balustrades. One end post has been replaced. The bridge is an undistinguished example of the most common bridge type used by the county and state in pre-WW II road expansion projects. It is not historically or technologically significant.

INFOR MATION

PHOTO: 612:12-13 (01/92) REVISED BY (DATE): QUAD: High Bridge

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1000056 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED SOUTH FRANKLIN STREET OVER SWAN CREEK **FACILITY** SOUTH FRANKLIN STREET

TOWNSHIP LAMBERTVILLE CITY

TYPE STONE ARCH **DESIGN** ELLIPTICAL **MATERIAL** Stone

 # SPANS 1 **LENGTH** 40 ft **WIDTH** 23 ft

CONSTRUCTION DT 1872 **ALTERATION DT** Unknown **SOURCE** INSCRIPTION

DESIGNER/PATENT UNKNOWN **BUILDER** COUNTY FORCES

SETTING / CONTEXT The bridge carries 2 lanes, shoulders, and sidewalks over a minor stream in the architecturally and historically significant 19th-century town of Lambertville. It is located at a crossroads. The historic traffic pattern in the town was altered this century when the NJ 29 bypass was built. South Franklin Street is now only a few blocks long. The bridge is located in the Lambertville Historic District. It is one of three 1870s stone arch spans in the district (100Y040, 100Y041).

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Listed. Lambertville Historic District. 06/30/1983. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The graceful elliptical stone arch bridge has undergone few alterations. Concrete parapets have been added. The arch opening is defined by ringstones. A stone post in the center of the later concrete balustrade is inscribed. The roadway has granite curbstones and Belgian pavers. The bridge was built within the period of significance of the Lambertville Historic District, and its historical role in the transportation system of the village makes the bridge a contributing resource.

INFOR MATION

BIBLIOGRAPHY:

Hunterdon County Engineer's Office, Bridge Card Y1.
Hunterdon County Cultural and Heritage Commission: The First 275 Years of Hunterdon County, 1714-1989. Flemington, New Jersey, 1989.

PHYSICAL DESCRIPTION: The elliptical stone arch bridge was built in 1872, as inscribed in a commemorative stone post that also bears the names of the three committee members, S. Lilly, J. Bird, and S.B. Bray. The 40'-long arch that is finished with gauged rusticated ringstones is constructed of the locally common gray granite stone which was quarried at nearby Raven Rock. In contrast to the regular coursed ringstone are the rubble-coursed spandrel walls. Stone end posts and center post on either side of the bridge are embedded in newer reinforced concrete parapets that are unadorned. The bridge is a 24 feet wide with two sidewalks with granite curbstones and Belgian pavers which have been covered with macadam. Long stone wingwalls have been repointed as have the spandrel walls. No other alterations are apparent.

HISTORICAL AND TECHNOLOGICAL SIGNIFICANCE: The 1872 stone arch bridge is located in the National Register-listed Lambertville Historic District, recognized for its transportation and architectural significance. Lambertville is a town which was shaped by transportation systems. Located on the Old York Road from Philadelphia to New York, its growth surged with the opening of the D&R Canal Feeder in the early 1830s. The Feeder, an important link with industrial Trenton and Philadelphia with the rich eastern Pennsylvania coal fields, carried its peak loads in the 1860s. In addition to the canal feeder, which was open to marine traffic until about 1913, Lambertville was also the site of the main shops of the Belvidere & Delaware Railroad, built by the Camden & Amboy Railroad from Trenton to Warren County and opened in 1851. The railroad played a significant role in the late-19th and early-20th century growth of the community as did roads linking surrounding communities. This bridge is situated on the old Ringoes-Trenton road at its crossroads with the Hopewell Road. Technologically the stone arch is representative of what by 1872 was common technology. It is significant because it was built within the period of significance of the historic district and that it contributes to the historic character of the district. It is one of three stone arch bridges in the historic district. All are evaluated as contributing resources because of their dates of construction and state of preservation

PHOTO: M68:32-34 (06/92) REVISED BY (DATE): QUAD: Lambertville

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US
November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1000057 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED ROCK ROAD OVER SWAN CREEK **FACILITY** ROCK ROAD

TOWNSHIP LAMBERTVILLE CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 34 ft **WIDTH** 16 ft

CONSTRUCTION DT 1925 **ALTERATION DT** **SOURCE** INSCRIPTION/CO RCDRS

DESIGNER/PATENT GRANT DAVIS, CO ENG **BUILDER** F R LEE WHITEHOUSE ST, NJ

SETTING / CONTEXT The one lane bridge carries Rock Road over the Swan Creek. It is located in a wooded rural area on a dirt lane adjacent to an area currently undergoing modern residential development.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The concrete encased steel stringer bridge with low paneled concrete parapets bears on the older fieldstone abutments with fieldstone wing walls of a previous span. One of over 75 steel stringer spans in the county, it was a design used by the county and the state post-WW I road expansion projects. It lacks technologically or historically significant.

INFOR MATION

PHOTO: 62:5,69:14-15 (06/91) REVISED BY (DATE): QUAD: Lambertville

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1000058 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED SOUTH UNION STREET OVER SWAN CREEK **FACILITY** SOUTH UNION STREET

TOWNSHIP LAMBERTVILLE CITY

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 44 ft **WIDTH** 30.5 ft

CONSTRUCTION DT 1916 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT GRANT DAVIS, CO ENG **BUILDER** SUTTON & ERNEST

SETTING / CONTEXT The bridge carries a quiet 2-lane with sidewalks residential street over Swan Creek in Lambertville. It is surrounded by 19th-century homes and retail businesses. The bridge is one of six over Swan Creek in the Lambertville Historic District which encompasses most of the city. The district recognizes the 19th-century architectural and transportation significance of the community. A utility pipe has been added through the arch.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Historic District Status Unresolved. Listed. Lambertville Historic District. 06/30/1983. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The reinforced concrete deck arch bridge is finished with a concrete balustrade with vase-shaped balusters and paneled posts. Many of the balusters have been replaced with plain ones. Although the bridge perpetuates the local preference for arch spans, it is not a technologically distinguished example. It is altered, and it is outside the 19th-century period of significance of the National Register-listed Lambertville Historic District. It is thus a noncontributing resource.

INFOR MATION

PHOTO: 68M:27-28 (07/91) REVISED BY (DATE): QUAD: Lambertville

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1000059 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CHERRY ST OVER SOUTH BR ROCKAWAY CREEK **FACILITY** CHERRY STREET (CR 629)

TOWNSHIP LEBANON BOROUGH

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 2 **LENGTH** 30 ft **WIDTH** 25.7 ft

CONSTRUCTION DT 1921 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a lightly traveled 2-lane county road over a minor stream in a suburban setting on the edge of the borough of Lebanon. Modern housing and commercial development are nearby.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span slab bridge is supported on rubble stone abutments and a concrete pier. Fieldstone wingwalls are capped with concrete. The bridge has been widened in kind. The downstream side of the stone abutments has been extended with concrete. Modern guide railings delineate the edge of the bridge. It is a well-represented example of a common bridge type is not technologically or historically distinguished.

INFOR MATION

PHOTO: 625:19-20 (03/92) REVISED BY (DATE): QUAD: Califon

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1000061 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED STANTON ROAD OVER PRESCOTT BROOK **FACILITY** STANTON ROAD

TOWNSHIP READINGTON TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 55 ft **WIDTH** 16.4 ft

CONSTRUCTION DT 1930ca **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The one-lane bridge carries Stanton Road over the Prescott Brook. It is located in a wooded rural setting on a lightly traveled country road. The land is used for mixed agricultural purposes.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two span encased stringer bridge is supported on one ashlar and one concrete abutment. Wing walls are stone masonry. The paneled concrete parapet has been damaged and is partially replaced with metal guide railing. The concrete pier has been re-faced. One of over 75 such spans in the county, it is an undistinguished example of a common bridge type used by the county and the state in the pre-WW II road expansion projects. It is not historically or technologically significant.

INFOR MATION

PHOTO: 62:30-31 (06/91) REVISED BY (DATE): QUAD: Flemington

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1000063 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MCCAN MILL ROAD OVER TRIBUTARY OF LAMINGTON RIVER **FACILITY** MCCAN MILL ROAD

TOWNSHIP TEWKSBURY TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 33 ft **WIDTH** 15.8 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a two-lane, lightly traveled road over a tributary of the Lamington River. It is located in a wooded rural setting with sparse development.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The concrete encased steel stringer bridge with paneled concrete parapets is supported on concrete abutments with stone wingwalls. Although unaltered, it is a representative example of the most common pre-WW II bridge type in the state. One of over 75 such spans, it is not historically or technologically noteworthy.

INFOR MATION

PHOTO: 64:6-7 (06/91) REVISED BY (DATE): QUAD: Gladstone

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1000064 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BLACK RIVER ROAD OVER LAMINGTON RIVER **FACILITY** BLACK RIVER ROAD

TOWNSHIP TEWKSBURY TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 116 ft **WIDTH** 25.2 ft

CONSTRUCTION DT 1931 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT W.E. ROBERTS CO. **BUILDER** C A SHARP & SON

SETTING / CONTEXT The bridge carries 2-lane Black River Road over the Lamington River. It is located in a wooded rural setting on a lightly traveled country road. The land is used for agricultural purposes.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 03/12/01

SUMMARY The 1931 concrete encased steel stringer three span bridge is supported on concrete abutments and piers. It is finished with a cavetto shaped fascia bay topped by concrete balustrades with oval openings. It is an unaltered example with custom detailing of the most common pre-WW II bridge type in the state. It is not technologically or historically distinguished. Each span is about 40' long.

INFOR MATION

PHOTO: 64:41-44 (06/91) REVISED BY (DATE): QUAD: Gladstone

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1000065 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED HOMESTEAD ROAD OVER TRIBUTARY LAMINGTON RIVER **FACILITY** HOMESTEAD ROAD

TOWNSHIP TEWKSBURY TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 2 **LENGTH** 33 ft **WIDTH** 15.8 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries one lane of lightly traveled country road over a minor stream in a wooded rural setting at a crossroads. It is adjacent to restored 19th century barns and milling complex converted to housing. The area is well maintained.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The concrete slab bridge with random ashlar abutments, concrete center pier, and low paneled concrete parapets appears unaltered. The abutments probably date from an earlier span. It exhibits spalling and exposed reinforcing bars. A representative example of a common bridge type, the span is not technologically innovative nor historically noteworthy.

INFOR MATION

PHOTO: 64:22-24 (06/91) REVISED BY (DATE): QUAD: Califon

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1000066 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PALATINE ROAD OVER TRIBUTARY OF LAMINGTON RIVER **FACILITY** PALATINE ROAD

TOWNSHIP TEWKSBURY TOWNSHIP

TYPE STONE ARCH **DESIGN** ELLIPTICAL **MATERIAL** Stone

 # SPANS 1 **LENGTH** 22 ft **WIDTH** 14.5 ft

CONSTRUCTION DT 1900 **ALTERATION DT** **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** GEORGE SCHUYLER (PLAQUE)

SETTING / CONTEXT The bridge carries one lane of a quiet country road over a minor stream in a sparsely developed, wooded rural setting. The land is used for mixed agricultural purposes.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The short elliptical stone arch bridge with a rising profile has low stone parapets. It has been altered. New concrete toe walls have been added to correct undermining. Extensive patching and re-pointing are also evident. The 1900 bridge has no distinguishing features and is a short, altered example of a type well represented in the county. It is not historically or technologically noteworthy based on its size and alterations.

INFOR MATION

PHOTO: 64:21-22 (06/91) REVISED BY (DATE): QUAD: Califon

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1000070 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED OAK GROVE ROAD OVER LOCKATONG CREEK **FACILITY** OAK GROVE ROAD

TOWNSHIP FRANKLIN TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 36 ft **WIDTH** 20 ft

CONSTRUCTION DT 1933 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The narrow stringer bridge carries Oak Grove Road over Lockatong Creek. It is located in a sparsely settled rural are of open fields. An 18th-century house is nearby. The road carries little traffic over the wooded streambed and minor stream.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed two span concrete encased steel stringer bridge with pipe and concrete post railings is supported on concrete abutments with wingwalls and pier. It is an undistinguished example of a design commonly used by the county and state in the pre-WW II road improvement projects. One of over 75 such spans in the county, it is not technologically or historically noteworthy.

INFOR MATION

PHOTO: 616:17-18 (02/92) REVISED BY (DATE): QUAD: Pittstown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1000071 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 645 (MAIN STREET) OVER SPRUCE RUN **FACILITY** CR 645 (MAIN STREET)

TOWNSHIP GLEN GARDNER BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 66 ft **WIDTH** 22.6 ft

CONSTRUCTION DT 1925 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries two lane County Route 645 (Main Street) over the Spruce Run. It is located in a shady setting on the edge of a picturesque village of 19th-century homes. It is adjacent to a small park. The road carries light traffic.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed two span concrete encased steel stringer bridge has concrete abutments, wing walls, and pier. Concrete scour protection has been added to the original scour protection on the pier. It has also been added to the abutments and wing walls. A typical example of a well-represented bridge type in the county, it is not technologically or historically noteworthy.

INFOR MATION

PHOTO: 610:33-34 (07/91) REVISED BY (DATE): QUAD: High Bridge

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1000072 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MAIN STREET OVER SPRUCE RUN **FACILITY** MAIN STREET

TOWNSHIP GLEN GARDNER BOROUGH

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 60 ft **WIDTH** 21.7 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge carries a 2-lane road over a minor stream on a quiet tree-lined street on the edge of a village. It is adjacent to well-maintained mixed homes and a 19th century inn, but the surroundings do not have historic district potential.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed earth-filled elliptical deck arch bridge has new pipe railing on one side and new beam guide railing on the other. The intrados has been coated with gunite. Concrete post and cable delineates the approach to the bridge. An example of a common bridge type, the span has been extensively altered marring its design integrity. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 610:43-44 (07/91) REVISED BY (DATE): QUAD: High Bridge

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1000077 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 651 OVER TRIBUTARY LOCKATONG CREEK **FACILITY** CR 651

TOWNSHIP KINGWOOD TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Concrete

 # SPANS 1 **LENGTH** 24 ft **WIDTH** 24 ft

CONSTRUCTION DT 1937 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT FRANK W. BOHREN, CO ENG **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in a wooded sparsely developed setting. It carries a two lane lightly traveled spur of County Route 519 over a tributary of the Lockatong Creek.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed single span reinforced concrete slab bridge is supported by concrete abutments with concrete wingwalls. It is finished with low paneled parapets. A wire rope and wood post guide fence remains on one side. It is neither historically nor technologically noteworthy. It is a representative example of a common type.

INFOR MATION

PHOTO: 67:43,69:18 (07/91) REVISED BY (DATE): QUAD: Lumberville

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1000079 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED HORSESHOE BEND ROAD OVER COPPER CREEK **FACILITY** HORSESHOE BEND ROAD

TOWNSHIP KINGWOOD TOWNSHIP

TYPE STONE ARCH **DESIGN** BARREL **MATERIAL** Stone

 # SPANS 1 **LENGTH** 21 ft **WIDTH** 15 ft

CONSTRUCTION DT 1896 **ALTERATION DT** Unknown **SOURCE** INSCRIPTION

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in a quiet rural setting of sparse housing and open fields. It carries a single lane of an unimproved road over a minor stream. The roadway accommodates light traffic. The bridge is sited in the center of an S-shaped curve.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The stone arch bridge is founded directly on bedrock. Four stone masonry wing walls extend from the arch. The bridge has been widened at the northwest and southeast corners, using rolled steel I-beams placed diagonally between the spandrel and wingwall. The additions have concrete decks. Repointing is evident, and repairs have been made to the parapets. The numerous alterations have compromised the original design integrity of the bridge. It is not technologically or historically noteworthy.

INFOR MATION

PHOTO: 67:3,69:19-20 (07/91) REVISED BY (DATE): QUAD: Frenchtown

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1000081 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED THATCHER ROAD OVER TRIBUTARY OF LOCKATONG CREEK **FACILITY** THATCHER ROAD

TOWNSHIP KINGWOOD TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 42 ft **WIDTH** 15.9 ft

CONSTRUCTION DT 1945 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries single lane Thatcher Road over a tributary of the Lockatong Creek. It is located in the center of an S curve. The setting is heavily wooded and rural.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single span steel stringer bridge is supported on concrete abutments. Concrete wingwalls extend from the west end while the east end retains the older stone masonry wingwalls. The superstructure consists of four wide-flange sections with welded cross bracing. The railing is steel pipe and concrete posts. An undistinguished example of the most common bridge type used in the state in the pre-WW II road expansion projects, it is not technologically or historically significant.

INFOR MATION

PHOTO: 67:31-32 (07/91) REVISED BY (DATE): QUAD: Lumberville

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1000082 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MUDDY RUN ROAD OVER MUD RUN **FACILITY** MUDDY RUN ROAD

TOWNSHIP KINGWOOD TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 33 ft **WIDTH** 15.1 ft

CONSTRUCTION DT 1919 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The single lane bridge is located in a wooded rural setting of sparse development. The bridge carries light traffic on the gravel Muddy Run Road over Mud Run.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single span concrete encased steel stringer bridge with paneled concrete parapets is supported by stone masonry abutments. Stone masonry wingwalls extend from the south abutment and concrete from the north. Repointing is apparent. The concrete encased stringer bridge was commonly used in the post-World War I state and county road expansion programs. This bridge is not historically or technologically noteworthy.

INFOR MATION

PHOTO: 67:33-34 (06/91) REVISED BY (DATE): QUAD: Lumberville

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1000087 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BOY SCOUT ROAD OVER SPRUCE RUN **FACILITY** BOY SCOUT ROAD

TOWNSHIP LEBANON TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 35 ft **WIDTH** 12.8 ft

CONSTRUCTION DT 1919 **ALTERATION DT** **SOURCE** NJDOT/STYLE

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The two span single lane stringer bridge carries Boy Scout Road over Spruce Run. The road serviced a Boy Scout Camp which according to a local resident is now closed. It is located in a wooded setting adjacent to an abandoned mill and the ruins of a 19th century village.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The concrete encased steel stringer bridge is supported on earlier stone abutments and cutwater concrete pier. The abutments have been reinforced with concrete and concrete scour protection has been added. It has paneled concrete parapets. One of over seventy-five stringer bridges, it was a design commonly used by the state and county in the post-WW I road improvement projects. It is not technologically or historically distinguished.

INFOR MATION

PHOTO: 624:36-37 (03/92) REVISED BY (DATE): QUAD: High Bridge

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1000088 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED NEWPORT ROAD OVER SPRUCE RUN **FACILITY** NEWPORT ROAD

TOWNSHIP LEBANON TOWNSHIP

TYPE STONE ARCH **DESIGN** ELLIPTICAL **MATERIAL** Stone

 # SPANS 1 **LENGTH** 21 ft **WIDTH** 12 ft

CONSTRUCTION DT 1895ca **ALTERATION DT** **SOURCE** STYLE

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries one lane of a lightly travelled country road over a minor stream in a wooded rural setting adjacent to an early 20th century farmstead. Sparse modern housing is nearby.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed short rubble-coursed stone arch bridge with stone wingwalls is finished with ringstones, but no keystone. Low stone parapets mark the edge of the bridge. Repointing is evident. An undocumented, representative example of a locally common bridge type, the short undocumented span, one of over ten stone arches in the county, is not technologically or historically noteworthy.

INFOR MATION

PHOTO: 624:31-33 (03/92) REVISED BY (DATE): QUAD: High Bridge

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1000094 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED TRIMMER ROAD OVER TRIBUTARY SOUTH BRANCH RARITAN RIVER **FACILITY** TRIMMER ROAD

TOWNSHIP LEBANON TOWNSHIP

TYPE SLAB **DESIGN** LAMINATED **MATERIAL** Wood

 # SPANS 1 **LENGTH** 28 ft **WIDTH** 15.6 ft

CONSTRUCTION DT 1930ca **ALTERATION DT** 1992 **SOURCE** STYLE

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries one lane of a quiet rural road over a tributary of the South Branch of the Raritan. It is located in a wooded rural setting.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single span steel stringer superstructure supported on stone abutments with stone wingwalls was replaced with a laminated wood superstructure in 1992. The railings are also laminated wood. The bridge is neither historically nor technologically distinguished based on its age and type.

INFOR MATION

PHOTO: 63:33A,69:7 (06/91) REVISED BY (DATE): QUAD: Califon

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1000096 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED YORK STREET OVER HAKIHOHAKE CREEK **FACILITY** YORK STREET

TOWNSHIP MILFORD BOROUGH

TYPE PONY TRUSS **DESIGN** PRATT HALF HIP **MATERIAL** Steel

 # SPANS 1 **LENGTH** 42 ft **WIDTH** 14.6 ft

CONSTRUCTION DT 1901 **ALTERATION DT** 1976 **SOURCE** PLAQUE

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries one lane of a lightly traveled country road over a minor stream. It is located in a lightly wooded village setting adjacent to a park. Modern housing is nearby.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The traditionally composed 3-panel Pratt half hip pony truss bridge is pin connected. The west abutment is random ashlar construction. East abutment was encased in concrete in 1976. The span has been altered by the addition of numerous welded repairs and reinforcing including repair plates, plates welded to panel points, and replacement diagonals. Floorbeams are also replacements. One of over 20 similar spans, less altered examples are extant in the county.

INFOR MATION

PHOTO: 620:13-15 (02/92) REVISED BY (DATE): QUAD: Frenchtown

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1000097 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED HALSTEAD ST OVER SOUTH BRANCH RARITAN RIVER **FACILITY** HALSTEAD STREET

TOWNSHIP CLINTON TOWN

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 131 ft **WIDTH** 24 ft

CONSTRUCTION DT 1932 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT WALTER E.ROBERTS, CE **BUILDER** M. FRED MCPEEK

SETTING / CONTEXT The bridge carries a 2-lane street and a sidewalk over a river. It is located in the well-preserved 19th-century town of Clinton. It is adjacent to a small city park. Although Clinton is not a listed National Register historic district, 4 nearby buildings are individually listed. The area is a potential historic district with a period of significance through about 1920. The bridge is noncontributing based on date of construction. It was built to replace a Lowthorp-Cowin pony truss.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Agreed Potential Historic District. Noncontributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The three span concrete encased steel stringer bridge replaces an earlier covered wooden bridge. It is supported on concrete abutments with wingwalls and cutwater piers and is finished with standard-design concrete balustrades. The bridge is just a representative example of a common bridge type used by the county and state in pre-WW II road improvement projects. It is not technologically or historically significant. It is appreciably newer than the surrounding buildings.

INFOR MATION

PHOTO: 612:19-20 (01/92) REVISED BY (DATE): QUAD: High Bridge

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1000099 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CAPNER STREET OVER WALNUT BROOK **FACILITY** CAPNER STREET

TOWNSHIP RARITAN TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 25 ft **WIDTH** 24 ft

CONSTRUCTION DT 1934 **ALTERATION DT** **SOURCE** COUNTY

DESIGNER/PATENT UNKNOWN **BUILDER** EMERGENCY RELIEF ADMIN

SETTING / CONTEXT The bridge carries two lane Capner Street over Walnut Brook. It is located in a wooded suburban setting, adjacent to a small neighborhood park. The bridge is located on the boundary of the Flemington Historic District, but it is not rated. Its date of construction is after the 18th- and 19th-century period of significance developed in the nomination. It is thus a noncontributing resource.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Listed. Flemington Historic District. 09/17/1980. Noncontributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single span concrete encased steel stringer bridge is supported on concrete abutments. It has concrete wingwalls and low paneled concrete parapets. County records show the footings were repaired in 1970. It is a representative example of the most common pre-WW II bridge type in the state, and is one of 75 from that era in Hunterdon County alone. It was constructed after the period of significance of the Flemington Historic District and is thus noncontributing.

INFOR MATION

PHOTO: 61:25A-26A (06/91) REVISED BY (DATE): QUAD: Flemington

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 10000Z4 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MAIN STREET OVER TRIBUTARY OF ROCKAWAY CREEK **FACILITY** MAIN STREET

TOWNSHIP LEBANON BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 27 ft **WIDTH** 30.4 ft

CONSTRUCTION DT 1921 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY BRIDGE DIV **BUILDER** NJ STATE HWY BRIDGE DIV

SETTING / CONTEXT The single span two lane stringer bridge carries Main Street over a tributary of Rockaway Creek. It is located in a suburban setting on a wooded streambed. Mixed date housing surrounds the bridge.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The slightly skewed concrete encased steel stringer bridge is supported on concrete abutments with wing walls. It has standard design concrete balustrades with concrete end posts. One of over 75 pre-World War II stringer bridges in the county, it is technologically and historically undistinguished.

INFOR MATION

PHOTO: 625:17-18 (03/92) REVISED BY (DATE): QUAD: Califon

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1000100 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED OLD CROTON ROAD OVER WICKECHEOKE CREEK **FACILITY** OLD CROTON ROAD

TOWNSHIP RARITAN TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 52 ft **WIDTH** 17.3 ft

CONSTRUCTION DT 1918 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries County Route 579 over a tributary of the Wickecheoke Creek. It is located in a wooded rural setting. Although marked for two lanes of traffic, the bridge is narrow. It carries light traffic.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased steel stringer two-span bridge is supported on stone abutments with stone wingwalls capped with concrete and a central concrete pier. The deck is reinforced concrete, and the bridge has paneled concrete parapets. Although one of the earlier stringer bridges in the county, which has over 75 pre-World War II ones in all, the technology is not innovative nor is it a historically significant span.

INFOR MATION

PHOTO: 61:27A-28A (06/91) REVISED BY (DATE): QUAD: Pittstown

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1000101 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED JOHANNA FARMS ROAD OVER 2ND NESHANIC RIVER **FACILITY** JOHANNA FARMS ROAD

TOWNSHIP RARITAN TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 29 ft **WIDTH** 14.5 ft

CONSTRUCTION DT 1921 **ALTERATION DT** 1980ca **SOURCE** COUNTY BRIDGE CARD

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The single lane bridge carries Johanna Farms Road over the Second Branch of the Neshanic River. It is located in a rural wooded setting on a very lightly traveled country road.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The short skewed gunite encased steel stringer bridge is supported on earlier stone masonry abutments. It has one concrete parapet; the parapet on the other side was replaced with guide railing, ca 1980. Concrete wingwalls replace the original stone ones. A concrete retaining wall redirects the stream. Although a representative example of the most common pre-WW II bridge type in the state, it is not technologically or historically significant.

INFOR MATION

PHOTO: 61:35A-36A (06/91) REVISED BY (DATE): QUAD: Stockton

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1000102 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PENNSYLVANIA AVENUE EXT OVER TRIBUTARY SOUTH BRANCH RARITAN RIVER **FACILITY** PENNSYLVANIA AVENUE EXTENSION

TOWNSHIP RARITAN TOWNSHIP

TYPE STONE ARCH **DESIGN** ELLIPTICAL **MATERIAL** Stone

 # SPANS 1 **LENGTH** 21 ft **WIDTH** 26.6 ft

CONSTRUCTION DT 1872 **ALTERATION DT** Unknown **SOURCE** PLAQUE

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries 2-lane Pennsylvania Avenue Extension (Flemington Point Road) over a tributary of the South Branch of the Raritan River. It is located on a curve in a sparsely settled area of residences, open fields and a quarry. It is adjacent to a gravel mill on a moderately traveled macadam road.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The well-proportioned stone arch bridge has low stone parapets topped with capstones. The parapets rise to a peak in the center following the crowning of the road. A plaque notes the date and the name Jacob Case. The bridge was widened at unknown date. One of over five 19th-century stone arches in the county, it is short and lacks of technological significance. Three other similar bridges in Lambertville (1000056, 100Y040, 100Y041) better represent the bridge type in the county.

INFOR MATION

PHOTO: 62:26-27 (06/91) REVISED BY (DATE): QUAD: Flemington

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1000105 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PERRYVILLE ROAD OVER TRIBUTARY SOUTH BRANCH RARITAN RIVER **FACILITY** PERRYVILLE ROAD

TOWNSHIP UNION TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 26 ft **WIDTH** 23.9 ft

CONSTRUCTION DT 1938 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT FRANK BOHREN, CO ENG **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries two-lane Perryville Road over a tributary of the South Branch of the Raritan River. It is located in a wooded rural setting with open fields and a railroad nearby. It carries moderate traffic.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The concrete encased steel stringer bridge is supported on concrete abutments and wingwalls. It is delineated by pipe and concrete post railings. It is an undistinguished example of a common design used by the county and state in pre-WW II road improvement projects. One of over 75 such spans in the county, it is not technologically or historically significant.

INFOR MATION

PHOTO: 621:18-19,69:2 (02/92) REVISED BY (DATE): QUAD: High Bridge

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1000108 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED COKESBURY ROAD OVER SOUTH BRANCH RARITAN RIVER **FACILITY** COKESBURY ROAD

TOWNSHIP CLINTON TOWNSHIP

TYPE PONY TRUSS **DESIGN** PRATT HALF HIP **MATERIAL** Metal

 # SPANS 1 **LENGTH** 78 ft **WIDTH** 13.8 ft

CONSTRUCTION DT 1900ca **ALTERATION DT** Unknown **SOURCE** STYLE

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries one lane of a paved country road over the South Branch of the Raritan River. It is located in a tranquil wooded rural setting.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 4-panel pin-connected half hip Pratt pony truss bridge is supported on random ashlar abutments. The original lattice railings remain. Cast iron connections join the top chord to the end posts. The detail is found on other bridges in the county. There are many welded alterations including duplicate diagonals, cross battens, outriggers, gusset plates, and other repairs. It is one of over 20 Pratt half hip spans in the county. Other documented examples with cast elements are more complete.

INFOR MATION

PHOTO: 665:19A-23A (06/91) REVISED BY (DATE): QUAD: High Bridge

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1000109 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED HERMAN THAU ROAD OVER BEAVER BROOK **FACILITY** HERMAN THAU ROAD

TOWNSHIP CLINTON TOWNSHIP

TYPE STONE ARCH **DESIGN** BARREL **MATERIAL** Stone

 # SPANS 1 **LENGTH** 22 ft **WIDTH** 18 ft

CONSTRUCTION DT 1875ca **ALTERATION DT** 1900ca, 1981 **SOURCE** STYLE/INSCRIPTION

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries one lane of a winding country unimproved road over a minor stream in a wooded rural setting. The area nearby is currently undergoing development. The approach to the bridge is on a sharp curve.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The earth-filled barrel stone arch bridge has low stone parapets and wingwalls. The bridge has been altered. It was widened inkind at an unknown date, and in 1981 the upstream wingwall and spandrel were replaced in concrete. A matching stone parapet was added. The capstones of the north wingwall have been replaced. The downstream side has been poorly repointed. The span lacks significance because of its size and alterations. There are better examples of the type in the county (10000111).

INFOR MATION

PHOTO: 65:26A-29A (06/91) REVISED BY (DATE): QUAD: Califon

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NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1000110 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 604 OVER WICKECHEOKE CREEK **FACILITY** CR 604

TOWNSHIP DELAWARE TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 84 ft **WIDTH** 12.1 ft

CONSTRUCTION DT 1872 **ALTERATION DT** 1961 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The last remaining covered bridge in New Jersey, it carries one lane of County Route 604 over the Wickecheoke Creek. A second bridge was constructed in 1961 to carry the second lane. The bridge is located in a wooded rural setting adjacent to a 19th-century stone schoolhouse.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Listed. Listed. Green Sergeant's Covered Bridge. 11/19/1974.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The original wooden Howe truss bridge was constructed in 1872 on 1750 stone abutments. The superstructure consists of wood shingle roofing, board-and-batten wood siding, heavy timber top chord and diagonal end posts, timber diagonals, and beam guide rail. Verticals are metal rods. Many of the components are replacements. The bridge no longer functions as a truss bridge. Stringers supported on a concrete substructure were added in 1961, and they carry the load. The bridge is individually listed.

INFOR MATION

PHOTO: 610:23-26 (07/91) REVISED BY (DATE): QUAD: Stockton

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1000111 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PINE HILL ROAD OVER TRIBUTARY WICKECHEOKE CREEK **FACILITY** PINE HILL ROAD

TOWNSHIP DELAWARE TOWNSHIP

TYPE STONE ARCH **DESIGN** BARREL **MATERIAL** Stone

 # SPANS 1 **LENGTH** 23 ft **WIDTH** 12.7 ft

CONSTRUCTION DT 1849 **ALTERATION DT** Unknown **SOURCE** INSCRIPTION

DESIGNER/PATENT UNKNOWN **BUILDER** P. DYKE, MASON

SETTING / CONTEXT The bridge carries one lane of an unimproved rural road over a minor stream in a wooded hilly setting.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The rubble-coursed stone arch bridge is founded on bedrock on one side. It has voussoirs, but no keystone, and a recessed spandrel wall. The stone parapet is nearly level with the raised roadway. An inset plaque identifies the bridge as Cold Water Bridge. Although the parapet has been repaired, this example of traditional stone arch technology appears to be relatively unaltered, and it is historically significant as the oldest documented bridge in the county.

INFOR MATION

BIBLIOGRAPHY:
Hunterdon County Master Plan: Sites of Historic Interest. 1979.
Hunterdon County Engineer's Office. Bridge File D329.

PHYSICAL DESCRIPTION: The 23'-long and nearly 13'-wide barrel fieldstone arch bridge with a high rise was constructed in 1849, according to an inscribed plaque inset on the upstream outside parapet wall. The decorative plaque also is inscribed with the initials "J.S.+ W.S., W.E., N.M.+C.M." and "Mason, P. Dyck." The bridge appears to be well preserved . Some re-pointing is evident at the footing and parapet. Most of the mortar on the intrados has fallen out. The span offers no physical evidence to indicate that bridge was widened. The roadway has been raised, making it nearly level with the 3'-high parapets.

HISTORICAL AND TECHNOLOGICAL SIGNIFICANCE: The bridge is historically significant as one of the oldest and best preserved stone arch bridges in the county. A representative example of a bridge technology that dates to earliest history of this county, the span is not technologically innovative, but it does serve as a noteworthy local record of the oldest type of bridge technology in Hunterdon County. In addition to its historical significance, the bridge enjoys integrity of setting, being located on a quiet rural road in a cluster of 19th-century houses.

Boundary Description and Justification: The bridge is evaluated as individually significant. Thus, the boundary is limited to the span itself, including back walls and wing walls.

PHOTO: 613:19-23 (02/92) REVISED BY (DATE): QUAD: Stockton

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1000112 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PINE HILL ROAD OVER PLUM BROOK **FACILITY** PINE HILL ROAD

TOWNSHIP DELAWARE TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 40 ft **WIDTH** 13.7 ft

CONSTRUCTION DT 1930ca **ALTERATION DT** **SOURCE** STYLE

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The one lane steel stringer bridge carries Pine Hill Road over Plum Brook. It is located in a wooded rural setting of sparse housing. The road carries very little traffic over the babbling stream.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The steel stringer bridge is supported on rubble-coursed stone abutments with wing walls. Concrete bearing seats have been added and concrete caps have been added to the wing walls. Concrete retaining walls have been added for stream control. The span is narrower than the natural stream bed. Guide railings border the corrugated metal deck. The bridge, an undistinguished example of the stringer design commonly used by the county and state in the thirties and continuing, is not significant.

INFOR MATION

PHOTO: 613:24-26 (02/92) REVISED BY (DATE): QUAD: Stockton

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US
November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1000113 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED STONE SIGN POST ROAD OVER PLUM BROOK **FACILITY** STONE SIGN POST ROAD

TOWNSHIP DELAWARE TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 25 ft **WIDTH** 14.7 ft

CONSTRUCTION DT 1932 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The one lane bridge carries Stone Sign Post Road over Plum Brook. The gravel road carries little traffic. The bridge is located in a wooded rural setting adjacent to a modern home in an area of sparse development.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The steel stringer bridge is supported on older fieldstone abutments and wingwalls. Alterations of the abutments include newer concrete seats, concrete reinforcing at the scour line, and repointing. The deck is modern as are the beam guide rail railings. The bridge is one of over 75 pre-World War II stringer bridges in the county, and it is not technologically or historically noteworthy.

INFOR MATION

PHOTO: 614:25-26 (02/92) REVISED BY (DATE): QUAD: Stockton

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1000114 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED DUNKARD CREEK ROAD OVER TRIBUTARY NESHANIC RIVER **FACILITY** DUNKARD CREEK ROAD

TOWNSHIP DELAWARE TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 30 ft **WIDTH** 16.3 ft

CONSTRUCTION DT 1925 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The single lane stringer bridge carries Dunkard Creek Road over a tributary of the Neshanic River. It is located in a wooded rural setting. The land is used for agricultural purposes. The road carries little traffic.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two span single lane concrete encased steel stringer bridge is supported on earlier ashlar abutments. The pier, however, is concrete. There is pipe railing on either side; the posts of one side have been replaced. The bridge is similar in design to nearby 1000122. An unremarkable example of the most common pre-World War II bridge type in the state, it is not historically or technologically distinguished.

INFOR MATION

PHOTO: 611:11A-12A (01/92) REVISED BY (DATE): QUAD: Stockton

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1000115 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED UPPER CREEK ROAD OVER WICKECHOEKE CREEK **FACILITY** UPPER CREEK ROAD

TOWNSHIP DELAWARE TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 26 ft **WIDTH** 17.9 ft

CONSTRUCTION DT 1925 **ALTERATION DT** 1987 **SOURCE** NJDOT/INSCRIPTION

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries two-lane Upper Creek Road over a tributary of the Wickecheoke Creek. It is located in a wooded rural setting with sparse housing. It is adjacent to the intersection with Old Mill Road. The road carries very light traffic over a babbling stream.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 1925 encased steel stringer bridge is supported on stone abutments with stone wingwalls. The abutments were extended in concrete to accommodate the 1987 widening on the upstream side. The downstream paneled concrete parapet has suffered from collision damage. One section has been replaced with guide rails. The upstream parapet was removed probably at the time the bridge was widened. Pebbles embedded in the remaining parapet spell "J D Dilts 1925". The span lacks significance based on type.

INFOR MATION

PHOTO: 613:32-33 (02/92) REVISED BY (DATE): QUAD: Stockton

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1000117 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 602 OVER BACK BROOK **FACILITY** CR 602

TOWNSHIP EAST AMWELL TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 45 ft **WIDTH** 21.2 ft

CONSTRUCTION DT 1931 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT UNKNOWN **BUILDER** WILLIAM H. SCHAAF

SETTING / CONTEXT The bridge crossing Back Brook is located in a pastoral setting of open fields and shade trees adjacent to a picturesque farm and outbuildings. It carries light traffic on two lane County Route 602.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed single span encased stringer bridge with concrete abutments and wingwalls has pipe and concrete post railings, not a common county railing design. The well-preserved stringer bridge is a representative example of a common bridge type and it is one of over 75 similar pre-WW II spans in the county. It is not historically or technologically significant.

INFOR MATION

PHOTO: 68:27A-28A (06/91) REVISED BY (DATE): QUAD: Hopewell

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1000118 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 602 OVER TRIBUTARY BACK BROOK **FACILITY** CR 602

TOWNSHIP EAST AMWELL TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 50 ft **WIDTH** 23.9 ft

CONSTRUCTION DT 1932 **ALTERATION DT** **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries two lane County Route 602 over a tributary of Back Brook. It is located in a pastoral setting adjacent to a farm and outbuildings. Older bridge abutments are visible slightly upstream.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The concrete encased steel stringer bridge is supported on concrete abutments and wingwalls. It has pipe and concrete post railings. Concrete posts and cable mark the approach. Spalling and exposed stringers are apparent. Similar in design to bridges in the area on CR 602 and one of over 75 such spans in the county, the bridge is not historically or technologically significant.

INFOR MATION

PHOTO: 68:29A-30A (07/91) REVISED BY (DATE): QUAD: Hopewell

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1000119 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 602 OVER TRIBUTARY NESHANIC RIVER **FACILITY** CR 602

TOWNSHIP EAST AMWELL TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 30 ft **WIDTH** 23.8 ft

CONSTRUCTION DT 1935 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries two lane County Route 602 over a small tributary of the Neshanic River. It is located in a wooded rural setting on a lightly traveled country lane.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The concrete encased steel stringer bridge has concrete post and cable approaches, concrete abutments, wingwalls, and paneled concrete parapets. It is a representative example of the design type commonly used by the county prior to the second world war. Spalling concrete, scouring on the downstream side, and undermining of the abutments is evident. The bridge is not technologically or historically noteworthy.

INFOR MATION

PHOTO: 68:18A,69:8 (06/91) REVISED BY (DATE): QUAD: Hopewell

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1000120 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED STONEY BROOK ROAD OVER STONEY BROOK **FACILITY** STONEY BROOK ROAD

TOWNSHIP EAST AMWELL TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 29 ft **WIDTH** 20.2 ft

CONSTRUCTION DT 1933 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT **BUILDER** HERBERT BAILEY CONSTRUCT.

SETTING / CONTEXT The bridge carries a lightly travelled road over a minor stream in a sparsely developed wooded area. The stream marks the boundary between Mercer and Hunterdon counties.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed concrete-encased steel stringer bridge is supported on a concrete substructure. The roadway is framed by a paneled concrete parapet. Designed as a joint county bridge, the span is a representative example of the most common pre-World War II bridge type in the state, and it is neither historically nor technologically distinguished.

INFOR MATION

PHOTO: 2:20-21 (09/92) REVISED BY (DATE): QUAD: Hopewell

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1000122 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CHURCH ROAD OVER TRIBUTARY NESHANIC RIVER **FACILITY** CHURCH ROAD

TOWNSHIP EAST AMWELL TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 31 ft **WIDTH** 15 ft

CONSTRUCTION DT 1925 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a lightly traveled 2-lane road over a tributary of the Neshanic River. It is located in a wooded rural setting in an area of sparse housing.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The concrete encased steel stringer bridge is supported on random ashlar abutments reinforced with concrete and a concrete pier. A combination of period pipe railing and modern metal guide railing delineates the bridge. The bridge is a representative example of a common bridge type and is one of over 75 stringer spans in the county. It is not technologically or historically significant.

INFOR MATION

PHOTO: 626:40,69:9 (06/91) REVISED BY (DATE): QUAD: Stockton

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1000126 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED JAVES ROAD OVER HAKIHOHAKE CREEK **FACILITY** JAVES ROAD

TOWNSHIP HOLLAND TOWNSHIP

TYPE PONY TRUSS **DESIGN** PRATT HALF HIP **MATERIAL** Steel

 # SPANS 1 **LENGTH** 36 ft **WIDTH** 15.9 ft

CONSTRUCTION DT 1900ca **ALTERATION DT** Unknown **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries one lane of a lightly traveled country road over a minor stream. It is located in a wooded rural setting within sight of sparse modern housing.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The traditionally composed pin-connected Pratt half hip pony truss bridge is supported on one stone and one concrete abutment. Alterations have compromised the design integrity of the bridge. Numerous welded additions and repairs include gusset plates at the panel points, additional diagonals, plates at the end posts, outriggers and guide railings. One of over 20 Pratt half hip pony truss bridges in the county, other documented examples with greater integrity and significance exist (10XXB26).

INFOR MATION

PHOTO: 620:20-22 (02/92) REVISED BY (DATE): QUAD: Frenchtown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1000130 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED HARMONY SCHOOL ROAD OVER NESHANIC RIVER **FACILITY** HARMONY SCHOOL ROAD

TOWNSHIP RARITAN TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 24 ft **WIDTH** 14 ft

CONSTRUCTION DT 1919 **ALTERATION DT** 1984, 1993 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** WILLIAM Y HOLT

SETTING / CONTEXT The single lane bridge carries Harmony School Road over the Neshanic River. It is located in a wooded rural setting with nearby open fields on a country road. It carries little traffic. Land is used for agriculture.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two span concrete encased stringer bridge is supported on repointed fieldstone abutments with fieldstone wing walls and a concrete pier. It exhibits spalling and exposed reinforcing steel. A modern metal railing was installed replacing a concrete parapet in 1993. In 1984 a concrete invert was added. The modified bridge is of a common type, and it is not technologically or historically noteworthy.

INFOR MATION

PHOTO: 61:32A,69:10,11 (06/91) REVISED BY (DATE): QUAD: Stockton

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1000131 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED DECKERS CORNER ROAD OVER TRIBUTARY ROCKAWAY CEERK **FACILITY** DECKERS CORNER ROAD

TOWNSHIP RARITAN TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 24 ft **WIDTH** 16.6 ft

CONSTRUCTION DT 1925ca **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The single lane bridge carries lightly traveled Deckers Corner Road over a tributary of the Rockaway Creek. It is located in a wooded rural setting of sparse modern housing and open farmland.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The steel stringer bridge is supported on earlier stone abutments and concrete footings. One abutment is encased in concrete. The other has been extensively re-pointed and reinforced with concrete. Two different styles of metal guide railings delineate the bridge. An altered undistinguished example of the most common bridge type in the county, it lacks technological or historical significance.

INFOR MATION

PHOTO: 626:42, 627:16-17 (04/92) REVISED BY (DATE): QUAD: Pittstown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1000133 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MOUNTAIN ROAD OVER SOUTH BRANCH ROCKAWAY CREEK **FACILITY** MOUNTAIN ROAD

TOWNSHIP READINGTON TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 28 ft **WIDTH** 18.4 ft

CONSTRUCTION DT 1924 **ALTERATION DT** **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** F R LEE, WHITEHOUSE ST NJ

SETTING / CONTEXT The two-lane bridge carries Mountain Road over the South Branch of Rockaway Creek. It is located in a wooded rural setting of sparse modern development.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The concrete encased steel stringer bridge is supported on concrete abutments and wingwalls. Scour problems have required additional concrete repairs. Paneled concrete parapets mark the edges of the bridge. One of over 75 stringer bridges in the county, the design was commonly employed by the county and state in post-WW I road improvement projects. It is not technologically or historically significant.

INFOR MATION

PHOTO: 623:5-6 (02/92) REVISED BY (DATE): QUAD: Califon

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1000135 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED RIDGE ROAD OVER CHAMBERS BROOK **FACILITY** RIDGE ROAD

TOWNSHIP READINGTON TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 23 ft **WIDTH** 20.5 ft

CONSTRUCTION DT 1925 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The two lane single span stringer bridge carries Ridge Road over Chambers Brook. It is located in a thinly wooded rural setting of sparse housing. It carries light traffic.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The concrete encased steel stringer bridge is supported on concrete abutments with wing walls. Paneled concrete parapets enclose the bridge. One of over 75 stringer bridges in the county, it is a design commonly used by the county and state in the pre-World War II era, and it is not technologically or historically noteworthy.

INFOR MATION

PHOTO: 622:30-31 (02/92) REVISED BY (DATE): QUAD: Raritan

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1000137 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED HOLLAND BROOK ROAD OVER HOLLANDS BROOK **FACILITY** HOLLAND BROOK ROAD

TOWNSHIP READINGTON TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 30 ft **WIDTH** 18.1 ft

CONSTRUCTION DT 1926 **ALTERATION DT** 1980 **SOURCE** PLAQUE

DESIGNER/PATENT GRANT DAVIS, CO ENG **BUILDER** SNOOK & SONS, CONTRACTORS

SETTING / CONTEXT The narrow two-lane bridge carries lightly traveled Holland Brook Road over Hollands Brook. It is adjacent to an 18th-century farmstead. It is located in a rural setting of open fields and woods.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The heavily skewed concrete encased steel stringer bridge is supported on concrete abutments and wingwalls. It has a paneled concrete parapet. A concrete collar and repairs were done in ca. 1980. The design was commonly used by the county and the state in post-WW I road improvement projects. One of over seventy-five stringer bridges in the county, it is not technologically or historically noteworthy.

INFOR MATION

PHOTO: 625:27-29 (03/92) REVISED BY (DATE): QUAD: Flemington

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1000139 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED HILLCREST ROAD OVER HOLLANDS BROOK **FACILITY** HILLCREST ROAD

TOWNSHIP READINGTON TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 40 ft **WIDTH** 20.2 ft

CONSTRUCTION DT 1916 **ALTERATION DT** 1956 **SOURCE** PLAQUE

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge with sidewalk carries lightly traveled Hillcrest Road over Hollands Brook. It is located in a village setting of mixed date housing. Woods and open fields are within sight of the park-like streambed. The bridge is adjacent to the intersection with County Route 620 and near a three-way crossroads.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The concrete encased steel stringer bridge is supported on earlier rusticated cut stone abutments and wingwalls. Concrete scour protection was added 1956, according to the inscription. The sidewalk is partitioned from the roadway by a high concrete curb. The stone wingwall has a plaque which identifies the bridge as the Readington Bridge, dated 187?. The bridge is neither technologically innovative nor historically notable.

INFOR MATION

PHOTO: 625:23-24 (03/92) REVISED BY (DATE): QUAD: Raritan

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1000140 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PINE BANK ROAD OVER HOLLANDS BROOK **FACILITY** PINE BANK ROAD

TOWNSHIP READINGTON TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 40 ft **WIDTH** 15.7 ft

CONSTRUCTION DT 1923 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The one lane bridge carries lightly traveled Pine Bank Road over Hollands Brook. It is located in a wooded hilly setting adjacent to open fields and working farms. It is set on a slight rise in the center of an S-shaped curve.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed concrete encased steel stringer bridge is supported on older stone abutments and wingwalls. The abutments have been re-pointed using a grapevine-style joint, and concrete scour protection has been added. The bridge is finished with paneled concrete parapets. It is a representative example of the most common pre-World War II bridge type in the state. One of over 75 in the county, the bridge is not technologically or historically significant.

INFOR MATION

PHOTO: 625:25-26 (03/92) REVISED BY (DATE): QUAD: Flemington

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1000141 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED OLD YORK ROAD OVER PLEASANT RUN **FACILITY** OLD YORK ROAD

TOWNSHIP READINGTON TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 41 ft **WIDTH** 20.8 ft

CONSTRUCTION DT 1923 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The narrow two lane bridge carries Old York Road over an active stream. It is located in a wooded setting with park-like grassland. A modified schoolhouse, barn and 19th century home are in the immediate area. The setting is bucolic.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The concrete encased steel stringer bridge is supported on concrete encased stone abutments with concrete wingwalls. Paneled concrete parapets, one section of which is newer, border the bridge. One of over seventy-five stringer bridges in the county, it is a representative example of a design commonly used by the county and the state in post-WW I road expansion projects. It lacks historical or technological significance.

INFOR MATION

PHOTO: 626:18-19 (04/92) REVISED BY (DATE): QUAD: Flemington

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1000145 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BAPTIST CHURCH ROAD OVER MULHOCKAWAY CREEK **FACILITY** BAPTIST CHURCH ROAD

TOWNSHIP UNION TOWNSHIP

TYPE PONY TRUSS **DESIGN** PRATT HALF HIP **MATERIAL** Steel

 # SPANS 1 **LENGTH** 34 ft **WIDTH** 15.7 ft

CONSTRUCTION DT 1902 **ALTERATION DT** **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** GEORGE UPDYKE

SETTING / CONTEXT The bridge carries one lane of a quiet country road over a minor stream. It is located in a wooded rural setting within sight of scattered modern housing.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The light 3-panel pin-connected Pratt half hip pony truss bridge is supported on random ashlar abutments with wingwalls. Pipe railings remain. Alterations are minimal and include concrete seats, plates welded to the lower panel points and end posts, and replacement stringers. The well-preserved bridge was built by George Updyke, a member of the county bridge committee. One of over 20 bridges of its type in the county, the span exhibits no unusual details and is a representative example.

INFOR MATION

PHOTO: 621:15-17 (02/92) REVISED BY (DATE): QUAD: High Bridge

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1000146 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 512 OVER LAMINGTON RIVER **FACILITY** CR 512

TOWNSHIP TEWKSBURY TOWNSHIP

TYPE THRU GIRDER **DESIGN** PARTIALLY ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 81 ft **WIDTH** 26 ft

CONSTRUCTION DT 1934 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT UNKNOWN **BUILDER** PHOENIX BRIDGE COMPANY

SETTING / CONTEXT The bridge carries a 2-lane county road over the Lamington River. It is located in a wooded village setting at the intersection of two moderately traveled roads. It is adjacent to a small retail establishment and parking area. The setting is undistinguished.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed thru girder with floor beams bridge is of built up construction. The original encasement has been partially removed, and a new steel grid deck on rolled risers has been installed. The original metal railing at the cantilevered sidewalk remains. Beam guide rail has been added at the inside face of the girders. A representative example of a common bridge type, the span is not technologically or historically noteworthy.

INFOR MATION

PHOTO: 64:8-11 (06/91) REVISED BY (DATE): QUAD: Gladstone

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1000B5W **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED VALLEY STATION ROAD OVER MUSCONETCONG RIVER **FACILITY** VALLEY STATION ROAD

TOWNSHIP BETHLEHEM TOWNSHIP

TYPE PONY TRUSS **DESIGN** PRATT HALF HIP **MATERIAL** Steel

 # SPANS 2 **LENGTH** 117 ft **WIDTH** 15.5 ft

CONSTRUCTION DT 1901 **ALTERATION DT** 1958 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT M B CULVER, DIR **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries one lane of a lightly traveled country road over the Musconetcong River, the county line with Warren County. The bridge is located in a lightly wooded park-like setting that is maintained by a conservation club. The river is channeled by stone weirs upstream. A sharp bend in the road marks the Warren County approach to the bridge.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 2-span pin-connected Pratt half hip pony truss bridge is supported on random stone abutments with wingwalls and a stone pier. Each span is 4 panels. Numerous welded repairs and reinforcing mar the integrity of design. They include additional cover plate to the top chord and verticals, plates at panel points, and reinforcing to bottom chord, additional diagonals, and new floorbeams. One of over 20 Pratt half-hip pony truss bridges in the county, the altered bridge is not distinguished.

INFOR MATION

PHOTO: 620:32, 627:29-33 (02/92) REVISED BY (DATE): QUAD: High Bridge

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1001152 **CO** HUNTERDON **OWNER** NJDOT **MILEPOINT** 4.07

NAME & FEATURE INTERSECTED NJ 12 OVER LOCKATONG CREEK **FACILITY** NJ 12

TOWNSHIP KINGWOOD TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 47 ft **WIDTH** 40 ft

CONSTRUCTION DT 1937 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY BRIDGE DIV **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a busy 2-lane with shoulders state highway over a minor stream. It is located in a wooded setting on a moderately traveled arterial highway. The land is used for a mix of agriculture, residences, and retail businesses.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The concrete encased steel stringer bridge has concrete abutments, stepped wing walls, and concrete balustrades. The style and type was used extensively by the State Highway Department Bridge Division in the highway expansion projects in the era between the world wars. It is one of over 75 stringer bridges in the county and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 66:23A-24A (07/91) REVISED BY (DATE): QUAD: Pittstown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1001154 **CO** HUNTERDON **OWNER** NJDOT **MILEPOINT** 6.41

NAME & FEATURE INTERSECTED NJ 12 OVER BRANCH OF WICKECHOEKE CREEK **FACILITY** NJ 12

TOWNSHIP FRANKLIN TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 33 ft **WIDTH** 40 ft

CONSTRUCTION DT 1937 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries two-lane with shoulders New Jersey State 12 over a branch of the Wickechoeke Creek. It is located in a wooded setting on a moderately traveled arterial highway. The land is used for a mix of agriculture, residences, and retail businesses.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed concrete encased steel stringer bridge has concrete abutments and concrete balustrades. Similar to other bridges located along NJ 12, it is a common bridge type designed by the State Highway Department Bridge Division. One of over seventy-five stringer spans in the county, it is not historically or technologically noteworthy.

INFOR MATION

PHOTO: 66:25A-26A;616:14-16 (02/92) REVISED BY (DATE): QUAD: Pittstown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1001155 **CO** HUNTERDON **OWNER** NJDOT **MILEPOINT** 7.12

NAME & FEATURE INTERSECTED NJ 12 OVER WICKECHOEKE CREEK **FACILITY** NJ 12

TOWNSHIP DELAWARE TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 54 ft **WIDTH** 40 ft

CONSTRUCTION DT 1939 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries two-lane State NJ 12 over Wickechoeke Creek. It is located in a wooded setting on a moderately traveled arterial highway. The land is used for a mixture of agriculture, residences, and retail businesses.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed encased steel stringer bridge has concrete abutments, stepped concrete wingwalls, and concrete balustrades. Similar in design to other bridges along NJ 12, this is a type commonly used by the county and the state in the pre-WW II era of dramatic road expansion. It is not historically or technologically significant.

INFOR MATION

PHOTO: 66:27A 611:5A-6A (01/92) REVISED BY (DATE): QUAD: Pittstown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1002150 **CO** HUNTERDON **OWNER** NJDOT **MILEPOINT** 10.95

NAME & FEATURE INTERSECTED NJ 12 OVER WALNUT (MINE) BROOK **FACILITY** NJ 12

TOWNSHIP RARITAN TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 46 ft **WIDTH** 40 ft

CONSTRUCTION DT 1939 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY BRIDGE DIV **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries two lanes and shoulders of New Jersey Route 12 over Walnut (Mine) Brook. It is located in a wooded urban area on the edge of the congested Flemington shopping area. Shops and parking lots are predominant features. It carries heavy traffic.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed concrete encased stringer bridge is supported on concrete abutments and has concrete balustrades with metal guide railings. It is a representative example of the type commonly constructed by the State Highway Department Bridge Division in the pre-WW II highway expansion projects. It is not historically or technologically noteworthy.

INFOR MATION

PHOTO: 61:21A-22A (06/91) REVISED BY (DATE): QUAD: Flemington

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1003150 **CO** HUNTERDON **OWNER** STATE AGENCY **MILEPOINT** 63.67

NAME & FEATURE INTERSECTED RARITAN VALLEY LINE RR OVER CR 173 **FACILITY** RARITAN VALLEY LINE (CNJ)

TOWNSHIP BETHLEHEM TOWNSHIP

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 68 ft **WIDTH** 56 ft

CONSTRUCTION DT 1914 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT CNJ RR OFFICE OF ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a single track of NJT's Raritan Valley Line over a busy two-lane county road that at one time was NJ 22. At the time it was built, the bridge carried two lines of track. The roadway dips and curves immediately after the bridge.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed elliptical reinforced concrete arch bridge has sloped wingwalls and pipe railings at the track level. A line corresponding to the arched opening is scored in the concrete. The bridge is a representative example of a common bridge type, and it is neither technologically innovative nor historically significant. The Central Railroad of New Jersey developed its right-of-way to the Pennsylvania coal fields beginning between 1849 and 1852.

INFOR MATION

PHOTO: 620:30-31 (02/92) REVISED BY (DATE): QUAD: Bloomsbury

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1004151 **CO** HUNTERDON **OWNER** NJDOT **MILEPOINT** 13.32

NAME & FEATURE INTERSECTED NJ 173 OVER SOUTH BRANCH RARITAN RIVER **FACILITY** NJ 173

TOWNSHIP CLINTON TOWN

TYPE THRU GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 188 ft **WIDTH** 40 ft

CONSTRUCTION DT 1926 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries a busy 2-lane with shoulders state highway over the South Branch of the Raritan River. It is located adjacent to the well-preserved 19th-century village of Clinton on the bypass road. The south end is next to a small park and the Clinton House, a restored 19th century inn. It is located on old NJ 9, the original Clinton bypass.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 3-span fully encased thru girder with floor beams bridge is supported on concrete abutments and concrete piers. There is a slight camber to the span. A standard-design metal railing with concrete posts encloses the cantilevered sidewalk. A representative example of a common state design and bridge type , the span is not technologically or historically distinguished.

INFOR MATION

PHOTO: 612:21-22 (01/92) REVISED BY (DATE): QUAD: High Bridge

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1005151 **CO** HUNTERDON **OWNER** NJDOT **MILEPOINT** 20.08

NAME & FEATURE INTERSECTED US 22 OVER CENTRAL RR OF NJ **FACILITY** US 22

TOWNSHIP CLINTON TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 134 ft **WIDTH** 76 ft

CONSTRUCTION DT 1937 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries busy four lane US Route 22 over one line of the Central Railroad of New Jersey. It was originally built to cross two lines of track. It is located in a rural setting of open fields and sparse housing.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Central Railroad of NJ Main Line Corridor. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95. DOE 11/30/95.

SUMMARY The skewed three span encased steel stringer bridge is supported on concrete abutments with wingwalls and column bents with crash walls. It has concrete balustrades on either side. It is an undistinguished example of the design commonly used by the county and state for both highway and railroad overpasses prior to World War II. Although well-preserved, it is not technologically or historically noteworthy.

INFOR MATION

PHOTO: 612:23-24 (01/92) REVISED BY (DATE): QUAD: Califon

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1005153 **CO** HUNTERDON **OWNER** NJDOT **MILEPOINT** 21.61

NAME & FEATURE INTERSECTED US 22 OVER BRANCH OF ROCKAWAY CREEK **FACILITY** US 22

TOWNSHIP LEBANON BOROUGH

TYPE RIGID FRAME **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 26 ft **WIDTH** 74 ft

CONSTRUCTION DT 1942 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries a very busy 4-lane state highway over a minor stream. It is located in a thinly wooded rural setting near modern housing and commercial development.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed rigid frame concrete bridge with haunches has concrete wingwalls and standard-design concrete balustrades. The bridge is a representative example of a bridge type first used in this country in the early 1920s. This example was built in 1942, and it is not technologically or historically distinguished.

INFOR MATION

PHOTO: 625:13-14 (03/92) REVISED BY (DATE): QUAD: Califon

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1005156 **CO** HUNTERDON **OWNER** NJDOT **MILEPOINT** 22.86

NAME & FEATURE INTERSECTED US 22 OVER BRANCH OF ROCKAWAY CREEK **FACILITY** US 22

TOWNSHIP CLINTON TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 23 ft **WIDTH** 122 ft

CONSTRUCTION DT 1942 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries a busy 4-lane state highway with a wide grassy median over a minor stream. It is located in a wooded rural setting near open fields. Sparse modern housing and commercial development are nearby.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The short but very wide concrete slab bridge is supported on concrete abutments with wingwalls. Concrete balustrades delineate the border of the bridge. Just a representative example of a common bridge type, the span is a standard State Highway Department style and design that is well represented in New Jersey. This span is not technologically or historically distinguished.

INFOR MATION

PHOTO: 625:15-16 (03/92) REVISED BY (DATE): QUAD: Califon

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1005162 **CO** HUNTERDON **OWNER** NJDOT **MILEPOINT** 25.67

NAME & FEATURE INTERSECTED US 22 EB OVER SOUTH BR ROCKAWAY RIVER **FACILITY** US 22 EASTBOUND

TOWNSHIP READINGTON TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 67 ft **WIDTH** 37 ft

CONSTRUCTION DT 1945 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries two lanes and shoulders of a busy arterial highway over the South Branch of Rockaway River. It is located in a thinly wooded suburban setting.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The concrete encased steel stringer bridge is supported on concrete abutments with wingwalls, and concrete pier. It has concrete balustrades. One of over 75 stringer bridges in the county, the design was commonly used by the county and state in the pre-WW II road improvement projects. It is not technologically or historically significant.

INFOR MATION

PHOTO: 622:11-12 (02/92) REVISED BY (DATE): QUAD: Flemington

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1006151 **CO** HUNTERDON **OWNER** NJDOT **MILEPOINT** 18.76

NAME & FEATURE INTERSECTED NJ 29 OVER SWAN CREEK **FACILITY** NJ 29 (S MAIN ST)

TOWNSHIP LAMBERTVILLE CITY

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 40 ft **WIDTH** 25 ft

CONSTRUCTION DT 1918 **ALTERATION DT** **SOURCE** STYLE/NJDOT

DESIGNER/PATENT NJ STATE HWY BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries two lanes and two sidewalks of the narrow main street of Lambertville over Swan Creek. It is on a street of early- to mid-19th century homes, and adjacent to a handsome 1875 firehouse. It is located within the Lambertville Historic District, recognized for its 19th-century architectural, industrial, and transportation history, but it was constructed after the 19th-century period of significance described in the nomination and is thus a noncontributing resource.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Contribute status unresolved. Listed. Lambertville Historic District. 06/30/1983. Not Rated.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The reinforced concrete elliptical arch bridge with concrete parapets is relatively unaltered. It continues the local tradition of constructing arch bridges, five others in Lambertville crossing the Swan Creek (1000056, 100Y040, 100Y041, 1019150,1019150). Together they document arch bridge building technology over a 50-year period. The bridge is not technologically distinguished, and it was built after the period of significance of the Lambertville Historic District. It is noncontributing.

INFOR MATION

PHOTO: 68M:29-30 (07/91) REVISED BY (DATE): QUAD: Lambertville

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1007159 **CO** HUNTERDON **OWNER** NJDOT **MILEPOINT** 22.97

NAME & FEATURE INTERSECTED NJ 29 OVER WICKECHEOKE CREEK **FACILITY** NJ 29

TOWNSHIP STOCKTON BORO

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 116 ft **WIDTH** 30 ft

CONSTRUCTION DT 1934 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT W.E. ROBERTS, CO. ENG. **BUILDER** DELTA CONSTRUCTION

SETTING / CONTEXT The bridge carries two-lane NJ 29 over the Wickecheoke Creek. It is located in a wooded area, at the crossroads of NJ 29 and the Kingwood-Stockton Road. It is adjacent to the National Register-listed Prallsville Industrial District, an important mill complex, but this bridge is well outside the district's period of significance and is not a contributing element to the district. Stone abutments from an earlier span are located a few yards downstream.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed, concrete encased steel stringer bridge is supported on concrete piers, abutments, and wingwalls. Typical concrete balustrades end in concrete posts bearing commemorative plaques listing the names of the freeholders, date and builder. The concrete fascia is paneled. The bridge, similar in design to others along NJ 29, is typical of those built by the county and state in the pre-WW II road improvement projects. It lacks technological or historical significance.

INFOR MATION

PHOTO: 615:39-42 (02/92) REVISED BY (DATE): QUAD: Stockton

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1009150 **CO** HUNTERDON **OWNER** NJDOT **MILEPOINT** 33.17

NAME & FEATURE INTERSECTED NJ 29 OVER COPPER CREEK **FACILITY** NJ 29

TOWNSHIP KINGWOOD TOWNSHIP

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 25 ft **WIDTH** No Data

CONSTRUCTION DT 1910ca **ALTERATION DT** 1936 **SOURCE** STYLE/INSCRIPTION

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge carries two lanes plus shoulders of NJ 29 and a dirt access road over Copper Creek. It is located in a wooded rural setting of sparse modern housing. The bridge crosses Copper Creek at the point where the creek enters the Delaware River.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed earth-filled concrete deck-arch bridge with wingwalls was widened in 1936. The older section, which carries a dirt road, is constructed of large aggregate, non-reinforced concrete, circa 1910. The newer portion is reinforced concrete inscribed with the date 1936. Although the older section documents the use of non-reinforced concrete in arch construction, it is altered and not a particularly early use of the material. The span is not technologically or historically distinguished.

INFOR MATION

PHOTO: 627:24-26,69:21 (04/92) REVISED BY (DATE): QUAD: Frenchtown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 100A004 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 3.1

NAME & FEATURE INTERSECTED CR 614 OVER HAKIHOKAKE CREEK **FACILITY** CR 614

TOWNSHIP ALEXANDRIA TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 23 ft **WIDTH** 25.1 ft

CONSTRUCTION DT 1927 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT GRANT DAVIS, CO ENG **BUILDER** SNOOK BROTHERS

SETTING / CONTEXT The single span two lane stringer bridge carries lightly traveled County Route 614 over Hakihohake Creek. It is located in a wooded rural setting near open fields adjacent to a 19th century stone house.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The concrete encased steel stringer bridge is supported on concrete abutments with wingwalls. It has paneled concrete parapets. The abutments have been modified with concrete for scour protection. One of over seventy-five stringer bridges, the design was commonly used by the county and the state in the post-WW I road improvement projects. It is not technologically or historically noteworthy.

INFOR MATION

PHOTO: 624:25-26 (03/92) REVISED BY (DATE): QUAD: Frenchtown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US
November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 100C026 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CRATETOWN ROAD OVER PRESCOTT BROOK **FACILITY** CRATETOWN ROAD

TOWNSHIP CLINTON TOWNSHIP

TYPE PONY TRUSS **DESIGN** PRATT HALF HIP **MATERIAL** Steel

 # SPANS 1 **LENGTH** 40 ft **WIDTH** 15.4 ft

CONSTRUCTION DT 1901 **ALTERATION DT** 1960ca **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries one lane of a lightly traveled country road over a minor stream. It is located in a rural wooded setting with sparse modern development. It is adjacent to an old mill race. No above ground resources from the mill remain.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed 3-panel pin-connected half hip Pratt pony truss is supported on ashlar abutments with wingwalls. Loop forged eye rods form the bottom chord. Floorbeams are original. Welded additions and repairs including additional diagonals and bottom chord members, and plates welded to panel points mar the original design and type. One of over 20 half-hip pony truss spans in the county, other documented examples of the well-represented type are more complete (10WD120). The bridge is not noteworthy.

INFOR MATION

PHOTO: 623:20-21 (02/92) REVISED BY (DATE): QUAD: Flemington

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US
November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 100C032 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PAYNE ROAD OVER PRESCOTT BROOK **FACILITY** PAYNE ROAD

TOWNSHIP CLINTON TOWNSHIP

TYPE PONY TRUSS **DESIGN** PRATT HALF HIP **MATERIAL** Metal

 # SPANS 1 **LENGTH** 47 ft **WIDTH** 15.8 ft

CONSTRUCTION DT 1899 **ALTERATION DT** 1953 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT WROUGHT IRON BRIDGE CO. **BUILDER** WROUGHT IRON BRIDGE CO.

SETTING / CONTEXT The bridge carries one lane of a lightly traveled country road over a minor stream. It is located in a wooded rural setting near open fields and sparse housing.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed 3-panel traditionally composed Pratt half hip pony truss bridge is pin-connected. Cast iron end post connections are used at the top and bottom chords. It is supported on random ashlar abutments and wingwalls. Welded additions include duplicate diagonals and bottom chord members and plates added to panel points. Although a documented bridge with an interesting detail, alterations have compromised the integrity and technological significance of the bridge. More complete examples exist.

INFOR MATION

PHOTO: 623:15-19 (02/92) REVISED BY (DATE): QUAD: Flemington

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 100D325 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED LOWER CREEK ROAD OVER WICKECHEOKE CREEK **FACILITY** LOWER CREEK ROAD

TOWNSHIP DELAWARE TOWNSHIP

TYPE PONY TRUSS **DESIGN** WARREN **MATERIAL** Steel

 # SPANS 2 **LENGTH** 103 ft **WIDTH** 13.3 ft

CONSTRUCTION DT 1915ca **ALTERATION DT** 1969, 1977 **SOURCE** STYLE/COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries one lane of a lightly travelled country road over a minor stream in a wooded rural setting. It is near an early 19th century farmstead and open fields.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 2-span Warren with verticals pony truss bridge is of riveted construction. Spans have 4 panels each. The east abutment is stone and the west abutment and pier are concrete dating from 1969. The wide profile floorbeams appear to be original and are attached with some square-nut bolts. This bridge of undocumented age replaced an 1899 Pratt pony truss by the WIBC. This bridge is exhibits no distinctive construction details. It is an undistinguished example of what is a common local type.

INFOR MATION

PHOTO: 613:14-18 (02/92) REVISED BY (DATE): QUAD: Stockton

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 100D383 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED FERRY ROAD OVER PLUM BROOK **FACILITY** FERRY ROAD

TOWNSHIP DELAWARE TOWNSHIP

TYPE PONY TRUSS **DESIGN** PRATT HALF HIP **MATERIAL** Steel

 # SPANS 1 **LENGTH** 48 ft **WIDTH** 15.9 ft

CONSTRUCTION DT 1901 **ALTERATION DT** 1933 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT M B CULVER, DIR **BUILDER** UNKNOWN

SETTING / CONTEXT The one-lane bridge carries a quiet country road over a minor stream. It is located in a wooded rural setting with scattered well-maintained modern housing and a farms.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 3-panel Pratt pin-connected half-hip pony truss bridge is supported on random ashlar abutments with wing walls. The abutments have been reinforced with concrete toe walls. Washers separate the eye bars in the lower pin connections. Alterations include welded plates at the panel points, additional diagonals, and outriggers. The original design has been compromised and render the bridge a technologically undistinguished example of a well-represented bridge type in the county.

INFOR MATION

PHOTO: 614:32-38 (02/92) REVISED BY (DATE): QUAD: Stockton

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 100D388 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED LOCKTOWN-FLEMINGTON ROAD OVER PLUM BROOK **FACILITY** LOCKTOWN FLEMINGTON ROAD

TOWNSHIP DELAWARE TOWNSHIP

TYPE PONY TRUSS **DESIGN** OTHER **MATERIAL** Steel

 # SPANS 1 **LENGTH** 29 ft **WIDTH** 13.7 ft

CONSTRUCTION DT 1900 **ALTERATION DT** 1975ca **SOURCE** COUNTY RECORDS

DESIGNER/PATENT J E BOWNE FREEHOLDER **BUILDER** J W SCOTT, FLEMINGTON NJ

SETTING / CONTEXT The bridge carries one lane of a quiet country road over a minor stream in a wooded setting with sparse housing. It is at the crossroads of three lightly traveled country roads. The setting is unspoiled.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 2-panel pony truss bridge is a hybrid modified Warren design with predominantly riveted connections. The reinforced floorbeam is suspended from a pin at the lower panel points. A non-functioning vertical rod extends from the pin and is secured to the top chord by a ball finial. The original lattice railings remain. It's similar to nearby 100D390. Despite 1970s minor alterations, the original design is preserved. It is historically significant as the work of a local fabricator and its design.

INFOR MATION

BIBLIOGRAPHY:
Hunterdon County Engineer's Office, Bridge card D388.
Schmidt, Hubert G. Rural Hunterdon: An Agricultural History. New Brunswick: Rutgers University Press, 1945.

PHYSICAL DESCRIPTION: The two-panel, pin-connected slightly skewed Warren pony truss bridge has several unusual features. The top chord is a riveted box member consisting of angles and plate and a continuous cover plate, bent at the inclined end posts. Gusset plates secure the diagonals at the lower panel points. The bottom chord and diagonals are toe-in angles. The vertical member, a modification to the original design made after 1974, consists of two angles with a center separating batten and a central rod which threads through the top chord into a fastening finial. The bottom of the rod is a forged loop that passes around the pin that U hanger for the single flame-cut floor beam. The bridge is supported on random fieldstone abutments with wingwalls. The original medallion and lattice railing remains, but collision damage has buckled the east end post and railing. Concrete scour protection has been added, and a concrete toe wall has been added to the east abutment. Other minor repairs include welded reinforcing plates at the bottom of one inclined end post.

HISTORICAL AND TECHNOLOGICAL SIGNIFICANCE: The diminutive pony truss bridge is technologically distinguished because it is a hybrid design variation on a Warren truss that reflects the experimental nature of metal truss bridge design in the 19th century. One of two nearly identical spans built over Plum Brook between 1900 and 1903, the designer is not documented, but it is probable that it was the builder of both spans, J. W. Scott, a fabricator from Flemington. According to Hubert Schmidt, Scott operated a foundry which specialized in the manufacture of iron bridges "during the latter part of the nineteenth century." (Schmidt, 220.) Scott also built two thru-truss bridges at Woodfern in Somerset County (18B0511, 18B0512). Like its companion (100D390), the bridge has minor alterations and repairs, but its design integrity and setting have not been compromised. The two bridges are the only documented examples of their design in the state, and while not representing the state of engineering or understanding of sound engineering principles of their day, do represent the variety and idiosyncrasy of bridge designs that characterize the heyday of the metal truss bridge era. Because both bridges are relatively well preserved, both have been evaluated as significant.

Boundary Description and Justification: The bridge is evaluated as individually significant. The boundary is thus limited to the bridge itself and includes the superstructure and substructure.

PHOTO: 614:21-23 (02/92) REVISED BY (DATE): QUAD: Stockton

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 100D390 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0
NAME & FEATURE INTERSECTED STONE SIGN POST ROAD OVER PLUM BROOK **FACILITY** STONE SIGN POST ROAD
TOWNSHIP DELAWARE TOWNSHIP
TYPE PONY TRUSS **DESIGN** OTHER **MATERIAL** Steel
 # SPANS 1 **LENGTH** 30 ft **WIDTH** 15.5 ft
CONSTRUCTION DT 1903 **ALTERATION DT** 1960ca, 2000 **SOURCE** PLAQUE/CO. RECORDS
DESIGNER/PATENT **BUILDER** J W SCOTT, FLEMINGTON

SETTING / CONTEXT The bridge carries one lane of a lightly traveled road over a minor stream in a wooded rural setting. A modern home adjacent to the bridge is the only structure in view.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No
CONSULT STATUS Individually Eligible.
CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed 2-panel pony truss bridge supported on stone abutments is a hybrid design based on a Warren truss. The floorbeam is suspended by a U-bolt and pin at the panel point. A vertical rod extends between the pin and the top chord where it is held by a ball finial. There are welded strengthening ca. 1960, but the bridge is of unusual design, and it was built by a local fabricator. It is one of two nearly identical spans (100D388), and it is historically and technologically significant.

INFORMATION

Bibliography:
Hunterdon County Engineer. Bridge File: D39.
Schmidt, Hubert. Rural Hunterdon: An Agricultural History. 1945.

Physical Description: The 30'-long, one-span hybrid pony truss bridge is a modified Warren truss that incorporates design elements that are not well founded in standard engineering practice. The top chord and inclined end posts of the two-panel bridge is a riveted box member consisting of toe-in angles with riveted cover plate. An additional cover plate has been welded to the original cover plate on the top chord. The interior diagonals and bottom chord consist of a pair of angles with battens. All connections are riveted gusset plates. The only floor beam is hung by a U bolt that passes over a pin at the interior panel point. The floor beam is totally supported by the bottom chord, but the design includes a curious arrangement of a non-functional loop-forged eye rod that extends from the pin to the top chord, where the rod is anchored by a ball final. The member does not provide the usual bracing of the top chord. Welded outrigger has been added since 1974 to the center panel point to provide lateral bracing. The bearings are sliding plates, and the abutments are rubble-coursed fieldstone.

Historical and Technological Significance: The diminutive hybrid variation of a Warren pony truss bridge is unusual in its design with a non-functional eye bar connecting the lower panel pin floor beam hanger pin with the top. One of two nearly identical spans built for the county between 1900 and 1903 by local designer and fabricator J.W. Scott of Flemington, it is significant as an example of the variety of idiosyncratic designs generated by the late-19th century desire to produce strong but economical metal truss bridges during the last quarter of the 19th century and the first decade of the 20th. This and its nearby companion (100D390 that is also evaluated as significant) over the same feature in the same township are the only documented example of this variation on a Warren truss in the state.

The span was designed and built by James W. Scott, a Scot who operated a foundry which specialized in the manufacture of iron bridges "during the latter part of the nineteenth century" (Schmidt, p. 220). Scott also built bridges in Somerset County with the two-span pin-connected Pratt thru truss at Woodfern Road in Branchburg Township in Somerset County (18B0511, 18B0512) being one of the largest. It is known that Scott bid many jobs in both Hunterdon and Somerset counties. Historically he and his small operation represent how bridges were built in the era before the rise of the professional county engineer. Fabricators, like Scott, not only submitted both designs as well as actual construction bids to the bridge committee of the Board of Chosen Freeholders, who spent a large percentage of the time dealing with the construction of bridges on local roads. A fabricator often submitted more than one bid for each bridge, as the county-generated request for bids did not specify a bridge type prior to the hiring of the county engineer who designed and spec'ed bridges rather than relying on the fabricators to do so.

Boundary Description and Justification: The bridge is evaluated as individually distinguished. The boundary is thus limited to the substructure and superstructure of the span itself.

PHOTO: 614:27-31 (02/92) REVISED BY (DATE): QUAD: Stockton

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 100D424 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED LOCKTOWN-SERGEANTSVILLE ROAD OVER PLUM BROOK **FACILITY** LOCKTOWN SEAGEANTSVILLE ROAD

TOWNSHIP DELAWARE TOWNSHIP

TYPE PONY TRUSS **DESIGN** WARREN **MATERIAL** Steel

 # SPANS 1 **LENGTH** 47 ft **WIDTH** 23.9 ft

CONSTRUCTION DT 1910ca **ALTERATION DT** 1947 **SOURCE** STYLE/COUNTY ENGNR

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane lightly traveled rural road over a minor stream in a wooded rural setting. Nearby are open fields and scattered 18th- and 19th-century homes.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 3-panel riveted Warren pony truss bridge is supported on ashlar abutments which have been widened with concrete. One wingwall is stone, the others are concrete. When the bridge was widened in 1947, the entire flooring system was redone. The top chord of back-to-back angles has an added welded cover plate, and welded reinforcing has been added to upper panel points. Design integrity has been compromised. The undocumented, altered span is one of more than 20 similar bridges in the county.

INFOR MATION

PHOTO: 613:34-37 (02/92) REVISED BY (DATE): QUAD: Stockton

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 100D488 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED OLD MILL ROAD OVER WICKECHOEKE CREEK **FACILITY** OLD MILL ROAD

TOWNSHIP DELAWARE TOWNSHIP

TYPE PONY TRUSS **DESIGN** PRATT HALF HIP **MATERIAL** Metal

 # SPANS 1 **LENGTH** 49 ft **WIDTH** 11 ft

CONSTRUCTION DT 1899 **ALTERATION DT** 1955 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT WROUGHT IRON BRIDGE CO. **BUILDER** WROUGHT IRON BRIDGE CO.

SETTING / CONTEXT The bridge carries one lane of a quiet country road over a minor stream in a wooded rural setting, near an 18th-century mill converted to a house. The surrounding area is residential with scattered houses dating from the 18th through the 20th centuries.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed 3-panel Pratt half hip pony truss bridge is pin-connected with cast iron connectors. The west abutment is stone encased in concrete. The east abutment and wingwalls were rebuilt in concrete in 1955. The bottom chord is stamped eye bars with shop numbers. Many welded alterations, including plates on the top chord and the cast connections, additional diagonals, and outriggers. The cast details are found on better preserved bridges in the county. This altered span is not distinguished.

INFOR MATION

PHOTO: 613:27-31 (02/92) REVISED BY (DATE): QUAD: Stockton

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 100E171 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 602 OVER TRIBUTARY OF BACK BROOK **FACILITY** CR 602

TOWNSHIP EAST AMWELL TOWNSHIP

TYPE PONY TRUSS **DESIGN** WARREN **MATERIAL** Steel

 # SPANS 1 **LENGTH** 44 ft **WIDTH** 24 ft

CONSTRUCTION DT 1937 **ALTERATION DT** **SOURCE** COUNTY

DESIGNER/PATENT STACEY WIDDICOMBE **BUILDER** WELDING ENGINEERS INC

SETTING / CONTEXT The bridge carries a 2-lane county road over a tributary of Back Brook. It is located in a wooded rural setting on a moderately traveled road. The land is used for agriculture.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 03/12/01

SUMMARY The totally welded 4-panel Warren with verticals pony truss bridge was constructed in 1937. It is supported on abutments that are random ashlar on the downstream side and concrete on the upstream side. Wingwalls are stone. All members are either H or I sections. The bridge is the earliest remaining all welded construction bridge in the county. The technology, which is still being used for truss bridges, was utilized by the railroads as early as 1928. The structure is the largest of all the welded truss bridges and has exceptionally deep floor beams. The structure does not convey the historic period and the rural context where welded truss bridges traditionally were built has been compromised. This structure is not individually eligible for listing in the National Register of Historic Places and does not contribute to an historic district.

INFOR MATION

PHOTO: 611:15A-16A (01/92) REVISED BY (DATE): QUAD: Hopewell

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 100E228 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED RAINBOW HILL ROAD OVER NESHANIC RIVER **FACILITY** RAINBOW HILL ROAD

TOWNSHIP EAST AMWELL TOWNSHIP

TYPE PONY TRUSS **DESIGN** WARREN **MATERIAL** Steel

 # SPANS 2 **LENGTH** 153 ft **WIDTH** 13.5 ft

CONSTRUCTION DT 1905ca **ALTERATION DT** **SOURCE** STYLE

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries one lane of a quiet country road over the Neshanic River in a densely wooded rural setting with sparse settlement.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 2-span bridge is composed of riveted 5-panel Warren with verticals pony trusses supported on concrete-capped random ashlar abutments with wingwalls and a concrete pier. A concrete toe wall was added to the pier in 1984. The bridge exhibits no unusual construction details. The verticals and diagonals are laced angles. Repairs are minimal, but the bridge is undocumented both to date and fabricator. It is an undistinguished example of a well-represented county bridge type.

INFOR MATION

PHOTO: 68:6A-8A (06/91) REVISED BY (DATE): QUAD: Hopewell

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 100E236 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WELISEWITZ ROAD OVER TRIBUTARY OF BACK BROOK **FACILITY** WELISEWITZ ROAD

TOWNSHIP EAST AMWELL TOWNSHIP

TYPE PONY TRUSS **DESIGN** WARREN **MATERIAL** Steel

 # SPANS 1 **LENGTH** 44 ft **WIDTH** 16.6 ft

CONSTRUCTION DT 1925 **ALTERATION DT** **SOURCE** COUNTY RECORDS

DESIGNER/PATENT GRANT DAVIS, CO ENGINEER **BUILDER** SNOOK AND SONS

SETTING / CONTEXT The bridge carries one lane of a lightly traveled country road over a minor stream. It is located in a wooded rural setting with sparse housing.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed 3-panel Warren with verticals riveted pony truss bridge bears on random ashlar abutments with wingwalls. The abutments have concrete caps. The upper railing is pipe, and the lower is welded channel. No welded repairs are apparent. Although well preserved, the bridge exhibits no distinctive details and is just a representative example of a well-represented local type. One of over 25 Warren pony truss bridges in the county, it is not historically or technologically distinguished.

INFOR MATION

PHOTO: 68:43A-44A, 1A (07/91) REVISED BY (DATE): QUAD: Hopewell

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 100E239 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0
NAME & FEATURE INTERSECTED CR 609 OVER BACK BROOK **FACILITY** CR 609 (MANNERS ROAD)
TOWNSHIP EAST AMWELL TOWNSHIP
TYPE PONY TRUSS **DESIGN** WARREN **MATERIAL** Steel
 # SPANS 1 **LENGTH** 65 ft **WIDTH** 15.4 ft

CONSTRUCTION DT 1914 **ALTERATION DT** **SOURCE** PLAQUE
DESIGNER/PATENT GRANT DAVIS, CO ENGINEER **BUILDER** DOVER BOILER WORKS

SETTING / CONTEXT The bridge carries one lane of a quiet country road over a minor stream in a wooded rural setting, adjacent to a plant nursery.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No
CONSULT STATUS Individually Eligible.
CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 4-panel Warren with verticals pony truss of riveted construction bears on concrete abutments with stone wingwalls. The use of heavy box sections in the design is an example of a secondary stress design. Floorbeams are riveted to angles which are riveted to the gusset plates at the lower panel points. The pipe railings are original. There are some welded repairs. The bridge is a noteworthy example of the work of local fabricator The Dover Boiler Works that was active until at least 1919.

INFOR MATION

BIBLIOGRAPHY:
Hunterdon County Engineer's Office, Bridge Card E239.
Hunterdon County Master Plan: Sites of Historic Interest. 1979.

PHYSICAL DESCRIPTION: The four panel, 65'-long, Warren with verticals pony truss bridge of riveted construction is supported on concrete abutments. The top chord and inclined end posts are built-up box members composed of channels, toe in, with riveted cover plate on the top and lacing on the underside. Verticals are composed of angles with lacing as are the interior diagonals. The bottom chord is plate riveted at the panel points to square gusset plates. The floor beams are attached to the panel points by riveted angle hangers. The pipe railing on the bridge and one approach is original. The bridge has a concrete deck. Modifications to the original design are minimal, limited primarily to small welded repairs and concrete reinforcement.

HISTORICAL AND TECHNOLOGICAL SIGNIFICANCE: In addition to being technologically distinguished as a notable representative example of a riveted Warren pony truss bridge, the 1914 span is historically significant as a well-preserved example of the work of The Dover Boiler Works. The Dover, New Jersey firm is documented as having begun fabrication of bridges in 1901 (Darnell, 32), and they continued building truss bridges in Hunterdon, Somerset, and Morris counties through at least 1919.

The riveted Warren pony truss was one of the most common bridge types in this country during the last decade of the 19th and first three decades of the 20th centuries. The Warren pony truss bridge is well represented in Hunterdon county where 25 dating from the 20th century survive. This example was evaluated as a significant representative example because of its state of preservation, integrity of setting, and historical association with a local fabricator.

Boundary Description and Justification: The span is located on an unspoiled country road. It is individually distinguished, so the significant boundary is limited to the span itself.

PHOTO: 68:34A-37A (07/91) REVISED BY (DATE): QUAD: Hopewell

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 100E240 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 609 OVER NESHANIC RIVER **FACILITY** CR 609 (MANNERS ROAD)

TOWNSHIP EAST AMWELL TOWNSHIP

TYPE PONY TRUSS **DESIGN** WARREN **MATERIAL** Steel

 # SPANS 1 **LENGTH** 60 ft **WIDTH** 20 ft

CONSTRUCTION DT 1920ca **ALTERATION DT** 1957 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane county road over the Neshanic River in a wooded rural setting. The surrounding land is used for agricultural purposes.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 5-panel Warren with verticals pony truss uses riveted construction. It is supported on concrete abutments with wingwalls. It was installed at this site in 1957, replacing an 1830 2-span stone arch bridge, and it appears that it is an earlier truss rebuilt for this location. The original date of the trusses is not documented, but stylistically it is a ca. 1920 span. The bridge is a representative example of a common type and is not technologically or historically distinguished.

INFOR MATION

PHOTO: 68:2A-4A (06/91) REVISED BY (DATE): QUAD: Hopewell

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 100FC80 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PINE HILL ROAD OVER SOUTH BRANCH RARITAN RIVER **FACILITY** PINE HILL ROAD

TOWNSHIP FRANKLIN TOWNSHIP

TYPE PONY TRUSS **DESIGN** PRATT HALF HIP **MATERIAL** Steel

 # SPANS 2 **LENGTH** 92 ft **WIDTH** 12 ft

CONSTRUCTION DT 1900ca **ALTERATION DT** 1983ca **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries one lane of a lightly trafficked unimproved rural road over the South Branch of the Raritan River. It is located in a well-preserved wooded setting that includes a camp and a nature preserve.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The traditionally composed pin-connected half hip Pratt pony truss is two spans, each 4 panels. It is supported on random stone abutments and a pier. Lattice railings remain. The bridge has been significantly modified. Welded additions include plates at panel points, reinforcing of the lower chords, repair plates on diagonals, and outriggers. On two panels the floorbeams are hung from the top chord using bolts and hangers. The span is too altered to be technologically significant.

INFOR MATION

PHOTO: 619:26-29 (02/92) REVISED BY (DATE): QUAD: Pittstown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 100H001 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 19.45

NAME & FEATURE INTERSECTED CR 519 OVER MILFORD CREEK **FACILITY** CR 519

TOWNSHIP HOLLAND TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 2 **LENGTH** 27 ft **WIDTH** 28 ft

CONSTRUCTION DT 1942 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge carries a 2-lane country road over a minor stream in an agricultural setting. A picnic area and sundry stand are adjacent to one corner of the bridge.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 2-span reinforced concrete slab bridge is supported on concrete abutments with wingwalls. The north abutment incorporates an earlier stone abutment. The central pier is also concrete. The original pipe railing remains on the downstream side only. Beam guide rails have been added. The short span is a common type, and it is not historically or technologically distinguished.

INFOR MATION

PHOTO: 629:5A-6A (07/91) REVISED BY (DATE): QUAD: Frenchtown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 100H093 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED JAVES ROAD OVER HAKIHOHAKE CREEK **FACILITY** JAVES ROAD

TOWNSHIP HOLLAND TOWNSHIP

TYPE PONY TRUSS **DESIGN** PRATT **MATERIAL** Steel

 # SPANS 1 **LENGTH** 53 ft **WIDTH** 20 ft

CONSTRUCTION DT 1940 **ALTERATION DT** **SOURCE** CO. RECORDS/PLAQUE

DESIGNER/PATENT FRANK BOHREN, CO ENG Apgar & W **BUILDER** UNKNOWN

SETTING / CONTEXT The truss bridge carries a lightly traveled two-lane road over Hakihohake Creek. It is located in a wooded rural setting with sparse modern housing nearby.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Structure might have significance as part of local truss bridge multiple property designation.

CONSULT DOCUMENTS SHPO Letter 03/12/01

SUMMARY The skewed 3-panel Pratt pony truss bridge of welded construction is supported on concrete abutments with wingwalls. The top flanges of stringers are embedded in the concrete deck. The top chord and end posts are H sections. The diagonals and lower chords are also rolled section. The unaltered bridge is a representative example of its type and design, and is one of 3 post-1935 welded truss bridges in the county. Not the earliest of a construction technology used by the railroads since 1928 and as roadway bridges since 1934, the structure is not individually eligible for listing in the National Register of Historic Places and does not contribute to an historic district.

INFOR MATION

PHOTO: 620:16-19 (02/92) REVISED BY (DATE): QUAD: Frenchtown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 100J001 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MAIN STREET OVER SOUTH BR RARITAN RIVER **FACILITY** MAIN STREET

TOWNSHIP CALIFON BOROUGH

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 100 ft **WIDTH** 24 ft

CONSTRUCTION DT 1887 **ALTERATION DT** 1985 **SOURCE** PLAQUE

DESIGNER/PATENT I. P. BARTLEY & CO. **BUILDER** I. P. BARTLEY & CO. (1887)

SETTING / CONTEXT The bridge carries 2-lane wide Main Street over the South Branch of the Raritan River. It is located in the Califon Historic District, surrounded by 19th century residences and shops. Described in the nomination as "a documentary of life in a small 19th century rural based village," Califon was a stop on the High Bridge Railroad. The bridge was part of the farmers' access to market.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible. Listed. Califon Historic District. 10/14/1976. Contributing.

CONSULT DOCUMENTS SHPO Letter 03/12/01

SUMMARY In order to retain the 1887 full hip, pin connected Pratt thru truss bridge, it was widened and converted to a stringer span in 1985. The ashlar abutments were extended with concrete. The original lateral, sway, and portal braces were spliced with in kind material to accommodate the widening. The original plaque, cresting, and ball finials remain. Although it has been widened, the trusses themselves are well preserved. As a result, the structure retains Its individual eligibility for listing in the National Register of Historic Places under Criteria A and C, and remains a contributing element of the Califon Historic District.

INFOR MATION

BIBLIOGRAPHY:
Hunterdon County Engineer's Office Bridge card J1.
Hunterdon County Master Plan: Sites of Historic Interest. 1979.
NJHPO. National Register Files: Hunterdon County; Califon; Califon Historic District.

PHYSICAL DESCRIPTION: The single-span pin-connected thru truss bridge with cantilevered sidewalks was rehabilitated and widened in 1985, when it was converted into a stringer span with a thru-truss superstructure. Prior to 1985 the floor beam hangers and diagonals in the outside panels had been strengthened. The sensitive rehabilitation considered aesthetic elements, duplicating lattice portals and retaining original fabric. Decorative finials, balls, and plaque remain. The plaque identifies the builder as I. P. Bartley of Bartley, N.J. The original pin connections and elongated hangers are still present. The original fieldstone abutments are encased in concrete. Some original steel fabric is stamped "Carnegie."

HISTORICAL AND TECHNOLOGICAL SIGNIFICANCE: The pin-connected Pratt thru truss bridge built in 1887 is individually historically significant as an example of a small local bridge-building firm, I.P. Bartley of Mount Olive Township in nearby Morris County. The bridge is one of less than 5 examples of the firms work. It was widened in 1985 when rolled I-section steel stringers were added beneath the trusses and the bridge functionally became Although the bridge is located within the a stringer rather than a truss span, but the original fabric of the span was preserved.

In addition to its historic significance, the bridge is located in the National Register-listed Califon Historic District. It was not rated in the nomination, but it was built within the period of significance of the district, and it contributes to the historic theme or area of significance of the district. The nomination describes the district as presenting "a documentary of life in a small nineteenth to twentieth century rural-based village in the Musconetcong Valley..." as it existed between the years of 1870 to 1920. The bridge allowed the surrounding farmers access to the mills and railroad station of the village of Califon, and it was thus an important element in the historic development of the village.

Although the bridge has been altered, the alterations were accomplished in a sensitive and non-obtrusive manner. The picturesque bridge contributes to the character of the late Victorian-era street scape. It was a key element in the development of the village as a trading and shipping point. All of these factors argue for inclusion of the structure as a contributing resource to the historic district.

Boundary Description and Justification: The bridge is a contributing resource in an National Register-listed historic district. The bridge and its setting are significant. For a precise delineation of the Califon Historic District boundary, refer to the National Register file at NJHPO.

PHOTO: 68:5-10 (06/92) REVISED BY (DATE): QUAD: Califon

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 100K087 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MILLTOWN ROAD OVER LOCKATONG CREEK **FACILITY** MILLTOWN ROAD

TOWNSHIP KINGWOOD TOWNSHIP

TYPE PONY TRUSS **DESIGN** WARREN **MATERIAL** Steel

 # SPANS 1 **LENGTH** 54 ft **WIDTH** 14.3 ft

CONSTRUCTION DT Unknown **ALTERATION DT** Rebuilt: 1929 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** WILLIAM SCHAAF

SETTING / CONTEXT The bridge carries one lane of a lightly traveled country road over a minor stream in a wooded rural setting with sparse housing. A dam is located 150' upstream. An altered 19th-century mill and house are next to the bridge. The altered mill is not an eligible resource.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The riveted 4-panel Warren with verticals pony truss bridge is supported on concrete abutments (from 1929) with stone wingwalls. Lattice web railings remain. Floor beam flanges are notched for connection to the verticals. The date of construction is not documented, but county engineer records state it was reconstructed in 1929. Stylistically it appears to be a 20th-century bridge. One of over 25 Warren pony trusses in the county, and it is not technologically nor historically noteworthy.

INFOR MATION

PHOTO: 67:44, 67:1-2 (07/91) REVISED BY (DATE): QUAD: Lumberville, PA

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 100L25W **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED POINT MOUNTAIN ROAD OVER MUSCONETCONG RIVER **FACILITY** POINT MOUNTAIN ROAD (CR 645)

TOWNSHIP LEBANON TOWNSHIP

TYPE PONY TRUSS **DESIGN** PRATT HALF HIP **MATERIAL** Steel

 # SPANS 1 **LENGTH** 76 ft **WIDTH** 15.4 ft

CONSTRUCTION DT 1905 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT UNKNOWN **BUILDER** SMITH BRIDGE CO., TOLEDO

SETTING / CONTEXT The bridge carries one lane of a lightly travelled rural road over the scenic Musconetcong River, the boundary between Hunterdon and Warren counties. The bridge is located in a wooded rural area.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 5-panel pin-connected half hip Pratt pony truss is supported on stone abutments and concrete backwalls. It exhibits no distinctive design details. The eye bars are stamped. The span is a late example of a common bridge type in the county. While technically undistinguished, it is one of the few documented examples of the Smith Bridge Company of Toledo, a small firm established in 1890. The historical interest is augmented by the fact that the span is well preserved.

INFOR MATION

Bibliography:
Hunterdon County Engineer's Office. Bridge File:L-25W.
Darnell, Victor. Directory of American Bridge Building Companies 1840-1900. SIA, 1984.

Physical Description: The 5-panel, pin-connected Pratt half hip pony truss bridge supported on ashlar abutments is 70' long and 15' wide. It is composed of steel sections with the top chord and inclined end post of channels with cover plate and the verticals of channels joined by battens. The eyebars used for the lower chords and diagonals are stamped while the counters are round bars with forged eyes. The rolled I-section floor beams are hung from the panel points on U-shaped suspenders. the roadway deck is wood. alterations appear to be limited to the addition of welded outriggers and a protective rail welded to the inside face of the truss lines.

Historical and Technological Significance: Although a late example of a pin-connected Pratt pony truss bridge, the most common bridge type from the last two decades of the 19th century, the 1905 Point Mountain Road bridge is historically significant because it is the product of a small Ohio bridge fabricator, the Smith Bridge Company of Toledo. Robert W. Smith moved his wood truss bridge works established in 1867 from Tippicanoe City (Ohio) to Toledo in 1869. There he built composite (wood and metal) trusses, and in 1870 he formed Smith Bridge Company which he sold in 1890. The new owners changed the name to Toledo Bridge Company and later sold to American Bridge Company in 1901. Smith, however, went back into business as Smith Bridge Company. How much past 1905 the small operation continued is not known, but this span is one of the few documented examples of their activity in New Jersey.

Smith Bridge Company is historically significant in that its history represents how metal truss bridges were manufactured and marketed during the last quarter of the 19th century. Using standard shapes and fairly standard designs, small companies like Smith Bridge Company fabricated trusses that were marketed to county officials through regional agents. The historical significance of the span is enhanced by the fact that it survives in such a complete state of preservation, and the historical and technological value of the structure combine to make it a significant example of its genre (criterion A). Ohio was a particularly fertile state for bridge fabricating companies which was the home state for giants like Canton's Wrought Iron Bridge Company and smaller concerns like the Massillon Bridge Company and the Champion Bridge Company of Wilmington.

Many of these smaller companies, like Wrought Iron Bridge Company and Toledo Bridge Company, the group that bought Smith's first company in 1890, were amalgamated into J.P. Morgan's and then United States Steel Corporation's American Bridge Company starting in 1900. Although that the American Bridge Company consolidation then controlled 50% of the nation's fabricating capacity (Darnell, p. 85), small concerns like Smith Bridge Company did continue to be successful through the 1900s. The change in technology with the widespread acceptance of the rolled stringer span was the reason most companies like Smith's abandoned their bridge fabricating operations in the 1910s and 1920s (refer to corporate histories of Dover Boiler Works and Berlin Construction Company).

Boundary Description and Justification: Located in an unspoiled wooded setting on a lightly traveled road, the bridge is evaluated as individually significant. Although the setting is pleasant, it does not possess National Register significance. The boundary is thus limited to the superstructure and substructure of the span itself.

PHOTO: 63:35A-37A (06/91) REVISED BY (DATE): QUAD: Washington

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 100M112 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MILL STREET OVER HAKIHOHAKE CREEK **FACILITY** MILL STREET

TOWNSHIP MILFORD BOROUGH

TYPE PONY TRUSS **DESIGN** OTHER **MATERIAL** Metal

 # SPANS 1 **LENGTH** 46 ft **WIDTH** 14.8 ft

CONSTRUCTION DT 1890ca **ALTERATION DT** **SOURCE** STYLE

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries one lane of a lightly traveled road over a minor stream. It is located in a wooded village setting, adjacent to modified 19th- and 20th-century homes, barns, and a converted mill and race downstream from the bridge. The village does not have historic district potential because of alterations and intrusions.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 3-panel pin-connected queen post pony truss bridge is supported on random ashlar abutments with wingwalls. Rod stock is used for all members except the top chords and end posts, which are built-up. Loop forged eye bar members are joined at the lower panel point by a single pin which also holds the floor beam U hanger. The well preserved, hybrid span is technologically distinguished, and it is also a contributing element to a potential historic district.

INFOR MATION

BIBLIOGRAPHY:
Hunterdon County Master Plan: Sites of Historic Interest, 1979.
Hunterdon County Cultural & Heritage Commission. The First 275 Years of Hunterdon County, 1714-1989. Flemington, New Jersey, 1989.

PHYSICAL DESCRIPTION: The 46'-long bridge is a single span wrought iron pin-connected queen post pony truss span supported on an ashlar substructure. The truss consists of built-up portals and top chord of channels with a top cover plate and battens. The rivets are small and widely spaced. Other members are composed of bar stock with loop-forged eyes at both ends, which is used for the verticals as well as the bottom chords, diagonals, and counters with sleeve nuts for adjustments. The vertical eye bars are more widely spaced at the lower pin connection as they are set outside the eye bars for the diagonals and lower chord. The expansion bearing is a sliding plate on a cast iron masonry, or bearing, plate. The original pipe railings on the bridge and two of the approach wingwalls are original as are the loop-forged brackets that affix them to the trusses. Alterations are minimal. Outriggers have been welded to the top chords and floor beams, and some welding has been done at the bearings.

HISTORICAL AND HISTORICAL SIGNIFICANCE: The 3-panel queen post pony truss bridge is technologically significant as a rare and well-preserved example of its type. It is also noteworthy for its construction details with loop-forged eye bars used for the verticals. The span appears to be of wrought iron, and while not documented in the records of the Hunterdon County engineer, stylistically the span dates to ca. 1890. The bridge is well preserved, and it ranks as one of the several idiosyncratic pony truss spans in the county. It is important in documenting the evolution of metal truss bridge design, which as late as 1890 was still an era of experimentation in both design and material use.

In addition to its technological significance, the bridge is a contributing resource in a potential historic district. It is located on the northeastern edge of the borough of Milford, a well-preserved 19th-century settlement. Milford, once known as "Burnt Mills," was, by 1880, a center for lumber and agricultural trade on the Delaware River. It boasted three churches, four stores, two hotels, two gristmills (one of which is within site of the bridge), a sawmill, a drug store, a hardware store, a carriage shop, two blacksmiths, a post office and a railroad depot serviced by the Belvidere & Delaware Railroad. Despite some late-20th century development, Milford retains its 19th century character, and the Mill Street bridge dates from its period of significance, which extends through World War I.

Boundary Description and Justification: The bridge is individually distinguished, but it is also located on the northeast edge of the potential historic district of Milford village. Thus the bridge and its surroundings are significant.

PHOTO: 620:7-12 (02/92) REVISED BY (DATE): QUAD: Frenchtown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 100P172 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 610 OVER LITTLE NISHISAKAWICK CREEK **FACILITY** CR 610

TOWNSHIP FRENCHTOWN BORO

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 46 ft **WIDTH** 31 ft

CONSTRUCTION DT 1940 **ALTERATION DT** 1980ca **SOURCE** NJDOT/STYLE

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane county road over a minor stream. It is located on the edge of the town of Frenchtown, in a wooded setting of sparse housing. The road carries moderately heavy traffic. Old stone abutments from an earlier, non-extant span are just downstream from this structure.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The reinforced concrete deck arch bridge has been extensively altered. The original arch has been encased in new concrete in a recent widening project. Modern guide railing delineates the edge of the bridge. The arch bridge is one of over ten bridges of this type in the county. The form is better represented by the arch bridges located in Lambertville. This span is not technologically or historically significant.

INFOR MATION

PHOTO: 620:6, 627:27 (02/92) REVISED BY (DATE): QUAD: Frenchtown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 100Q160 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED RAKE FACTORY ROAD OVER TRIBUTARY OF WICKECHEOKE CREEK **FACILITY** RAKE FACTORY ROAD

TOWNSHIP RARITAN TOWNSHIP

TYPE PONY TRUSS **DESIGN** WARREN **MATERIAL** Steel

 # SPANS 1 **LENGTH** 51 ft **WIDTH** 15 ft

CONSTRUCTION DT 1915ca **ALTERATION DT** 1950s **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries one lane of a lightly traveled country road over a tributary of the Wickecheoke Creek. It is located in a wooded rural setting. The south approach of the bridge at the intersection with Sam Levine Road bends sharply.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The riveted 4-panel Warren with verticals pony truss bridge was moved to this location ca. 1950, replacing a wooden truss span. Its original location is not documented. It is supported on ashlar abutments with wingwalls that date from an earlier span. A concrete collar has been added to the south abutment. The guide railings and outriggers are alterations. The bridge is not unusual in design nor is it historically noteworthy. It is a representative example of a common type.

INFOR MATION

PHOTO: 61:29A-30A (06/91) REVISED BY (DATE): QUAD: Pittstown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 100Q168 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PENNSYLVANIA AVENUE EXT OVER RAILROAD **FACILITY** PENNSYLVANIA AVENUE EXTENSION

TOWNSHIP RARITAN TOWNSHIP

TYPE PONY TRUSS **DESIGN** PRATT **MATERIAL** Steel

 # SPANS 1 **LENGTH** 80 ft **WIDTH** 19.4 ft

CONSTRUCTION DT 1918 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries Pennsylvania Avenue over the Central New Jersey South Branch Railroad. It is located on a sharp curve in a rural setting on the edge of Flemington. A gravel mill is nearby.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 10/98 03/12/01.

SUMMARY The skewed, 6-panel riveted pony truss bridge is built with a slight camber, a common railroad overpass design detail. Vertical members are laced angles reinforced with battens at the bottom. Center panel diagonals are also reinforced with a central gusset plate and battens. One of over 10 Pratt pony truss bridges in the county, the undocumented span, which may have been moved to this location because of its skew angle, is eligible for listing in the National Register of Historic Places under Criteron C as a representative example of the over 70 metal truss bridges in Hunterdon County which date from the late 1860s until the late 1920s.

INFOR MATION

PHOTO: 62:23-25 (06/91) REVISED BY (DATE): QUAD: Flemington

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 100R024 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0
NAME & FEATURE INTERSECTED MILL ROAD OVER ROCKAWAY CREEK **FACILITY** MILL ROAD
TOWNSHIP READINGTON TOWNSHIP
TYPE PONY TRUSS **DESIGN** PRATT HALF HIP **MATERIAL** Steel
 # SPANS 2 **LENGTH** 70 ft **WIDTH** 15.2 ft

CONSTRUCTION DT 1905ca **ALTERATION DT** **SOURCE** STYLE
DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries one lane of a country road over a stream. It is located in a wooded setting surrounded by fields and meadows and a handsome 18th-century house that has been reworked in the Colonial Revival mode. A 1757 mill site (non-extant) is nearby. The picturesque, unspoiled setting contributes to the historic character of the bridge. The bridge has integrity of setting.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No
CONSULT STATUS Individually Eligible.
CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span riveted Pratt half hip pony truss bridge is supported on a fieldstone substructure. Each 3-panel span is composed primarily of back-to-back angles with web gussets, which is not an uncommon style. Square-headed bolts hold the floorbeams to the gusset plates. Original pipe railings remain. Minimal changes include concrete toe walls and welded outriggers. The bridge is undocumented, but it one of the few riveted Pratt half hips and is thus a good example of its type.

INFOR MATION

Bibliography:
Hunterdon County Engineer. Bridge File: R 24

Physical Description: The 2-span riveted Pratt half hip bridge is supported on a rubble-coursed fieldstone substructure to which some concrete toe walls have been added. Each approximately 35'-long span is three panels, and the members are composed of angle set back-to-back with the gusset plates at all panel points set between the angles. The detail is not uncommon, and it is a design frequently found on Dover Boiler Works bridges. The pipe railings along the inside of the truss lines are original as are the stamped railing brackets. The floor beams are rolled, and the only apparent alteration to the original design is the addition of outriggers or knee braces to provide lateral stability. Some of the field connections are executed with square-headed bolts. The span is well preserved as is its bucolic setting.

Historical and Technological Significance: The 2-span pony truss bridge is significant because it is a rare and nearly complete example of a riveted, rather than the much more common pin-connected, Pratt half hip bridge. Some of the field connects are done with square-headed bolts, an early-20th century detail that marks the transition from the pin connection to the field rivet connections. Square-headed bolt field connections are not common, but they chronicle the evolution of metal-to-metal connections. Although undocumented in the county engineer's records as to date of construction and fabricator, stylistically the well-preserved span dates to the first decade of the 20th century. It bears design similarities to documented examples of the Dover Boiler Works of Dover, NJ, and it may well be their bridge. The company was active in Hunterdon County during the first two decades of this century according to the Freeholders Minutes.

In addition to being a well-preserved example of the early-20th century bridge technology that combines a popular late-19th century pin-connected truss type with more advanced riveted and bolted connections, the bridge enjoys integrity of setting. Located in a county noted for its picturesque agrarian areas and working farms, the span is well sited in an agricultural area that retains its historic rural character. The setting contributes to the historic significance of the bridge.

Boundary Description and Justification: The bridge is located in a well preserved rural setting. While the span is individually significant, it would also be a contributing recourse should the area be evaluated as a rural historic district. The nearby farmhouse and related farm were not evaluated for National Register eligibility as part of this study.

PHOTO: 622:15-18 (02/92) REVISED BY (DATE): QUAD: Califon

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 100T022 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED HOLLOW BROOK ROAD OVER TRIBUTARY LAMINGTON RIVER **FACILITY** HOLLOW BROOK ROAD

TOWNSHIP TEWKSBURY TOWNSHIP

TYPE PONY TRUSS **DESIGN** OTHER **MATERIAL** Steel

 # SPANS 1 **LENGTH** 33 ft **WIDTH** 16.5 ft

CONSTRUCTION DT 1880ca **ALTERATION DT** 1962 **SOURCE** STYLE

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries one lane of a lightly travelled country road over a minor stream in a wooded rural setting adjacent to a well-maintained early-19th century farmstead. The setting is unspoiled and contributes to the significance of the bridge.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed 2-panel pin-connected Fink-like truss bridge bears on random stone abutments with wingwalls. There are minor welded alterations and repairs, but the unusual trusses perform like a Bollman with a floor beam hung from the diagonals. Undocumented as to original date and fabricator, the bridge dates stylistically to ca. 1880 and is the sole known example of its type in the county. It is technologically significant based on the design of the trusses.

INFOR MATION

Bibliography:
Condit, Carl. American Building Art 19th Century. 1960.

Physical Description: The 33'-long, one-span, pin-connected pony truss bridge is a variation of the Bollman truss in which the chief characteristic is that the floor beam(s) are supported by a pair of diagonals which span from end of span to end of span, accomplished in this 2-panel bridge by pairs of loop forged eye bars. Bars in one panel are fitted with a turnbuckle for adjustments. The top chord, end posts, and one vertical appear to be original, although repaired several times. The trusses consist of vertical end posts which are a pair of channels with a full-height cover plate on the approach roadway face and a top and bottom batten plate on the span face. The top chord is made up of a pair of channels with a top cover plate and bottom batten plates. It extended beyond the end post by about 8" and is finished with a decorative cast cover. The top chord is a compression strut that holds the supporting columns (end posts) from falling in to the middle. There are no bottom chord elements. The vertical is a pair of channels with top and bottom battens. The one on the upstream side is a modern replacement. The vertical is a "dummy" member which serves only to halve the unsupported length of the top chord. The rolled I-section floor beam is supported on an inverted U-hanger which passes over the pin connecting the diagonals. The end posts are set on plates on the ashlar abutments. The steel grid deck was placed in 1962.

Historical and Technological Significance: Although undocumented as to date of construction and fabricator, the span is a rare example of a Fink or Bollman truss type where the floor beams are supported by a pair of diagonals that span from end of span to end of span. Originally designed for the combination of wood and iron, the Bollman truss was developed in 1850, and while it increased the possible length of bridges of its day, it passed from favor by 1880 because it is not a rigid truss. Dated stylistically to ca. 1880, the bridge represents the most basic expression of the Fink or Bollman truss form (it is not developed enough to indicate which diagonal pattern it would have been had it been more than two panels long), and it is historically and technologically significant as a rare and fairly complete survivor of the pre-Civil War bridge technology.

PHOTO: 64:15-20 (07/91) REVISED BY (DATE): QUAD: Gladstone

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 100T061 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED POTTERSTOWN ROAD OVER NORTH BRANCH ROCKAWAY CREEK **FACILITY** POTTERSTOWN ROAD

TOWNSHIP TEWKSBURY TOWNSHIP

TYPE PONY TRUSS **DESIGN** PRATT HALF HIP **MATERIAL** Steel

 # SPANS 1 **LENGTH** 65 ft **WIDTH** 15.3 ft

CONSTRUCTION DT 1901 **ALTERATION DT** 1945, 1988 **SOURCE** PLAQUE

DESIGNER/PATENT AMERICAN BRIDGE CO. **BUILDER** AMERICAN BRIDGE COMPANY

SETTING / CONTEXT The bridge carries one lane of a lightly traveled country road over a scenic minor stream. It is located in a wooded rural setting near dense modern development.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The traditionally composed 4-panel pin-connected Pratt half hip pony truss bridge bears on ashlar abutments and stone wingwalls. Diagonals are loop forged eye bars while the lower chord is stamped eye bars. Constructed by the American Bridge Company shortly after its formation, the span has been significantly altered. Duplicate diagonals, welded panel-point plates, plate welded to the end posts, and outriggers all mar its integrity and historical significance of the span.

INFOR MATION

PHOTO: 623:7-10 (02/92) REVISED BY (DATE): QUAD: Califon

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 100T073 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MEADOW LANE OVER NORTH BRANCH OF ROCKAWAY CREEK **FACILITY** MEADOW LANE

TOWNSHIP TEWKSBURY TOWNSHIP

TYPE PONY TRUSS **DESIGN** PRATT HALF HIP **MATERIAL** Steel

 # SPANS 1 **LENGTH** 61 ft **WIDTH** 14 ft

CONSTRUCTION DT 1901ca **ALTERATION DT** 1958 **SOURCE** STYLE

DESIGNER/PATENT UNKNOWN **BUILDER** THE DOVER BOILER WORKS

SETTING / CONTEXT The bridge carries one lane of a lightly traveled country road over a minor stream in a wooded rural setting and sparse development. Most of the surroundings are is dedicated to agricultural use.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 3-panel pin-connected half hip Pratt pony truss bridge is supported on random ashlar abutments. It is traditionally composed and exhibits no unusual details. Alterations are minor and include welded additions to the bottom chord eye bars, a new floor system, and outriggers. One of several pony truss spans built in the county by the local Dover Boiler Works before 1919, this example as complete as 10XXF48 that ha been evaluated as significant. It is not noteworthy based on its design and alterations.

INFOR MATION

PHOTO: 64:23-25 (06/91) REVISED BY (DATE): QUAD: Califon

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 100T35S **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MCCAN MILL ROAD OVER LAMINGTON RIVER **FACILITY** MCCAN MILL ROAD

TOWNSHIP TEWKSBURY TOWNSHIP

TYPE PONY TRUSS **DESIGN** WARREN **MATERIAL** Steel

 # SPANS 1 **LENGTH** 63 ft **WIDTH** 16.4 ft

CONSTRUCTION DT 1923 **ALTERATION DT** 1978 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries one lane of a lightly traveled unimproved road over the Lamington River in a wooded rural setting.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The riveted five panel Warren with verticals pony truss bridge bears on concrete abutments and older fieldstone wingwalls capped with concrete. Concrete reinforcement was added in 1978. Alterations are minor and include bolts replacing some rivets on the gussets. One of over 20 Warren pony truss bridges in the county, the span is a late example of its type, and it exhibits no distinctive details. It is not technologically or historically noteworthy.

INFOR MATION

PHOTO: 64:3,5 (06/91) REVISED BY (DATE): QUAD: Gladstone

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 100T36S **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED VLIETTOWN ROAD OVER LAMINGTON RIVER **FACILITY** VLIETTOWN ROAD

TOWNSHIP TEWKSBURY TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 121 ft **WIDTH** 25.1 ft

CONSTRUCTION DT 1931 **ALTERATION DT** **SOURCE** PLAQUE/COUNTY RECORD

DESIGNER/PATENT UNKNOWN **BUILDER** THOMPSON & DRUMM

SETTING / CONTEXT The bridge carries two-lane Vliettown Road over the Lamington River at the county border with Somerset County. It is in a wooded rural setting on a lightly traveled country road over a minor stream. Older stone abutments are found slightly upstream.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased steel stringer three span bridge has concrete piers and abutments, paneled fascia stringer, and concrete balustrades. It is a representative example of a common bridge type used by the county and state in post-WW I road expansion projects. It is technologically and historically undistinguished.

INFOR MATION

PHOTO: 64:1-2 (06/91) REVISED BY (DATE): QUAD: Gladstone

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 100W034 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WILSON ROAD OVER MOORES CREEK **FACILITY** WILSON ROAD

TOWNSHIP WEST AMWELL TOWNSHIP

TYPE PONY TRUSS **DESIGN** PRATT **MATERIAL** Steel

 # SPANS 1 **LENGTH** 43 ft **WIDTH** 16.1 ft

CONSTRUCTION DT 1920 **ALTERATION DT** 1960ca **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** WELDING ENGINEERS, INC

SETTING / CONTEXT The bridge carries one lane of a quiet unimproved rural road over a minor stream. It is located in a rural area of open fields, pasture land, and modern farm buildings.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 4-panel Pratt pony truss bridge is supported on random fieldstone abutments with wingwalls. Concrete collars and patches were added in 1964. Circa 1960, the original connecting pins were removed and replaced with welded gusset plates. Outriggers and metal guide rail were added. The alterations have seriously compromised the design integrity of the bridge, making it less historically and technologically significant than some of the over 10 other Pratt full hip pony trusses in the county.

INFOR MATION

PHOTO: 62:13,611:34-36 (06/91) REVISED BY (DATE): QUAD: Lambertville

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 100W069 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED ROCK ROAD OVER PETER'S BROOK **FACILITY** ROCK ROAD

TOWNSHIP WEST AMWELL TOWNSHIP

TYPE PONY TRUSS **DESIGN** PRATT HALF HIP **MATERIAL** Steel

 # SPANS 1 **LENGTH** 37 ft **WIDTH** 15.4 ft

CONSTRUCTION DT 1910 **ALTERATION DT** 1953, 1954 **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries one lane of a lightly travelled country road over a minor stream in a rural, agricultural setting.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 3-panel half hip Pratt pony truss bridge is pin-connected. It is supported on one unaltered random stone abutment and one faced with concrete. Floorbeams were replaced in 1953, and outriggers added in 1954. There are many welded repairs, including plates welded to the pin connections on the downstream side. The verticals are connected to the top chord by z-shaped clips, a detail found on other bridges in the county. The bridge is undocumented and altered. More complete examples exist.

INFOR MATION

PHOTO: 611:28A-33A (01/92) REVISED BY (DATE): QUAD: Hopewell

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 100Y040 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.4

NAME & FEATURE INTERSECTED CR 518 (BRUNSWICK AVE) OVER SWAN CREEK **FACILITY** CR 518 (BRUNSWICK AVE)

TOWNSHIP LAMBERTVILLE CITY

TYPE STONE ARCH **DESIGN** ELLIPTICAL **MATERIAL** Stone

 # SPANS 1 **LENGTH** 40 ft **WIDTH** 31 ft

CONSTRUCTION DT 1875 **ALTERATION DT** **SOURCE** COUNTY RECORDS

DESIGNER/PATENT J. BURD DIR **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries two lanes of a town street over a minor stream in the architecturally significant 19th-century town of Lambertville. It is on a residential street and is located in the Lambertville Historic District. It is one of three 1870s stone arch bridges in the district over the same water feature (1000056, 100Y041 are the others). The bridge was built within the 19th-century period of significance of the Lambertville Historic District, and it is a contributing resource.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Listed. Lambertville Historic District. 06/30/1983. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed short stone arch bridge, built in 1875, is of rubble-coursed construction with ringstones defining the arch. There is no keystone. Extended stone wingwalls mark the approaches, and stone retaining walls channel the stream. The bridge was repointed in 1957 and 1963. While not individually significant, the well-preserved span reflects Lambertville's transportation history emphasized in the National Register nomination, and it contributes to the historic character of the district.

INFOR MATION

BIBLIOGRAPHY:

Hunterdon County Engineer's Office Bridge card Y41.
Hunterdon County Master Plan: Sites of Historic Interest. 1979.
Schmidt, Hubert G. Rural Hunterdon: An Agricultural History. New Brunswick: Rutgers University Press, 1945.
ONJH. National Register File: Hunterdon County: Lambertville Historic District. 1983.

PHYSICAL DESCRIPTION: The 40'-wide elliptical stone arch bridge with random-coursed ashlar spandrel walls was built in 1875 of the locally common gray granite stone quarried in nearby Raven Rock. It is of traditional construction, using ringstones to define the arch and is finished with low stone parapets and extended wingwalls. The bridge was insensitively repointed with very light mortar in 1957 and again in 1963. It is very similar to another arch bridge a few feet away, over the same meandering stream (100Y041).

HISTORICAL AND TECHNOLOGICAL SIGNIFICANCE: The small stone arch bridge built in 1875 is located in the National Register-listed Lambertville Historic District, recognized for its transportation and architectural significance. Lambertville is a town which was shaped by the transportation needs of the state. Located on the Old York Road from Philadelphia to New York City, its growth surged with the opening of the D&R Feeder Canal in the early 1830s. The Feeder, an important link with industrial Trenton and Philadelphia with the rich eastern Pennsylvania coal fields, carried its peak loads in the 1860s. The town also benefited from the construction of the Delaware Division Canal in Pennsylvania. Canal boats were pulled across the Delaware River by cable to Lambertville, there connecting with the D&R. In addition to the canal feeder, which was open to marine traffic until about 1913, Lambertville was also the site of the main shops for the Belvidere and Delaware Railroad, built from Trenton to Warren County and opened in 1851. The railroad also played a significant role in the 19th and early-20th century development of the community as did the road. CR 518, the road carried by the bridge, is the historic route from Lambertville to Hopewell (Mercer County). Technologically the short span is representative of what by 1876 was common technology. Its significance is that it was built within the 19th-century period of significance of the Lambertville Historic District and that it contributes to the historic and physical character of that district.

Boundary Description and Justification: The bridge is a contributing resource in an National Register-listed historic district. The bridge and its surroundings are significant. For a precise delineation of the Lambertville Historic District boundaries, refer to the National Register file at NJHPO.

PHOTO: 62:4, 69:11A,12 (06/91) REVISED BY (DATE): QUAD: Lambertville

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 100Y041 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.5

NAME & FEATURE INTERSECTED CR 518 OVER SWAN CREEK **FACILITY** CR 518

TOWNSHIP LAMBERTVILLE CITY

TYPE STONE ARCH **DESIGN** ELLIPTICAL **MATERIAL** Stone

 # SPANS 1 **LENGTH** 40 ft **WIDTH** 29.5 ft

CONSTRUCTION DT 1876 **ALTERATION DT** 1963 **SOURCE** PLAQUE

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane local street and narrow shoulders over a minor stream in the center of the architecturally and historically significant 19th-century town of Lambertville. It is on a residential street with 19th- and 20th-century dwellings. Lambertville is a National Register-listed historic district. This is one of 3 stone arch bridges the historic district (others are 100Y040, 1000056). The bridge was built within the 19th-century period of significance and contributes.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Listed. Lambertville Historic District. 06/30/1983. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The rubble-coursed elliptical stone arch bridge built in 1876, has low stone parapets and wingwalls. The arch is set with rusticated ringstones. The southeast wingwall was reinforced with concrete in 1963, and the spandrel walls have been incompatibly repointed. While not individually distinguished, the bridge reflects the significant transportation history emphasized in the National Register nomination. It contributes to the historic character of the district.

INFOR MATION

BIBLIOGRAPHY: Hunterdon County Engineer's Office Bridge card Y41.
Hunterdon County Master Plan: Sites of Historic Interest. 1979.
Schmidt, Hubert G. Rural Hunterdon: An Agricultural History. New Brunswick: Rutgers University Press, 1945.
ONJH. National Register File: Hunterdon County: Lambertville Historic District. 1983.

PHYSICAL DESCRIPTION: The 40'-wide elliptical stone arch bridge with random-coursed ashlar spandrel walls was built in 1876, as inscribed in a center stone. The stone also identifies the bridge committee members as Levi Reynolds, J.H. Boozer, B. Blackwell, J. Dilts, and P.B. Goodfellow. It is constructed of the locally common gray granite stone quarried in nearby Raven Rock. It is of traditional construction, using ringstones to define the arch. It is finished with low stone parapets and extended wingwalls. The bridge was "patched" in 1950, and insensitive repointing with very light mortar was done in 1963 and 1966. It is very similar to another arch bridge a few feet away, over the same meandering stream (100Y040).

HISTORICAL AND TECHNOLOGICAL SIGNIFICANCE: The small stone arch bridge built in 1876 is located in the National Register-listed Lambertville Historic District, recognized for its 19th-century transportation and architectural significance. Lambertville is a town which was shaped by the transportation needs of the state. Located on the Old York Road from Philadelphia to New York City, its growth surged with the opening of the D&R Feeder Canal in the early 1830s. The feeder, an important link with industrial Trenton and Philadelphia with the rich eastern Pennsylvania coal fields, carried its peak loads in the 1860s. The town also benefited from the construction of the Delaware Division Canal in Pennsylvania. Canal boats were pulled across the Delaware River by cable to Lambertville, there connecting with the D&R. In addition to the canal feeder, which was open to marine traffic until about 1913, Lambertville was also the site of the main shops for the Belvidere and Delaware Railroad, built from Trenton to Warren County and opened in 1851. The railroad also played a significant role in the 19th and early-20th century development of the community as did the road. CR 518, the road carried by the bridge, is the historic route from Lambertville to Hopewell (Mercer County). Technologically the short span is representative of what by 1876 was common technology. Its significance is that it was built within the 19th-century period of significance of the Lambertville Historic District and that it contributes to the historic and physical character of that district.

Boundary Description and Justification: The bridge is a contributing resource to an National Register-listed historic district. The bridge and its surroundings are significant. For a precise delineation of the Lambertville Historic District, refer to the National Register file at the NJHPO.

PHOTO: 62:44,69:13 (06/91) REVISED BY (DATE): QUAD: Lambertville

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1010151 **CO** HUNTERDON **OWNER** NJDOT **MILEPOINT** 13.3

NAME & FEATURE INTERSECTED NJ 31 OVER BRANCH OF STONY BROOK **FACILITY** NJ 31

TOWNSHIP EAST AMWELL TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 47 ft **WIDTH** 40 ft

CONSTRUCTION DT 1927 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY BRIDGE DIV **BUILDER** UNKNOWN

SETTING / CONTEXT The stringer bridge carries a two lane with shoulders state highway over Stony Brook. It is located in a wooded setting on the edge of a small village of modified 19th- and 20th-century homes. The road carries busy arterial traffic.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed single span concrete encased steel stringer bridge is supported on concrete abutments with concrete wingwalls. It is finished with balustrades with plain posts. The bridge is an uninspired example of the most common bridge type used by the county and the state in the road expansion projects of the post-WW I years. It lacks technological or historical significance.

INFOR MATION

PHOTO: 611:26A-27A (01/92) REVISED BY (DATE): QUAD: Hopewell

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1011153 **CO** HUNTERDON **OWNER** NJDOT **MILEPOINT** 9.36

NAME & FEATURE INTERSECTED ACCESS ROAD OVER 3RD NESHANIC RIVER **FACILITY** ACCESS ROAD

TOWNSHIP RARITAN TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 63 ft **WIDTH** 30 ft

CONSTRUCTION DT 1925 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a short 2-lane road that runs from US 202 and dead ends at a private driveway. It is located in a suburban setting adjacent to heavily travelled US 202. Running parallel to its replacement that carries the present right-of-way of US 202 over the river, the bridge is on what was the original right-of-way of the highway.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed 2-span encased steel stringer bridge is supported on a concrete substructure with a cutwater pier. The wingwall on the east side of the bridge abuts the wingwall of the US 202 span. The bridge is finished with a standard-design concrete balustrade. One of over 75 pre-World War II stringer spans in the county, it is not technologically or historically distinguished.

INFOR MATION

PHOTO: 28:17-18 (05/92) REVISED BY (DATE): QUAD: Hopewell

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1012151 **CO** HUNTERDON **OWNER** RAILROAD **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BLACK RIVER AND WESTERN RR OVER NJ 31 **FACILITY** BLACK RIVER & WESTERN RR

TOWNSHIP RARITAN TOWNSHIP

TYPE THRU GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 69 ft **WIDTH** 21 ft

CONSTRUCTION DT 1928 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a single line of Black River & Western tracks over busy NJ 31 a 2-lane highway with shoulders. It is located on the edge of the congested Flemington shopping area. The bridge originally carried two tracks; one has been removed.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The thru girder with floor beams bridge is of riveted built-up construction with knee braces and is supported on a concrete substructure. It consists of three girders and has a ballasted deck and brick curb at the inside face of the track level of the girders. A representative example of a type well represented in the county, it is not technologically or historically significant.

INFOR MATION

PHOTO: 61:2A, 624:14-15 (06/91) REVISED BY (DATE): QUAD: Flemington

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1012152 **CO** HUNTERDON **OWNER** NJDOT **MILEPOINT** 23.13

NAME & FEATURE INTERSECTED NJ 31 OVER BUSHKILL CREEK **FACILITY** NJ 31

TOWNSHIP RARITAN TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 22 ft **WIDTH** 40 ft

CONSTRUCTION DT 1928 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT NJ STATE HWY BRIDGE DIV **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a busy 2-lane state highway over a minor stream in an urban area of mixed residential and retail establishments. It is near the busy Flemington shopping area.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single span reinforced concrete slab bridge is supported on concrete abutments with wingwalls. It has a standard design concrete balustrades. It exhibits spalling and exposed reinforcing bars. The bridge is a representative example of a common type and is not technologically or historically significant.

INFOR MATION

PHOTO: 62:21-22 (06/91) REVISED BY (DATE): QUAD: Flemington

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1012154 **CO** HUNTERDON **OWNER** NJDOT **MILEPOINT** 24.49

NAME & FEATURE INTERSECTED NJ 31 OVER ASSISCONG CREEK **FACILITY** NJ 31

TOWNSHIP RARITAN TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 31 ft **WIDTH** 40 ft

CONSTRUCTION DT 1928 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The two-lane bridge carries Old Route 30 over the Assiscong Creek. It is located in a wooded setting, on the edge of the congested Flemington shopping area. It carries moderate to heavy traffic. The land is used for mixed agricultural purposes.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The concrete encased stringer bridge is supported on concrete abutments with wing walls and has concrete balustrades. It is of the standard design and exhibits not distinctive details. One of over 75 similar spans in the county, the bridge is a representative example of the most common pre-World War II bridge type in the state. It is not historically or technologically noteworthy.

INFOR MATION

PHOTO: 61:15A-16A (06/91) REVISED BY (DATE): QUAD: Flemington

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1012155 **CO** HUNTERDON **OWNER** NJDOT **MILEPOINT** 25.35

NAME & FEATURE INTERSECTED NJ 31 OVER LEHIGH VALLEY MAINLINE **FACILITY** NJ 31

TOWNSHIP RARITAN TOWNSHIP

TYPE THRU GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 153 ft **WIDTH** 40 ft

CONSTRUCTION DT 1928 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries a busy two-lane state highway and shoulders over one track of NJT's Lehigh Valley line. It is located in a wooded rural setting of sparse development.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed bridge is composed of two encased stringer approach spans and an encased thru girder with floorbeams main span. It bears on concrete abutments and bents and has concrete balustrades on the stringer spans. The bridge exhibits no distinctive details and is a type and style commonly used by the state in the pre-WW II era. It is not technologically or historically significant.

INFOR MATION

PHOTO: 61:19A-20A (06/91) REVISED BY (DATE): QUAD: Flemington

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1012156 **CO** HUNTERDON **OWNER** NJDOT **MILEPOINT** 25.44

NAME & FEATURE INTERSECTED NJ 31 OVER SOUTH BRANCH RARITAN RIVER **FACILITY** NJ 31

TOWNSHIP RARITAN TOWNSHIP

TYPE THRU GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 220 ft **WIDTH** 40 ft

CONSTRUCTION DT 1928 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries a 2-lane with shoulders state highway over the South Branch of the Raritan River. It is located in a sparsely settled wooded, rural area.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The fully encased thru girder with floor beams bridge is supported on concrete abutments and piers with concrete balustrades. It is a representative example of a common pre-World War II bridge type that was used frequently by the State Highway Department. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 61:17A-18A (06/91) REVISED BY (DATE): QUAD: Flemington

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1012158 **CO** HUNTERDON **OWNER** NJDOT **MILEPOINT** 27.17

NAME & FEATURE INTERSECTED NJ 31 OVER BRANCH OF PRESCOTT BROOK **FACILITY** NJ 31

TOWNSHIP READINGTON TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 30 ft **WIDTH** 40 ft

CONSTRUCTION DT 1928 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY BRIDGE DIV **BUILDER**

SETTING / CONTEXT The two lane bridge carries New Jersey State Route 31 over a branch of the Prescott Brook. It is located in a wooded rural setting with nearby open fields. It is on a heavily traveled two lane arterial road.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The concrete encased steel stringer bridge with concrete abutments, wing walls, and concrete balustrades is unaltered. It is a representative example of the most commonly used bridge type in the county and the state in the pre-WW II highway expansion projects. One of over 75 such spans in the county, it is not historically or technologically noteworthy.

INFOR MATION

PHOTO: 62:28-29 (06/91) REVISED BY (DATE): QUAD: Flemington

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1012159 **CO** HUNTERDON **OWNER** NJDOT **MILEPOINT** 28.07

NAME & FEATURE INTERSECTED NJ 31 OVER PRESCOTT BROOK **FACILITY** NJ 31

TOWNSHIP CLINTON TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 54 ft **WIDTH** 40 ft

CONSTRUCTION DT 1928 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries a busy 2-lane with shoulders state highway over a minor stream. The bridge carries heavy traffic. It is located in an undistinguished wooded rural setting with scattered 19th- and 20th-century housing nearby. The area does not appear to have historic district potential.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed concrete encased stringer bridge is supported on concrete abutments and wingwalls. It has rectangular pierced concrete balustrades. The 48" deep steel girders are of built-up plates. The bridge is not technologically nor historically distinguished.

INFOR MATION

PHOTO: 623:24-25 (02/92) REVISED BY (DATE): QUAD: Flemington

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1013151 **CO** HUNTERDON **OWNER** NJDOT **MILEPOINT** 33.2

NAME & FEATURE INTERSECTED NJ 31 OVER SOUTH BRANCH RARITAN RIVER **FACILITY** NJ 31

TOWNSHIP CLINTON TOWN

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 130 ft **WIDTH** 40 ft

CONSTRUCTION DT 1928 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries a two lane and one shoulder highway over the South Branch of the Raritan River. It is located in a wooded rural setting on the edge of the town. It carries heavy arterial traffic.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 4/30/91

SUMMARY The three span concrete encased steel stringer bridge is supported on concrete abutments with wingwalls and concrete piers. It has concrete balustrades faced with modern beam guide rails. It is an undistinguished example of a common design used by the State Highway Department in the pre-WW II era. It is not technologically or historically noteworthy.

INFOR MATION

PHOTO: 612:17-18 (01/92) REVISED BY (DATE): QUAD: High Bridge

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1013152 **CO** HUNTERDON **OWNER** NJDOT **MILEPOINT** 35.08

NAME & FEATURE INTERSECTED NJ 31 OVER WILLOUGHBY BROOK **FACILITY** NJ 31

TOWNSHIP LEBANON TOWNSHIP

TYPE DECK ARCH **DESIGN** BARREL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 29 ft **WIDTH** 40 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries 2 lanes and shoulders of a busy state highway over minor stream in a wooded setting on the edge of a busy urban area.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The short reinforced concrete closed-spandrel deck arch bridge is supported on concrete footings and has concrete wingwalls. It is finished with standard-design concrete balustrades. An unaltered example of a type well represented within the state, the bridge is not technologically innovative nor historically noteworthy.

INFOR MATION

PHOTO: 610:5-6 (07/91) REVISED BY (DATE): QUAD: High Bridge

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1013154 **CO** HUNTERDON **OWNER** NJDOT **MILEPOINT** 36.64

NAME & FEATURE INTERSECTED NJ 31 OVER SPRUCE RUN **FACILITY** NJ 31

TOWNSHIP GLEN GARDNER BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 72 ft **WIDTH** 40 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries a two lane road and shoulders over Spruce Run. It is located in a wooded setting on the edge of a village of mixed residential and retail buildings. It carries a heavily traveled arterial road.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed concrete encased steel stringer two span bridge is supported on scored concrete abutments with wingwalls and a pier. It has concrete balustrades. The wingwalls are reinforced with sandbags. The bridge, one of over 75 such spans in the county, is a representative example of the most common pre-World War II type in the state. It is technologically and historically undistinguished.

INFOR MATION

PHOTO: 610:3-4 (07/91) REVISED BY (DATE): QUAD: High Bridge

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1013155 **CO** HUNTERDON **OWNER** NJDOT **MILEPOINT** 37.18

NAME & FEATURE INTERSECTED SANATORIUM ROAD OVER SPRUCE RUN **FACILITY** SANATORIUM ROAD

TOWNSHIP GLEN GARDNER BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 63 ft **WIDTH** 30 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a two-lane street over a minor stream. It is located on the edge of a village surrounded by 19th- and 20th-century homes. The bridge is also located a few feet from the intersection with NJ 31.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The concrete encased steel stringer two span bridge is supported on concrete abutments with wing walls and concrete pier. It is finished with concrete balustrades. One of over 75 in the county, it is of the type commonly used by the county and the state in the pre-WW II road improvement projects. It is not technologically or historically noteworthy.

INFOR MATION

PHOTO: 610:1-2 (07/91) REVISED BY (DATE): QUAD: High Bridge

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1013158 **CO** HUNTERDON **OWNER** NJDOT **MILEPOINT** 38.47

NAME & FEATURE INTERSECTED NJ 31 OVER RARITAN VALLEY LINE **FACILITY** NJ 31

TOWNSHIP HAMPTON BOROUGH

TYPE THRU GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 180 ft **WIDTH** 40 ft

CONSTRUCTION DT 1934 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries a busy 2-lane state highway and one sidewalk over the four tracks of NJT's Raritan Valley Line. It is located in a wooded rural setting.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Central Railroad of NJ Main Line Corridor. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95. DOE 11/30/95.

SUMMARY The skewed fully encased thru girder with floor beams bridge bears on concrete abutments with wingwalls. A heavy-gauge metal railing with a decorative open geometric pattern borders the sidewalk. The bridge is a representative example of a style and type that was commonly used by the Sate Highway Department prior to 1940, and it is not historically or technologically distinctive.

INFOR MATION

PHOTO: 63:7A-8A (06/91) REVISED BY (DATE): QUAD: High Bridge

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1017163 **CO** HUNTERDON **OWNER** NJDOT **MILEPOINT** 18.31

NAME & FEATURE INTERSECTED I 78 OVER BEAVER BROOK **FACILITY** I-78

TOWNSHIP CLINTON TOWNSHIP

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 30 ft **WIDTH** No Data

CONSTRUCTION DT 1941 **ALTERATION DT** 1966 **SOURCE** PLANS

DESIGNER/PATENT UNKNOWN / NJ STATE HWY DEPT **BUILDER**

SETTING / CONTEXT The arch bridge carries 8 lanes and shoulders of a limited access highway over a minor stream in a wooded setting.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The reinforced concrete deck arch bridge with wingwalls was built in two sections. Originally dating to 1941, the span was widened in kind in 1966. At that time the south elevation was removed to accommodate the widening. The altered bridge, a representative example of a common type, is not historically or technologically noteworthy.

INFOR MATION

PHOTO: 69: (03/92) REVISED BY (DATE): QUAD: High Bridge

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1019150 **CO** HUNTERDON **OWNER** NJDOT **MILEPOINT** 0.18

NAME & FEATURE INTERSECTED NJ 165 OVER SWAN CREEK **FACILITY** NJ 165

TOWNSHIP LAMBERTVILLE CITY

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 32 ft **WIDTH** 50 ft

CONSTRUCTION DT 1929 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located in the quaint town of Lambertville. It carries a busy 4-lane state highway through an area of late-18th and early- to mid-19th century homes, inns and businesses. The bridge is part of the route that bypasses Main Street, the historic main road through Lambertville. It is located within the boundaries of the Lambertville Historic District which encompasses most of the political boundaries of the town.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Individually Eligible. Listed. Lambertville Historic District. 06/30/1983. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The concrete deck arch bridge with concrete balustrades and decorative spandrel panels reflects the apparent local preference for arches. The bridge is an unaltered representative example of the type. One of six arches crossing Swan Creek, together they document arch bridge technology from 1872 through 1929. Although built later than the period of significance of the Lambertville Historic District, it is significant on its own merits as a well-designed bridge by the State Highway Department.

INFOR MATION

BIBLIOGRAPHY:
Schmidt, Hubert G. Rural Hunterdon: An Agricultural History. New Brunswick: Rutgers University Press, 1945.
ONJH. National Register File: Hunterdon County: Lambertville Historic District. 1983.

PHYSICAL DESCRIPTION: The handsome, well-proportioned reinforced concrete elliptical arch bridge is 32' long and 50' wide. It carries a 4-lane road over a minor stream. The spandrel has spandrel panels with a brush hammer finish. The balustrade is a standard design set between paneled end posts inscribed with date and highway route. The position of the end posts is echoed with scored panels on the wingwalls. The span appears to be unaltered.

HISTORICAL AND TECHNOLOGICAL SIGNIFICANCE: The well-proportioned reinforced concrete arch bridge is an excellent and well-preserved example of the high quality designs of the Bridge Division of the New Jersey State Highway Department in the years between the two world wars. Under the direction of bridge engineer Morris Goodkind (1888-1968), Chief Bridge Engineer, and Arthur Lichtenberg, Architect, the department was a national leader in the application of aesthetics to bridge design. They also guided the bridge division at its period of greatest production and growth and the establishment of the state highway system as we know it today. The bridge is located in the National Register-listed Lambertville Historic District, recognized for its 19th-century transportation and architectural significance. Although it was built after the period of significance of the historic district, it perpetuates the local preference for arch bridges, and it contributes to the character of the district. It is however, distinguished in its own right.

Lambertville is a town which was shaped by the transportation needs of the state. Located on the Old York Road from Philadelphia to New York City, its growth surged with the opening of the D&R Feeder Canal in the early 1830s. The Feeder, an important link with industrial Trenton and Philadelphia with the rich eastern Pennsylvania coal fields, carried its peak loads in the 1860s. The town also benefited from the construction of the Delaware Division Canal in Pennsylvania. Canal boats were pulled across the Delaware River by cable to Lambertville, there connecting with the D&R. In addition to the canal feeder, which was open to marine traffic until about 1913, Lambertville was also the site of the main shops for the Belvidere and Delaware Railroad, built from Trenton to Warren County and opened in 1851. The railroad also played a significant role in the 19th and early-20th century development of the community as did the road. This bridge is located on the bypass road which did much to preserve the historic character of the community by relieving the traffic congestion in the district.

Boundary Description and Justification: The bridge is individually distinguished, but it is also located within a historic district. Thus the span and its surroundings are significant. For an exact delineation of the boundary of the Lambertville Historic District, refer to the National Register file at the New Jersey Historic Preservation Office.

PHOTO: 68M:31-33 (07/91) REVISED BY (DATE): QUAD: Lambertville

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1020150 **CO** HUNTERDON **OWNER** NJDOT **MILEPOINT** 3.75

NAME & FEATURE INTERSECTED NJ 179 OVER ALEXAUKEN CREEK **FACILITY** NJ 179

TOWNSHIP WEST AMWELL TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 93 ft **WIDTH** 40 ft

CONSTRUCTION DT 1929 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries two lanes and shoulders of a highway over Alexauken Creek. Built as State Route 29, the highway bypasses the historic main street of Mount Airy. The southerly side of NJ 179 forms the northerly boundary of the National Register-listed Mount Airy Historic District. The bridge is not within the district and, it is outside the district's 1750-1881 period of significance. It does not contribute to the historic character of the area.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed 3-span concrete encased stringer bridge is supported on concrete abutments and piers, with concrete wing walls and balustrades. Some of the eight steel stringers have lost the concrete encasement. The bridge is an undistinguished example of the bridge type most commonly used by the county and state in the pre-WWII road improvement projects. It was built well outside the 1750-1881 period of significance of the Mount Airy Historic District to the south.

INFOR MATION

PHOTO: 612:2-3 (01/92) REVISED BY (DATE): QUAD: Stockton

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1021150 **CO** HUNTERDON **OWNER** NJDOT **MILEPOINT** 13.75

NAME & FEATURE INTERSECTED US 202 NB OVER SOUTH BRANCH RARITAN RIVER **FACILITY** US 202 NORTHBOUND

TOWNSHIP RARITAN TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 180 ft **WIDTH** 40 ft

CONSTRUCTION DT 1934 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries two lanes and a shoulder of one-way traffic over the South Branch of the Raritan River. It is located on the edge of a busy urban area of residential and retail buildings.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 8/10/90

SUMMARY The skewed concrete encased steel stringer three span bridge bears on scored concrete abutments and piers and has concrete balustrades. One of over 75 such bridges in the county, it is a representative example of the design used by the county and state in pre-WW II road expansion projects. It is not technologically or historically noteworthy.

INFOR MATION

PHOTO: 68:14A-15A (06/91) REVISED BY (DATE): QUAD: Flemington

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1021152 **CO** HUNTERDON **OWNER** NJDOT **MILEPOINT** 14.07

NAME & FEATURE INTERSECTED US 202 NB OVER CENTRAL RR OF NJ (BR&W) **FACILITY** US 202 NORTHBOUND

TOWNSHIP READINGTON TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 123 ft **WIDTH** 41.3 ft

CONSTRUCTION DT 1934 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries two lanes and a shoulder of one-way traffic on US 202 NB over the Central Railroad of New Jersey. It is located in a rural area of mixed fields near a busy urban area. It carries busy arterial highway over the one remaining track of an original two track crossing.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 8/10/90

SUMMARY The skewed encased steel stringer bridge has concrete column bents, concrete abutments, and concrete balustrades. It is a representative example of the most common pre-World War II bridge type in the state. One of over 75 such spans in the county, the bridge is not technologically or historically noteworthy.

INFOR MATION

PHOTO: 68:16A-17A (06/91) REVISED BY (DATE): QUAD: Flemington

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1021154 **CO** HUNTERDON **OWNER** NJDOT **MILEPOINT** 14.16

NAME & FEATURE INTERSECTED US 202 NB OVER LEHIGH VALLEY RR **FACILITY** US 202 NORTHBOUND

TOWNSHIP READINGTON TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 172 ft **WIDTH** 40 ft

CONSTRUCTION DT 1934 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries the 2 north-bound lanes and a shoulder of a divided state highway over 1 track of the Lehigh Valley Railroad. It is located in a rural setting of mixed fields on the edge of a congested urban area dominated by shopping centers. The highway is a major arterial route that was built in two sections with the northbound portion being the oldest.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 8/10/93

SUMMARY The 3-sapn overpass is composed of encased stringer approach span and an encased deck girder with floor beams span. The bridge is supported on a concrete substructure with stub abutments and column bents with crash walls. A standard design concrete balustrade finishes the span which is a representative example of a common bridge type throughout the state. It is neither technologically or historically distinguished.

INFOR MATION

PHOTO: 68:18A-20A (06/91) REVISED BY (DATE): QUAD: Flemington

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1021157 **CO** HUNTERDON **OWNER** NJDOT **MILEPOINT** 17.04

NAME & FEATURE INTERSECTED US 202 OVER PLEASANT RUN **FACILITY** US 202

TOWNSHIP READINGTON TOWNSHIP

TYPE DECK ARCH **DESIGN** BARREL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 34 ft **WIDTH** 97.2 ft

CONSTRUCTION DT 1933 **ALTERATION DT** 1960 **SOURCE** PLANS/INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The four lane plus shoulders and grassy median strip-wide bridge carries a busy state highway over a minor stream. The wooded rural setting is undistinguished.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span concrete deck arch bridge has concrete wing walls. Originally built in 1933, it was nearly doubled in width by a 1960 addition to the north side. An example of a well represented bridge type in the county, the altered bridge is not technologically or historically noteworthy.

INFOR MATION

PHOTO: 626:20-21 (04/92) REVISED BY (DATE): QUAD: Flemington

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1022150 **CO** HUNTERDON **OWNER** NJDOT **MILEPOINT** 6.2

NAME & FEATURE INTERSECTED NJ 179 OVER BACK BROOK (RINGOES CREEK) **FACILITY** NJ 179

TOWNSHIP EAST AMWELL TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 24 ft **WIDTH** 38.5 ft

CONSTRUCTION DT 1923 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane county road with shoulders over a minor stream on the edge of a village of modified 19th and 20th century homes. It carries moderate highway traffic.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single span reinforced concrete slab bridge is supported on concrete abutments with wingwalls. It is bordered with metal guide railings. Exhibiting no distinctive details, it is a representative example of a common bridge type and is not technologically or historically significant.

INFOR MATION

PHOTO: 611:13A-14A (01/92) REVISED BY (DATE): QUAD: Hopewell

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1024151 **CO** HUNTERDON **OWNER** NJDOT **MILEPOINT** 8.8

NAME & FEATURE INTERSECTED NJ 173 OVER MULHOCKAWAY CREEK **FACILITY** NJ 173

TOWNSHIP UNION TOWNSHIP

TYPE THRU GIRDER **DESIGN** PARTIALLY ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 71 ft **WIDTH** 30 ft

CONSTRUCTION DT 1920 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries a 2-lane state highway and narrow shoulders over a minor stream. Paralleling US 78, the highway carries heavy traffic. It is located in a wooded rural area, near open fields and farmland.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed built-up thru girder with floor beams bridge is supported on concrete abutments with wingwalls. The floorbeams are encased. The bridge is a representative example of a common bridge type and is not technologically or historically significant.

INFOR MATION

PHOTO: 621:13-14 (02/92) REVISED BY (DATE): QUAD: High Bridge

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1050160 **CO** HUNTERDON **OWNER** UNKNOWN **MILEPOINT** 6.899

NAME & FEATURE INTERSECTED MILFORD ROAD OVER LEHIGH VALLEY RR **FACILITY** MILFORD ROAD

TOWNSHIP BLOOMSBURY BOROUGH

TYPE PONY TRUSS **DESIGN** HOWE **MATERIAL** Wrought Iron

 # SPANS 1 **LENGTH** 96 ft **WIDTH** 20 ft

CONSTRUCTION DT 1891 **ALTERATION DT** 1917, 1933 **SOURCE** INSCRIPTION/PLANS

DESIGNER/PATENT OFF OF ENG LEHIGH VAL RR **BUILDER** PHILA. BRIDGE WORKS

SETTING / CONTEXT The bridge carries one lane of a quiet rural road over one track of the Lehigh Valley Railroad. It originally crossed three tracks. It is located in a lightly wooded suburban setting dominated by large homes on generous lots. The bridge is at the intersection with Staats Road.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 1891 9-panel Howe pony truss bridge is of riveted construction. It rests on bearing plates supported on 1917 concrete abutments with wingwalls. It has timber stringers and deck. The deck is cambered, but not the truss. Three blast plates remain. Knee braces are used at each floorbeam rather than outriggers. The floorbeams are attached to only the inside plate of the bottom chord. The bridge is extremely well preserved, and it is one of the most distinctive early RR spans in the area.

INFOR MATION

Bibliography:
NJDOT Aperture Card Plan File: Conrail 0501/68.99.
Holton, James L. The Reading Railroad The History of a Coal Age Empire. 1989.
Darnell, Victor. Directory of American Bridge Building Companies. 1984.

Physical Description: The 9-panel Howe pony truss bridge is supported on concrete abutments built in 1917 (south) and 1933 (north). The members are wrought iron, and all connections are riveted. Although moved to this location in 1933, the trusses appear to be entirely original. They are of unusual, massive design with the inclined end posts, top chords, and bottom chords of double-web plate each with two angles which connect to a cover plate. At the bottom (open) edge of the web plates of the top chords there are unusual corrugated plate instead of the more common detail of lacing. Each truss panel is composed of two diagonals in the pattern of an X. The tension diagonal consists of four angles in two pairs riveted to the chord web plates outside the line of the double webs. The compression diagonals, which pass through the tension diagonals, consist of four angles in an H configuration with closely spaced lacing in the webs. Except at the first interior floor beam, there are no verticals, but there are knee braces which extend from the top flange of the floor beams to the inside web plate of the top chord. Another unusual detail is the haunched roadway profile which is achieved by varying the floor beam attachment points. At the abutments the stringers sit on a timber bridge seat rest on the back wall which is depressed so that the roadway surface is lower than the bridge bearings. The first interior floor beams are riveted to the underside of the bottom chords while the remaining floor beams frame into the inside web plates of the bottom chords.

Historical and Technological Significance: The wrought-iron Howe pony truss bridge is technologically significant as a rare survivor of its type, being one of the oldest and most complete railroad-related pony truss spans in the state (criterion C). The various plans and shop drawings that survive offer an interesting chronological history of the crossing and the trusses. Prior to 1896 the Easton & Amboy Railroad, a subsidiary of the Lehigh Valley Railroad, had constructed a 3-span timber pony truss bridge over its two-track line. A plan prepared for or by the Easton & Amboy Railroad dated April 4, 1896 shows the addition of a new masonry and timber bent at the line of the original south abutment, and the construction of a new stringer end span that allowed the excavation under the original south end span to accommodate a third track.

The Easton & Amboy line became known as the Lehigh Valley Railroad. In 1916 the LVRR designed a reinforced concrete south abutment and a new timber pony truss bridge that eliminated the short south end span added 20 years earlier. The inscription on the south abutment reads "1917" showing that it was built the year after the date on the plans.

Plans dated March 21, 1933, indicate that the Lehigh Valley Railroad replaced all of the timber pony truss span except the 1917 concrete south abutment. The work was done in 1933 and 1934. The 1917 abutment was raised with a new concrete seat. The north abutment is a gravity type. The most significant feature of the 1933 "upgrading" of the crossing is that the Howe pony trusses installed to replace the timber trusses. The iron trusses were fabricated in 1891 by the Philadelphia Bridge Works. They are a pair of the six "side trusses" fabricated for the LVRR for the "Stanton Bridge" (bridge 53-A) in Hunterdon County. The Stanton bridge was removed and the trusses were in storage. While the trusses are old, the rolled floor beams, stringers, and timber plank deck were new in 1933. The plans show that the floor system was designed for a strong of 15-tone trucks (similar to today's H-15 loading). The 1891 truss lines were checked for this load in 1933 and found to have great excess capacity.

A notation on the 1891 Philadelphia Bridge Company shop drawing specifies that six "trusses like this" were wanted. From the size of the section of the truss members, it is clear that the trusses were built to carry rail traffic, not vehicular traffic. The shop drawings give no material properties, so the note that the trusses are wrought iron is not confirmed. The 1891 trusses survive basically unaltered, and they rank among the oldest and most complete railroad-related pony truss spans in the state.

The Philadelphia Bridge Works was started in 1877 by Cofrode & Saylor. Their shop was located in Pottstown. The 1898 Philadelphia city directory list the owners of the company as C.R. Baird and Company and that the plant was idle and for sale. It was purchased by the Pottstown Bridge Company who subsequently sold to McClintic-Marshall in 1900. The Pottstown works were on the location of a former repair shop of the Philadelphia and Reading (Reading) Railroad.

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US
November 12, 2002

Boundary Description and Justification: The bridge is evaluated as individually distinguished. The fact that it was moved does not detract from its technological significance. It is the trusses that are the important part of the resource, and the boundary is limited to the trusses themselves.

PHOTO: 619:36-41 (02/92) REVISED BY (DATE): QUAD: Bloomsbury

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1050161 **CO** HUNTERDON **OWNER** UNKNOWN **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 579 OVER LEHIGH VALLEY RAILROAD **FACILITY** CHURCH STREET

TOWNSHIP BLOOMSBURY BOROUGH

TYPE PONY TRUSS **DESIGN** WARREN **MATERIAL** Steel

 # SPANS 3 **LENGTH** 129 ft **WIDTH** 16 ft

CONSTRUCTION DT 1910 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge carries one lane of a lightly traveled 2-lane street over a single line of track of the Lehigh Valley Railroad now used as a Conrail freight line. It is located in a wooded village setting. Modern development is encroaching.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 10/98 03/12/01.

SUMMARY The 3-span bridge is composed of two short deck girder approach spans and a 6-panel riveted Warren with verticals pony truss main span built with curved parallel chords to increase clearance over the tracks. It is supported on concrete abutments and laced steel bents. Riveted outriggers are original. An expansion plate is located in the center of the span. Although there are no distinctive details, it is an unaltered example of a bridge type commonly used by the railroads since the 1890s. The structure is individually eligible for listing in the National Register under Criterion C.

INFOR MATION

PHOTO: 619:30-35 (02/92) REVISED BY (DATE): QUAD: Bloomsbury

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1050164 **CO** HUNTERDON **OWNER** UNKNOWN **MILEPOINT** 59.06

NAME & FEATURE INTERSECTED CR 513 OVER LEHIGH VALLEY RR **FACILITY** CR 513 (PITTSTOWN ROAD)

TOWNSHIP UNION TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Reinforced Concrete

 # SPANS 3 **LENGTH** 112 ft **WIDTH** 34 ft

CONSTRUCTION DT 1935ca **ALTERATION DT** **SOURCE** STYLE

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge carries a two-lane county road (Pittstown Road) over one track of the Lehigh Valley Railroad. There were originally three tracks. It is near the tiny village of Grandin. Grandin has several well-maintained 19th-century homes, a church and a cemetery.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The three span concrete encased steel stringer bridge is supported on concrete abutments and concrete bent piers. It has paneled concrete parapets. Three metal blast plates are still in place. A late representative example of a common bridge type, it is one of over seventy-five stringer bridge built before World War II that are extant in the county. It is not technologically or historically significant.

INFOR MATION

PHOTO: 617:3-5 (02/92) REVISED BY (DATE): QUAD: Pittstown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US
November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1050167 **CO** HUNTERDON **OWNER** NJDOT **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED HIGGINSVILLE ROAD OVER LEHIGH VALLEY MAIN LINE **FACILITY** HIGGINSVILLE ROAD

TOWNSHIP READINGTON TOWNSHIP

TYPE PONY TRUSS **DESIGN** WARREN **MATERIAL** Iron

 # SPANS 1 **LENGTH** 43 ft **WIDTH** 12 ft

CONSTRUCTION DT 1890 **ALTERATION DT** Demolished: 1997 **SOURCE** PLANS

DESIGNER/PATENT LEHIGH VALLEY RR CHF ENG **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries one lane of a lightly traveled country road over the Lehigh Valley Railroad main line in a rural, agricultural setting. The Lehigh Valley Railroad was a Pennsylvania coal hauler that linked with the CRR of NJ at Phillipsburg in 1855. It developed its own line in New Jersey beginning in 1871. The line became part of Conrail in 1976 and is actively used today as a freight route.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Bridge was Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 4-panel riveted Warren pony truss bridge with original outriggers has floor beams that vary in depth to create the camber. Timber stringers are notched to go over floor beams. The wearing surface is plank. The bridge is supported on ashlar abutments that have been raised twice; concrete caps in 1929, and recent timber grillage. Floor beams were replaced in 1923. The documented, well-preserved bridge is a good, representative example of the truss overpasses from the late 19th century.

INFOR MATION

Bibliography:
Archer, Robert. A History of the Lehigh Valley Railroad. 1977.
NJDOT. Bridge Plan File: 0501/47.52.

Physical Description: The 43'-long and 12'-wide 4-panel rivet connected iron Warren pony truss bridge is supported on rubble-coursed stone abutments. The superstructure has been raised twice to increase vertical clearance. In 1929 new concrete seats were added. The present timber grillage seat is recent. The top chord, bottom chord, and inclined end posts are composed of angles with riveted web plate. What is of particular note are the T sections, set back to back and fixed together with rivets, that make up the diagonals. This detail has been identified on only a few 1890s bridges in New Jersey. The outriggers are built up of riveted plates. The built-up floor beams are fitted with section brackets upon which the timber stringers that are notched to go over the floor beams bear and give the span a vertical deck profile. The wood elements appear to be inkind replacements of the original details. With the exception of being raised, and having modern beam guide rail added, the bridge appears unaltered.

Historical and Technological Significance: The iron Warren pony truss overpass of riveted construction was built in 1890, according to plans drawn by the Lehigh Valley Railroad office of Superintendent of Bridges. It is technologically significant because it is an early and well-preserved example of its type and it has T sections for the diagonals (criterion C). T-shaped section is a ca. 1890 detail that is not common. The riveted Warren pony truss with outriggers to brace the upper chord and provide lateral stability was a common choice by railroads for grade crossing eliminations around the turn of the century, but few of the extant examples are documented as being as early as the Higginsville Road overpass. Additionally, the trusses appear unaltered, and the flooring system appears to be an inkind replacement of the original arrangement of timber stringers carried on brackets on the floor beams carrying a plank deck.

The Lehigh Valley Railroad, primarily a coal hauling line, was completed across eastern Pennsylvania to Phillipsburg, New Jersey in 1855. It connected with the Central Railroad of New Jersey (CNJ) for trackage across the state, but it later built its own line across New Jersey, the Easton & Amboy Railroad. It established its waterfront freight terminals at Perth Amboy in 1875. The railroad is also noted for having purchased the Morris Canal as a means of gaining a trans-state route. The LVRR extended its line to Jersey City beginning in 1887. The railroad survived until 1976 when it became part of Conrail. Much of its historic right-of-way in New Jersey is still an active freight line.

Boundary Description and Justification: The bridge is evaluated as individually significant, and the boundary is limited to the superstructure and substructure of the span itself.

PHOTO: 68:11A-13A (06/91) REVISED BY (DATE): QUAD: Flemington

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US
November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1060155 **CO** HUNTERDON **OWNER** STATE AGENCY **MILEPOINT** 45.41

NAME & FEATURE INTERSECTED MOUNTAIN ROAD OVER RARITAN VALLEY LINE **FACILITY** MOUNTAIN ROAD

TOWNSHIP READINGTON TOWNSHIP

TYPE PONY TRUSS **DESIGN** WARREN **MATERIAL** Steel

 # SPANS 1 **LENGTH** 108 ft **WIDTH** 15.1 ft

CONSTRUCTION DT 1910 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT OFF OF ENG CNJ RR **BUILDER** PHEONIX BRIDGE COMPANY

SETTING / CONTEXT The one lane pony truss bridge carries Mountain Road over one line of Raritan Valley Line track. Originally two lines of track were crossed. It is located in a wooded sparsely settled area, immediately adjacent to an intersection.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The cambered ten panel Warren with verticals pony truss bridge is riveted. It is supported on concrete abutments and wing walls. The curved top chord is a built-up box member. Outriggers are original. Lacing on diagonal members is riveted to the outside edge of the angle. Alterations are minimal. Strengthening plates have been added to the bottom chord. Stringers and deck are replacements. The NJ Transit Historic Railroad Bridge Survey recommended that the bridge be ineligible.

INFOR MATION

PHOTO: 623:2-4 (02/92) REVISED BY (DATE): QUAD: Flemington

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1060167 **CO** HUNTERDON **OWNER** STATE AGENCY **MILEPOINT** 50.63

NAME & FEATURE INTERSECTED RARITAN VALLEY LINE RR OVER WEST STREET (CR 641) **FACILITY** RARITAN VALLEY LINE RR

TOWNSHIP CLINTON TOWNSHIP

TYPE DECK PLATE GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 32 ft **WIDTH** 30 ft

CONSTRUCTION DT 1915 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT OFF OF ENG CNJ RR **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries two tracks of NJT's Raritan Valley Line over one lane of a two-lane county road. The bridge is on a sharp curve with obstructed visibility. It is located in a village of well-maintained altered late-19th century homes.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Central Railroad of NJ Main Line Corridor. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95. DOE 11/30/95.

SUMMARY The skewed single span steel open-deck deck plate girder eliminates a grade crossing. It is of riveted built-up construction and is supported on handsome rusticated random ashlar abutments and stepped wingwalls with later concrete bearings. It has a cantilevered timber sidewalk and pipe railing. The bridge type is not technologically innovative nor is it historically distinguished as it is a representative example of a common type.

INFOR MATION

PHOTO: 612:27-28 (01/92) REVISED BY (DATE): QUAD: High Bridge

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1061165 **CO** HUNTERDON **OWNER** STATE AGENCY **MILEPOINT** 58.67

NAME & FEATURE INTERSECTED IRON BRIDGE ROAD OVER RARITAN VALLEY LINE **FACILITY** IRON BRIDGE ROAD

TOWNSHIP BETHLEHEM TOWNSHIP

TYPE THRU GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 51 ft **WIDTH** 12 ft

CONSTRUCTION DT 1900 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT CRR NJ OFF. OF CHIEF ENG. **BUILDER** PHOENIX BRIDGE COMPANY

SETTING / CONTEXT The single-span one lane bridge carries unimproved Iron Bridge Road over one line of NJT's Raritan Valley Line track. Originally, the bridge crossed two lines of track. It is located in a wooded hilly setting. The road carries little traffic. The rail line was originally developed by the Central Railroad of New Jersey.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Central Railroad of NJ Main Line Corridor, May contribute.

CONSULT DOCUMENTS SHPO Letter 6/30/95. DOE 11/30/95.

SUMMARY The skewed thru girder with floorbeams bridge is supported on ashlar abutments with wingwalls. Concrete caps have been added to the abutments and wingwalls. The lateral bracing is riveted to the floorbeams. Pipe railings top the girders. Though relatively unaltered, the technology is not innovative, and the bridge is not historically noteworthy. It is a representative example of a bridge type that is common in the state.

INFOR MATION

PHOTO: 621:1-4 (02/92) REVISED BY (DATE): QUAD: Bloomsbury

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 10RQ164 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED ROCKAFELLOWS MILL ROAD OVER SOUTH BRANCH RARITAN RIVER **FACILITY** ROCKAFELLOWS MILL ROAD

TOWNSHIP RARITAN TOWNSHIP

TYPE THRU TRUSS **DESIGN** PRATT **MATERIAL** Steel

 # SPANS 1 **LENGTH** 140 ft **WIDTH** 15.5 ft

CONSTRUCTION DT 1900 **ALTERATION DT** **SOURCE** COUNTY RECORDS

DESIGNER/PATENT WROUGHT IRON BRIDGE CO. **BUILDER** WROUGHT IRON BRIDGE CO

SETTING / CONTEXT The one-lane bridge carries an unpaved, 2-lane rural road over the South Branch of the Raritan River. It is located in a wooded rural setting but the urban environment is encroaching. The mill for which the dirt road is named does not appear to have survived, but remains of the dam are visible.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Listed. South Branch Historic District. 01/26/1990. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge is a six panel riveted pin-connected Pratt thru truss bridge. It is supported on rebuilt concrete abutments and stone wing walls. Modifications include welded repairs to bottom chord and verticals and welded gusset panels. Some pins are bent, and the eyebar bottom chord is twisted. Double pins are used for the lower chord at end panel points only. It has original lattice railing. The well-preserved bridge is rated as contributing element in the National Register district nomination.

INFOR MATION

PHOTO: 61:12A-14A (06/91) REVISED BY (DATE): QUAD: Flemington

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 10WD120 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED HAMP ROAD OVER ALEXAUKEN CREEK **FACILITY** HAMP ROAD

TOWNSHIP WEST AMWELL TOWNSHIP

TYPE PONY TRUSS **DESIGN** PRATT HALF HIP **MATERIAL** Metal

 # SPANS 1 **LENGTH** 55 ft **WIDTH** 13.1 ft

CONSTRUCTION DT 1895ca **ALTERATION DT** 1973-1974 **SOURCE** STYLE

DESIGNER/PATENT UNKNOWN **BUILDER** WROUGHT IRON BRIDGE CO.

SETTING / CONTEXT The bridge carries a narrow, lightly travelled, unimproved country road over a minor stream in a sparsely developed area. It is located in a wooded rural setting. Within sight of the bridge are the stone abutments of a non-extant railroad bridge. The unspoiled and protected setting enhances the significance of the span.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 11/22/95

SUMMARY The 4-panel pin-connected half hip Pratt pony truss bridge is supported on random ashlar abutments with wingwalls. The diagonals are joined to the chords and through bearing assembly with cast iron connectors, a detail found on another WIBC span in the county (10XXL95). This span is well preserved, and it is one of the most distinctive and complete examples of the over 20 Pratt half hip pony trusses in the county. Its state of preservation and construction details make it significant.

INFOR MATION

BIBLIOGRAPHY:
Darnell, Victor C. A Directory of American Bridge-Building Companies, 1840-1900. Washington D.C.: Society for Industrial Archeology, 1984.

PHYSICAL DESCRIPTION: The four-panel, pin-connected, half-hip Pratt pony truss bridge is supported on random ashlar abutments with wingwalls. The top chord and inclined end posts are riveted box members composed of shallow channels, toe out, with cover plates and widely spaced battens. Vertical members are back-to-back angles joined by lattice. The bottom chord and diagonals are stamped round-headed eyebars. Pin connections are through gusset plates riveted to the vertical ends. An unusual feature is the cast iron bearing shoes with rollers at both the expansion bearing plate and the fixed end. Cast iron connectors are also used for the node connecting the inclined end posts and top chord. The diagonals pass through the node and are secured by bolts. The original lattice railings remain.

Alterations are not intrusive and include the addition of outriggers, small welded reinforcing plates at panel points, duplicate diagonals welded to the outside of the top chords in the end panels, and small repairs. A new deck has been added. The bottom chord appears to be sprung.

HISTORICAL AND TECHNOLOGICAL SIGNIFICANCE: Although the fabricator and date of construction are not documented, the ca. 1895 pin-connected Pratt pony truss bridge appears to be very like the "Low Truss, Half Slope End Posts" bridge described in the 1885 Wrought Iron Bridge Company Illustrated Pamphlet. The castings used at the bearings and the node between the end posts and top chord are unusual construction details that distinguish the span as technologically significant (criterion C). The span, one of over 20 Pratt half hip pony truss bridges in Hunterdon County, is a valuable example of both an important local bridge type and idiosyncratic details. It is attributed to The Wrought Iron Bridge Company based on those details.

The Wrought Iron Bridge Company of Canton, Ohio was founded in 1864 by David Hammond, and it was incorporated in 1871. It operated as such until 1899, when it was absorbed by the American Bridge Company (Darnell, 48.) By the use of illustrated catalogues and through the efforts of traveling bridge agents, distant fabricators were able to successfully compete with local contractors for the county award of bridge contracts. WIBC was one of the most successful late-19th century bridge companies, and their bridges are not uncommon in the state. This example is distinguished by its relatively good state of preservation, integrity of setting, and distinctive details. The modifications do not preclude the span from functioning as originally designed, and they do not outweigh the significance of the seldom-seen details.

Boundary Description and Justification: The bridge is located on an unimproved road in a rural area that was not evaluated for historic district potential. There are no above-ground resources adjacent to the bridge, which is individually distinguished. The boundary is thus limited to the substructure and superstructure of the span itself.

PHOTO: 612:6-11 (07/91) REVISED BY (DATE): QUAD: Stockton

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 10XX0N1 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MAIN STREET OVER SOUTH BR RARITAN RIVER **FACILITY** MAIN STREET

TOWNSHIP CLINTON TOWN

TYPE PONY TRUSS **DESIGN** PRATT **MATERIAL** Wrought Cast Iron

 # SPANS 2 **LENGTH** 170 ft **WIDTH** 15.6 ft

CONSTRUCTION DT 1870 **ALTERATION DT** 1938 ? **SOURCE** INSCRIPTION

DESIGNER/PATENT FRANCIS C. LOWTHROP **BUILDER** WILLIAM COWIN

SETTING / CONTEXT The bridge, located in the center of the town of Clinton, carries one-way traffic of the main street over the river. It is adjacent to a pond and dam, the Clinton Historical Society, housed in Hunt's Mill built in 1810 (listed in NR 01/74), and the Hunterdon Art Museum housed in Dunham-Perry's Mill listed in NR 4/82). The center is dominated by well-preserved and well-maintained 19th- and 20th century commercial buildings. A bypass highway relieves traffic pressure on the center.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 1870 cast and wrought iron Pratt pony truss bridge built by Lambertville contractor William Cowin using the patented design of Francis C. Lowthrop, ranks as one of the historically and technologically significant metal truss bridges in the state. The 2-span bridge with cast verticals and top chord is important in the evolution in materials and design used in bridge building in the mid-19th century transition from wood to iron to steel. The bridge was documented by HAER in 1991-1992.

INFOR MATION

MAIN STREET X SOUTH BRANCH RARITAN RIVER

BIBLIOGRAPHY:

Hunterdon County Engineer's Office Bridge card N1, L-90W, G63.
Hunterdon County Master Plan: Sites of Historic Interest, 1979.
Schmidt, Hubert G. Rural Hunterdon: An Agricultural History. New Brunswick: Rutgers University Press, 1945.
Fleming, R. "Sixty Year Old Iron Bridge in a New Jersey Village." Engineering News Record: November 11, 1920, v35 no. 29 p. 925-927.
Lowthorp, F.C. "On the Use of Cast Iron for Compressive Members of Iron Bridges." New York: Transactions of the American Society of Civil Engineers, v 1, 1872, as read to the Society on June 15, 1870.

PHYSICAL DESCRIPTION: The two span pin-connected Pratt pony truss was fabricated in 1870 by William Cowin as designed by Francis Lowthorp. It uses cast iron for compression members and wrought iron for tension elements. The cast top chord is fitted together with pressure joints. The name of the fabricator is cast into the piece. Diagonals are loop forged eyerods. An unusual feature is the patented Johnson tightener, an eccentric ratchet and pawl arrangement at the panel point for tuning the bridge. Cast vertical members are tapered. Some principal diagonals have a screw adjustment mechanism, but not all. Floor beams are unusual in the use of two rods in an inverted Kingpost truss arrangement which may be adjusted to increase tension. The bottom lateral sway bracing rods screw into a center ring for adjustment. The last segment of the bottom chord is an articulated cast member, designed to absorb temperature expansion and contraction. The vertical cast Italianate column end posts give the date of construction. Sidewalks with decorative cast railings grace each side of the bridge.

HISTORICAL AND TECHNOLOGICAL SIGNIFICANCE: The Clinton bridge is one of three remaining bridges constructed by Lambertville fabricator William Cowin, using the design of F.C. Lowthorp (1810-1890). The use of cast and wrought iron reflects a period of experimentation using new materials in bridge construction. Designers were still discovering the strengths and weaknesses of metal, compared to the earlier timber trusses. Emphasis was placed on examining materials under varying stress conditions. Quality control had become an issue.

Lowthorp, who spent at least part of his childhood in Lambertville, was a noted designer of several railroad bridges including a two level bridge across the Delaware River at Easton to connect the Lehigh Valley, the New York Central and the Belvidere and Delaware lines. Lowthorp advocated the use of cast iron in compression, declaring in a paper delivered to the American Society of Civil Engineers, "there is much more to be feared from defects in wrought iron used for tensile than for cast iron used for compressive purposes." Lowthorp's distrust of wrought iron, based on experiments he conducted to test each element before acceptance, were prompted by the inability to control impurities in the metal and the shortage of skilled foundry men.

William Cowin was the fabricator for all three remaining Lowthorp design bridges (N1, L-90W, G63). In addition to these, an Engineering News Record article (11/11/20, p.925) refers to an 1859 cast and wrought iron bridge in Clinton built by William and Charles Cowin. Darnell dates Cowin's production as 1868 to 1870. More research is required to determine if Cowin was involved with the Lambertville Iron Works which also began production in 1859 and operated throughout the century.

Although the village of Clinton has four properties individually listed on the National Register (Clinton Historical Museum 1/08/74, Dunham's Mill-Parry's Mill 4/15/82, Music Hall 5/07/82, and Old Grandin Library 11/01/74), it is not listed as a district. The bridge is located slightly downstream from the mill dams and adjoins the two mill properties. It is an integral aspect of the farm to market cycle which dominated the town's past and a significant element in the character of the present street scape.

The Clinton bridge, based on its age, use of materials, design, and documentation, is one of the most important bridges in the nation. When compared with the other two remaining near-by bridges (one of which, Glen Gardner Pony Pratt Truss Bridge, is on the National Register 9/22/77), it gives insight into the thought processes of the designer and fabricator and the technological imperatives which they faced. The historical context of the bridge remains and has been enriched by the re-use of one mill complex as a historical museum. The

integrity of the site allows insight into daily farm-town transactions and relationships. The size and extraordinary detailing of the bridge reveals civic pride and optimism. The bridge possesses both historical and technological significance.

PHOTO: 64:2-7 (06/91) REVISED BY (DATE): QUAD: High Bridge

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 10XX0Q1 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED EVERITTS ROAD OVER BRANCH OF NESHANIC RIVER **FACILITY** EVERITTS ROAD

TOWNSHIP RARITAN TOWNSHIP

TYPE PONY TRUSS **DESIGN** PRATT HALF HIP **MATERIAL** Steel

 # SPANS 1 **LENGTH** 66 ft **WIDTH** 15.7 ft

CONSTRUCTION DT 1900ca **ALTERATION DT** 1974 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries one lane of a quiet rural road over a scenic branch of the Neshanic River in a wooded setting. A nursery is adjacent to the bridge, and open fields are nearby. The setting is unspoiled.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The undocumented half hip Pratt pin-connected pony truss is supported on random ashlar abutments. The original railings of lattice web with boss connections remain. Verticals are composed of angles with lacing and are connected to the top chord by straps. There are enough welded repairs/alterations, including outriggers, added diagonals, and strengthening of the lower chord done in 1974 to compromise the integrity of the span and its technological and historical significance.

INFOR MATION

PHOTO: 61:42A-44A, 1A (06/91) REVISED BY (DATE): QUAD: Hopewell

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 10XX140 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED HOFFMAN'S CROSSING ROAD OVER SOUTH BRANCH RARITAN **FACILITY** HOFFMAN'S CROSSING

TOWNSHIP LEBANON TOWNSHIP

TYPE THRU TRUSS **DESIGN** PRATT **MATERIAL** Steel

 # SPANS 1 **LENGTH** 103 ft **WIDTH** 16.2 ft

CONSTRUCTION DT 1898 **ALTERATION DT** **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** TIPPETT & WOOD, PHILBG, NJ

SETTING / CONTEXT The bridge carries one lane of a quiet rural road over the South Branch of the Raritan River. It is located in a wooded rural setting adjacent to well-maintained 19th-century homes. Green space adjacent to the bridge provides it with a park like setting. The picturesque setting of the bridge contributes to its significance.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 7-panel pin-connected Pratt thru truss bridge is a remarkably complete example of its type. It is supported on random ashlar abutments. The stone wingwalls are topped with pipe railings. Verticals are laced and portals are latticed. Lattice railings remain. Top struts and knee bracing have been reinforced with welded plates. The few repairs noted are unobtrusive and do not compromise the original fabric of the bridge. The nearly unaltered bridge enjoys integrity of setting and design.

INFOR MATION

BIBLIOGRAPHY:
Hunterdon County Engineer's Office, Bridge Card L140.
Hunterdon County Master Plan: Sites of Historic Interest, 1979.
Darnell, Victor C. A Dictionary of American Bridge-Building Companies, 1840-1900. Washington, D.C.: Society for Industrial Archeology, 1984.

PHYSICAL DESCRIPTION: The seven-panel, pin-connected, full hip Pratt truss bridge is remarkably well preserved. The top chord is composed of channels, toe out and cover plates with lacing. The bottom chords consist of stamped eyebars. Verticals are composed of channels with lacing on each side. The diagonals are stamped eyebars while the counters are rods. The portals are latticed with A knee bracing. Floor beams are hung using U-bolt hangers. The original lattice web railings remain. The bridge is supported on ashlar abutments with wingwalls finished with pipe railings. According to county records, the abutments were repaired in 1967 and the wingwalls were re-pointed in 1975. The corrugated steel deck with asphalt overlay was added in 1970. Lateral bracing has been welded to the top chords, and knee bracing has been welded to each vertical and lateral brace.

HISTORICAL AND TECHNOLOGICAL SIGNIFICANCE: The nearly unaltered pin-connected Pratt thru truss bridge is the only documented example of the work of a small New Jersey fabricator, Tippett and Wood (criterion C). According to Victor Darnell, this Phillipsburg (Warren County) firm was established in 1868 and operated until at least 1901. Although the bridge does not exhibit any unusual design details, it is a well-preserved example of an important late-19th century bridge type. Its significance is enhanced by the fact that it is documented as being the work of a little-known local fabricator. The bridge, located adjacent to a well-preserved Hoffman home dating to the 19th century, enjoys integrity of setting and design.

Boundary Description and Justification: The bridge is individually distinguished and it is located in or on the border of a potential historic district. Thus the span and the area adjacent to the abutments is significant. The limits of the potential historic district were not defined in this survey.

PHOTO: 68M:43-44, 1-2 (07/91) REVISED BY (DATE): QUAD: Califon

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 10XX159 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED RIVER ROAD OVER SOUTH BRANCH NISHISAKAWICK CREEK **FACILITY** RIVER ROAD

TOWNSHIP FRENCHTOWN BORO

TYPE PONY TRUSS **DESIGN** WARREN **MATERIAL** Steel

 # SPANS 1 **LENGTH** 57 ft **WIDTH** 15.4 ft

CONSTRUCTION DT 1905ca **ALTERATION DT** 1960ca **SOURCE** NJDOT/STYLE

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries one lane of a lightly traveled unimproved road over a stream. It is located in an area of mixed date homes in Frenchtown. It is parallel to a 1912 2-span concrete arch railroad bridge that was not part of this survey.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The riveted 4-panel Warren with verticals pony truss is supported on random ashlar abutments with wingwalls. The top and bottom chords are composed of back-to-back angles. The riveted outriggers are bolted to the floorbeams with square-headed bolts. Numerous alterations include plates welded to the floor system and cover plate welded to the end posts. One of over 25 Warren pony truss bridges in the county, the bridge is an altered representative example of a locally common type.

INFOR MATION

PHOTO: 620:1A-3A,69:23-24 (03/92) REVISED BY (DATE): QUAD: Frenchtown

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 10XX179 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED STANTON ROAD OVER SOUTH BRANCH RARITAN RIVER **FACILITY** STANTON ROAD

TOWNSHIP READINGTON TOWNSHIP

TYPE THRU TRUSS **DESIGN** PRATT **MATERIAL** Metal

 # SPANS 1 **LENGTH** 103 ft **WIDTH** 15.7 ft

CONSTRUCTION DT 1880 **ALTERATION DT** 1974 **SOURCE** PLAQUE

DESIGNER/PATENT UNKNOWN **BUILDER** CLEVELAND BRIDGE & IRON

SETTING / CONTEXT The bridge carries one lane of a lightly travelled unimproved road over the South Branch of the Raritan River in a picturesque wooded rural setting adjacent to a small park. The road is near a village of well-maintained 19th-century houses adjacent to the railroad tracks. In 1880, when the bridge was constructed, the village of Stanton Station included a church, a store, a post office, a school, and the railroad station a mile distant.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The light pin-connected Pratt thru truss bridge built in 1880 by the Cleveland Bridge & Iron Co. is one of the earliest metal truss bridges in the county. It is well-preserved, complete with its original built up floor beams and well-detail plaque with ornate sunflower motif and scrollwork. The few alterations, which include replacement of one floor beam, end panel points reinforced, and bracing of the verticals, do not detract from the technological and historical significance of the span.

INFOR MATION

BIBLIOGRAPHY:
Hunterdon County Engineer's Office, Bridge card RQ179.
Hunterdon County Master Plan: Sites of Historic Interest, 1979.
Simmons, David. "The King Iron Bridge and Manufacturing Company." IA The Journal of the Society for Industrial Archeology. Vol. 15, No.2 (1989). pp. 23-39.

PHYSICAL DESCRIPTION: The eight-panel, pin-connected, Pratt half-hip thru-truss bridge is supported on random ashlar abutments. The top chord is composed of shallow toe-out channels and cover plate with lacing. The bottom chord consists of stamped eyebars. Verticals are channels joined with lacing. Top lateral bracing is also angles joined with lattice and reinforced with latticed corner brackets. The vertical hangers have been reinforced with additional welded bars with battens. Floor beams are hung from U-bolt hangers. A noteworthy detail is the original built-up "fish-belly" shaped floor beams. The easternmost floorbeam has been replaced. Expansion is accommodated at the eastern end by roller nests. A crested scrollwork three-dimensional plaque identifies the builder and date. The ornate plaque is decorated with sunflowers and acanthus leaves. Many of the members retain their shop numbers to aid with erection. Alterations on this early bridge are minimal. In addition to the replaced floor beam, other modifications include replaced stringers, a new railing system added, and prior to 1940, horizontal mid-line reinforcing added. In 1960, the end posts, originally composed of toe-out channels joined by lattice or lacing on the top face, were modified. The lattice or lacing was removed, and the channels were joined by welded face plate.

HISTORICAL AND TECHNOLOGICAL SIGNIFICANCE: The 1880 bridge ranks not only as one of the oldest thru truss spans in the county, it is also extremely well preserved and exhibits unusual construction details like the built-up "fish belly" floor beams (criterion C). It was manufactured by the Cleveland Iron Bridge and Manufacturing Company, incorporated by founder, Zenas King of Cleveland, Ohio. King, who had worked as a salesman for Thomas Moseley selling Moseley's patented bowstring truss bridge before establishing his own firm about 1860, initially marketed a patented tubular bowstring trusses, and he was enormously successful from a business standpoint. His bridges were marketed nationally through a network of regional salesmen. His bridges were located in every state. The bridge pieces were fabricated in his Cleveland shops and shipped to the site for erection. Although King's operation was not unlike other bridge companies, he was noted for having an efficient design and operation which made his spans economical -- often the primary reason for selection of a design and fabricator. By the 1880s King had a complete bridge plant and 360 employees and was considered one of the major plants in the country. As the Pratt truss gained in popularity in the late 1870s, it came to dominate as the truss type of choice, and much of King's production in the 1880s and 1890s was the Pratt truss. King died 1892, but the company continued under the direction of his sons, but it was never as prolific as it has been under Zenas.

The bridge, the second oldest extant thru truss span in the county, stands in a remarkably complete state of preservation, especially considering its age. Of particular significance are the built-up floor beams and the elaborate makers plaque. It is one of the few documented examples of the King Iron Bridge and Manufacturing Company in the county, and in addition to documenting the evolution and application of metal truss bridge technology in Hunterdon County, it also documents how those bridges were built.

Boundary Description and Justification: The bridge is not located in a potential historic district. The bridge is individually distinguished and the boundary is limited to the substructure, including wing walls and superstructure.

PHOTO: 62:32-42 (06/91) REVISED BY (DATE): QUAD: Flemington

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 10XX233 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CIDER MILL ROAD OVER NESHANIC RIVER **FACILITY** CIDER MILL ROAD

TOWNSHIP EAST AMWELL TOWNSHIP

TYPE THRU TRUSS **DESIGN** PRATT **MATERIAL** Steel

 # SPANS 1 **LENGTH** 85 ft **WIDTH** 16 ft

CONSTRUCTION DT 1900ca **ALTERATION DT** 1976 **SOURCE** COUNTY

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The single span single lane thru truss bridge carries Cider Mill Road (Reaville-Clover Hill, CR 29) over the Neshanic River. It is located in a pastoral setting of open fields, farm buildings, corn fields and scattered trees. It carries a lightly traveled country road.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 6-panel Pratt thru truss bridge is pin connected. The connections were reinforced with welded plates in 1976. It is supported on random ashlar abutments and wingwalls. Other alterations include reinforcements on floorbeams, top struts and knee braces, added diagonal end posts, metal pan deck and guiderail. One of ten Pratt thru-truss bridges in the county, the many alterations have compromised the design integrity and historical significance of the bridge.

INFOR MATION

PHOTO: 68:38A-42A (07/91) REVISED BY (DATE): QUAD: Hopewell

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 10XX243 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED VAN LIEUS ROAD OVER BACK BROOK **FACILITY** VAN LIEUS ROAD

TOWNSHIP EAST AMWELL TOWNSHIP

TYPE PONY TRUSS **DESIGN** WARREN **MATERIAL** Steel

 # SPANS 1 **LENGTH** 63 ft **WIDTH** 13.8 ft

CONSTRUCTION DT 1940ca **ALTERATION DT** 1953 **SOURCE** STYLE/COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries one lane of a quiet country road over a minor stream in a wooded rural setting. The nearby land currently is used for agricultural purposes, but housing development is encroaching on the farmland.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Noncontributing.

CONSULT DOCUMENTS SHPO Letter 03/12/01

SUMMARY The 4-panel welded Warren with verticals pony truss bridge is supported on concrete abutments with wingwalls. The outriggers are skewed to the span. The construction date is undocumented, but it dates technologically and stylistically no earlier than 1935. The floor beams were replaced in 1948, and welded repairs and reinforcements were made in 1953.

INFOR MATION

PHOTO: 68:31A-33A (07/91 JPH (5/96)) REVISED BY (DATE): QUAD: Hopewell

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 10XX300 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0
NAME & FEATURE INTERSECTED RAVEN ROCK ROAD OVER LOCKATONG CREEK **FACILITY** RAVEN ROCK ROAD
TOWNSHIP DELAWARE TOWNSHIP
TYPE THRU TRUSS **DESIGN** PRATT **MATERIAL** Iron
 # SPANS 1 **LENGTH** 129 ft **WIDTH** 15.6 ft

CONSTRUCTION DT 1878 **ALTERATION DT** **SOURCE** PLAQUE
DESIGNER/PATENT LAMBERTVILLE IRON WORKS **BUILDER** LAMBERTVILLE IRON WORKS

SETTING / CONTEXT The bridge carries one lane of a lightly traveled paved rural road over an unspoiled stream. Two 18th- or 19th-century farmsteads are nearby. The wooded rural setting includes a nature preserve. The bucolic setting contributes to the overall significance of the span.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes
CONSULT STATUS Individually Eligible.
CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 1878 iron pin-connected 9-panel Pratt thru truss bridge supported on ashlar abutments is constructed with patented Phoenix columns. It ranks as one of the most important thru truss bridges in the state based on its age, nearly complete state of preservation, and use of Phoenix columns for the compression members. Alterations are minimal and non-intrusive. The bottom lateral bracing joins to a center ring, like the 1870 Clinton bridge (10XXON1), also fabricated by the Lambertville Iron Works.

INFORMATION

BIBLIOGRAPHY:
Hunterdon County Engineer's Office, Bridge card D300.
Schmidt, Hubert G. Rural Hunterdon: An Agricultural History. New Brunswick: Rutgers University Press, 1945.
Waddell, J.A.L. Bridge Engineering. New York: John Wiley & Sons, Inc., 1925.
Snell, James P., Compiler. History of Hunterdon and Somerset Counties, New Jersey. 1881.
Hunterdon County Freeholders Minutes 1841-1886. Hunterdon County. County Clerk's Office.
Miscellaneous Papers; William Cowin.
U.S. Population Schedules. 1850-1870. Lambertville Beacon. Feb. 28, 1918, p. 1.

PHYSICAL DESCRIPTION: The single span, cast- and wrought-iron, pin-connected Pratt thru-truss bridge is supported on ashlar abutments with flared wingwalls. The trusses consist of inclined portals, top chords, and intermediate verticals, or posts, of patented Phoenix column sections which are joined at each panel point with cast iron pieces that are compression fittings. Inside each piece is a sleeve over which the column section fits. The connecting pins pass through these castings. The bottom chord and principle diagonals are eyebars which are unusual in having a nearly square cross-section as opposed to the more common rectangular cross-section. The counters are rods with loop forged eyes. They also have sleeve nuts for adjustment. The original vertical hangers are eyebars with loop forged eyes. The vertical hanger pin that carries the U-bolt to accept the floor beam also passes through a special casting which supports the bottom chord. The eyebars of the bottom chord continue through this panel point without connecting to the pin, and the two-pronged, bracket-like casting prevents the 2-panel long eyebars from sagging or moving out of position. The top chord lateral bracing system consists of transverse I-section members and X-pattern lateral bracing rods all of which terminate in an upward extension of the top chord node. The bracing connection is topped with an elaborate ball and spire finial. The portal bracing contains decorative cast-iron filigree at the corners. The expansion bearings are probably nested rollers but they are completely obscured by the bearing casting.

Some of the steel stringers and corrugated metal deck are modern. Welded steel braces have been added from the portals diagonally to the bottom chord first panel point, as well as welded knee braces between the verticals and top lateral braces. Welded steel gussets are added to the top and bottom pins of the vertical hangers at the first panel points, with two welded bars added to strengthen the hangers. The remainder of the truss is in original condition. The rolled I-beam floor beams have been strengthened with welded top and bottom cover plates.

HISTORICAL AND TECHNOLOGICAL SIGNIFICANCE: The nearly unaltered pin-connected Pratt thru truss bridge is a well preserved example of its type and is technologically distinguished as one of the earliest and most complete bridges built with Phoenix columns in the state. It is also the work of one of the county's foremost second-half of the 19th-century foundries, that of William Cowin. Cowin was the fabricator of the most important 19th century bridges in the region.

The Phoenix column, a wrought iron segmental channel riveted together to form a tube of great compressive strength, developed in 1864 by David Reeves of the Phoenix Iron Company at Phoenixville, Pennsylvania. The patented section was used by both the Phoenix Bridge Company and other fabricators in the erection of buildings as well as bridges. By joining the compressive members through compression fittings at cast iron nodes, the Phoenix column "was a great factor causing the substitution of wrought iron for cast iron in compression members of pin-connected bridges," according to noted engineer and author J.A.L. Waddell. The handsome bridge at Raven Rock Road records not only the use of the wrought iron Phoenix column, but also the numerous cast iron elements which serve both utilitarian and decorative purposes. It is an excellent representative of the skill of the 19th-century iron worker

The bridge was fabricated by the Lambertville Iron Works, a local foundry which began operation in 1849 as Laver & Cowin, and it continued in operation through most of the second half of the nineteenth century (Schmidt, p. 219). The name was changed to Lambertville Iron Works by 1878, as attested to by the plaque on this bridge, and it was run by William Cowin who is associated with not only this bridge but the three cast and wrought iron spans designed by engineer Francis C. Lowthorp and built in Clinton, Glen Gardner, and Hampton between 1868 and 1870. Cowin's foundry was also making axles, safety boilers, and steam engines (Snell, p. 283).

The bridge enjoys integrity of setting and is located in a rural area near two well-preserved early farmsteads on a road joining the nearby

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villages of Raven Rock and Rosemont. Raven Rock, an area of quarrying industry, was serviced by the New Jersey Railroad, the Delaware & Raritan Canal, and a covered bridge across the Delaware River. In 1880, it boasted a railroad station, a store, a post office and several dwellings. Rosemont was settled in 1754.

PHOTO: 614:39-40, 615:16-26 (02/92) REVISED BY (DATE): QUAD: Lumberville

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 10XX337 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED LOCKTOWN ROAD OVER WICKECHEOKE CREEK **FACILITY** LOCKTOWN ROAD

TOWNSHIP DELAWARE TOWNSHIP

TYPE PONY TRUSS **DESIGN** WARREN **MATERIAL** Steel

 # SPANS 1 **LENGTH** 72 ft **WIDTH** 19.1 ft

CONSTRUCTION DT 1920ca **ALTERATION DT** Moved: 1961 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a lightly traveled country road over a minor stream in a wooded setting on the edge of the village of Locktown. An 18th century meeting house and 19th century school house are within sight of the bridge, but not close enough to be evaluated as part of any potential historic district.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Potential Historic District. Noncontributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The undocumented ca. 1920 riveted Warren with verticals pony truss bridge is supported on one stone abutment and one concrete. The built-up box top chord and end posts are composed of channels turned toe in with cover plate. The original pipe railings remain. Alterations include bolted extensions of floor beams. The bridge was moved from Lambertville when the 1899 WIBC Pratt pony truss at this crossing was lost. One of over 25 Warren pony trusses in the county, this example is undistinguished.

INFOR MATION

PHOTO: 666:29A-32A 614 (02/92) REVISED BY (DATE): QUAD: Stockton

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 10XX481 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED STRIMPLES MILL ROAD OVER LOCKATONG CREEK **FACILITY** STRIMPLES MILL ROAD

TOWNSHIP EAST AMWELL TOWNSHIP

TYPE THRU TRUSS **DESIGN** PRATT **MATERIAL** Metal

 # SPANS 1 **LENGTH** 93 ft **WIDTH** 16 ft

CONSTRUCTION DT 1897 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT WROUGHT IRON BRIDGE CO. **BUILDER** WROUGHT IRON BRIDGE CO.

SETTING / CONTEXT The bridge carries one lane of a quiet rural road over a minor stream in an unspoiled wooded setting. An operating lumber mill is adjacent to the bridge, and the remains of a dam and raceway are nearby. The bridge enjoys integrity of setting.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The pin-connected Pratt thru truss bridge is supported on ashlar abutments with wing walls. A noteworthy feature is the basket-like 4-pronged end on the hip vertical floorbeam hangers. The bottom chord is composed of loop forged eyebars with erection numbers. Minimal additions include plates welded to floor beams and diagonal top chord bracing. The bridge is significant because it is relatively unaltered, documented, in its historic context, and has distinctive design details.

INFOR MATION

BIBLIOGRAPHY
Hunterdon County Engineer's Office, Bridge card D481.
Hunterdon County Master Plan: Sites of Historic Interest, 1979.
Simmons, David. "Bridge Preservation in Ohio." Cities & Villages. Vol. XXVI No. 8 (August, 1978), pp. 13-18.

PHYSICAL DESCRIPTION: The single-span pin-connected Pratt thru-truss bridge is supported on random ashlar abutments with U-type wingwalls. The trusses appear to be original with the exception of the floor beams, stringers and deck that have been recently replaced, the addition of welded corner braces to the top laterals, and welded braces extending from the portal struts to the exterior floor beams. The trusses are pin-connected throughout. The portals and top chord consist of two channels, a cover plate and lacing. The intermediate verticals consist of two channels with lacing. The lacing on the verticals parallels the bridge centerline. The bottom chord eyebars and diagonal eyebars have forged eyes. The counters are provided with sleeve nuts for adjustment. The end panel vertical hanger has a four-prong, claw-like ends which engage the pins directly over and in line of the U-bolt floor beam hanger. Such an arrangement, also seen on King Bridge Company spans from the same era, means that the hangers are out of phase or reversed. The expansion bearings consist of nested rollers.

HISTORICAL AND TECHNOLOGICAL SIGNIFICANCE: The well preserved 1897 thru-truss bridge is a documented example of the work of the Wrought Iron Bridge Company of Canton, Ohio, one of the most prolific late-19th century bridge fabricating concerns in the country. In addition to its historical association with the WIBC, the span exhibits unusual details, including the "crows foot" vertical hanger detail and the reversed vertical hangers . A good representative example of an important 19th-century bridge type (criterion C), the span enjoys integrity of setting and is located in its original industrial context adjacent to a water-powered saw mill. The saw mill, which is still in operation, is known to have been owned by Enoch Danbury before 1891. Thus the bridge embodies both integrity of design and setting.

The Wrought Iron Bridge Company (WIBC) was organized in 1866 by David Hammond and incorporated in 1871. It is one of the three Ohio bridge companies that stand out for their designs and technological contributions to bridge engineering (Simmons, p. 15). The company distributed, through a network of regional agents who submitted both design and price to the Freeholders, a variety of truss types from the bowstring truss through the Pratt truss. Many of their notable details were castings to join various members of the truss. WIBC was absorbed by the American Bridge Company in 1899.

Boundary Description and Justification: The bridge is located next to a potentially historic saw mill, but the span is distinguished on its own merits. The history of the two structures appears to be independent. The significant boundary of this resource is limited to the substructure and superstructure.

PHOTO: 615:29-38 (02/92) REVISED BY (DATE): QUAD: Lumberville

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 10XXB26 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.01
NAME & FEATURE INTERSECTED CR 630 OVER MUSCONETCONG RIVER **FACILITY** CR 630
TOWNSHIP BETHLEHEM TOWNSHIP
TYPE PONY TRUSS **DESIGN** PRATT HALF HIP **MATERIAL** Steel
 # SPANS 2 **LENGTH** 104 ft **WIDTH** 14.5 ft

CONSTRUCTION DT 1900ca **ALTERATION DT** 1988 **SOURCE** COUNTY RECORDS
DESIGNER/PATENT UNKNOWN **BUILDER** DOVER BOILER WORKS

SETTING / CONTEXT The bridge carries one lane of a quiet country road over the Musconetcong River, the boundary between Hunterdon and Warren counties. It is located in a rural setting, adjacent to a well-maintained 19th century farm with fields and outbuildings. Other bridges in the county by the same fabricator include 10XXF48.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No
CONSULT STATUS Individually Eligible.
CONSULT DOCUMENTS SHPO Letter 11/22/95

SUMMARY The 2-span pin-connected half hip Pratt pony truss bridge is supported on random stone abutments. The pier was rebuilt in concrete in 1988. Each span is 4 panels, and alterations are minimal. Plates have been welded to the lower chord on one side, and welded repairs have been made to the bearings on the pier. The undated span is one of several by the Dover Boiler Works, active in the county through 1919. This is a representative example of a common local bridge type and was fabricated locally.

INFOR MATION

Bibliography:
Platt, Charles. Dover Dates 1722-1922. 1922.
New Jersey Bureau of Statistics Department of Labor. The Industrial Directory of New Jersey. 1912-1952.

Physical Description: The 2-span pin-connected Pratt half hip with counters pony truss bridge is supported on stone abutments. The concrete pier was placed in 1988. Each of the trusses is 5 panels long and has round-headed eye bars for the lower chords. Floor beams are hung from the lower panel points by a pair of U bolts. The most unusual detail is design of the built-up verticals composed of back-to-back angles with a flared web plate. The flared shape adds lateral stability. Repairs are minimal. Plate has been welded to the inclined end posts at the bearings. One line of the original pipe railing survives, but the other, at the lower level, has been replaced with modern beam guide rail.

Historical and Technological Significance: The undocumented 2-span pin-connected Pratt half hip pony truss bridge is technologically significant as a representative example of a once-common bridge type and for the unusual design of the verticals. The flared shape provides a braced member and lateral stability, an inherent weakness in pony truss bridges. Historically the span is important for its association with a regional fabricator, The Dover Boiler Works of nearby Dover (Morris County). The company, which produced a variety of metal products including boilers, hoppers, bins, stacks, and later structural steel, was established in 1874 by Foster F. Birch as a small repair shop only doing hand-repair work. By 1927 the company, then lead by Birch's son William F. Birch, employed 156 men and 5 women. Their products, made from steel purchased from any number of sources like Bethlehem and Luken Steel, went all over the world. Their boilers were in the Woolworth Building in New York. Bridges were not the firm's main product, but they are documented as serving as bridge fabricators from about 1900 through 1919. They, like other small metal fabricating shops, cut, shaped, and riveted angles, channels, and plate into bridges to service the local market. The Dover Boiler Works bridges are concentrated in northwest New Jersey. The company was in business in Dover as late as 1953 under the name Dover Boiler Plate and Fabrications, but its output was considerably less than its 1920s and 1930s peak.

PHOTO: 621:5-10 (02/92) REVISED BY (DATE): QUAD: High Bridge

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 10XXC76 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED GRAY ROCK ROAD OVER RARITAN RIVER **FACILITY** GRAY ROCK ROAD

TOWNSHIP CLINTON TOWNSHIP

TYPE THRU TRUSS **DESIGN** PRATT **MATERIAL** Steel

 # SPANS 1 **LENGTH** 102 ft **WIDTH** 14.5 ft

CONSTRUCTION DT 1893 **ALTERATION DT** Demolished: 1993 **SOURCE** PLAQUE

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries one lane of a heavily trafficked rural road over the South Branch of the Raritan River. It is located in a sparsely developed area immediately south of NJ 31 that is currently undergoing modern development. The setting does not contribute to the significance of the bridge.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Bridge was Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 7-panel pin-connected Pratt truss bridge is supported on random ashlar abutments with wingwalls. It is a well-preserved example of its type, and it retains its original pipe railing. Although there is some impact damage to the toe-out laced verticals, alterations to the bridge are minimal. The fabricator is not documented, but the state of preservation makes the span one of the more complete of the 10 Pratt thru trusses spans in the county. It is significant as a good example of its type.

INFOR MATION

Bibliography:
Hunterdon County Engineer's Office. Bridge File: C 76.

Physical Description: The well-preserved 102'-long pin-connected Pratt thru truss bridge is supported on ashlar abutments. The top chord and inclined end posts are composed of toe-out channels with cover plated riveted to the top and battens on the bottom. The portal brace and brackets have a lattice fill, and the bridge plaque is affixed to the top strut. The verticals are also toe-out channels, joined on each face by lacing. The bottom chord is made up of stamped, round-headed eye bars, and the diagonals are loop forged eye bars. Interestingly, the floor beams are connected to the lower panel point pins by punched plate hangers connected to the floor beams by rivets rather than the more common inverted U hangers that pass over the pin. The lateral and sway bracing appear to be original. The bridge has impact damage, modern beam guide rail on the inside face, and small welded repairs, but overall it is in a remarkably complete state of preservation.

Historical and Technological Significance: The 102'-long pin-connected Pratt thru bridge was built in 1893, but the designer and fabricator are not known. While exhibiting no patented details, its significance is as a very well-preserved example of a technologically and historically notable bridge type that is becoming increasingly rare in New Jersey (criterion C). It is one seven Pratt thru truss bridges from the 19th century in the county, and all were evaluated as significant either individually or as part of historic districts. Its technological significance is enhanced by the fact that the floor beams are hung from the pins by punched plates riveted to the floor beams rather than the more common 1890s detail of suspending them from inverted U bolts that pass over the pins. The bridge plaque identifies the date of erection and the Freeholders.

Boundary Description and Justification: The bridge is evaluated as individually significant. The boundary is limited to substructure and superstructure of the span itself.

PHOTO: 610:8-12 (07/91) REVISED BY (DATE): QUAD: High Bridge

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 10XXF45 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WHITE BRIDGE ROAD OVER CAPOOLONG CREEK **FACILITY** WHITE BRIDGE ROAD

TOWNSHIP FRANKLIN TOWNSHIP

TYPE PONY TRUSS **DESIGN** PRATT HALF HIP **MATERIAL** Ferrous

 # SPANS 1 **LENGTH** 80 ft **WIDTH** 13.8 ft

CONSTRUCTION DT 1900 **ALTERATION DT** **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge, on a sharp curve that restricts visibility, carries one lane of a quite country road over a minor stream. It is located in a pastoral wooded setting with nearby open fields and farmland. A late-18th century farm is atop the hill overlooking the bridge. The remains of a wooden stringer culvert a few feet away mark the abandoned right of way of the railroad which paralleled the stream.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed 5-panel half hip Pratt pin-connected pony truss bridge is supported on ashlar abutments. A concrete seat has been added to the east abutment. The clips connecting vertical members to the top chord is similar to 100W069. Modifications include outriggers welded to floorbeams and plates welded to panel points and end post. The span is too long for the crossing, suggesting it may have been moved to this location. An altered example of a locally common bridge type, it is not distinguished.

INFOR MATION

PHOTO: 616:19-23 (02/92) REVISED BY (DATE): QUAD: Pittstown

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 10XXF48 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED UPPER KINGTOWN ROAD OVER CAPOOLONG CREEK **FACILITY** UPPER KINGTOWN ROAD

TOWNSHIP FRANKLIN TOWNSHIP

TYPE PONY TRUSS **DESIGN** WARREN **MATERIAL** Steel

 # SPANS 1 **LENGTH** 50 ft **WIDTH** 15.3 ft

CONSTRUCTION DT 1919 **ALTERATION DT** **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** DOVER BOILER WORKS

SETTING / CONTEXT The bridge carries one lane of a narrow road over a minor stream. It is located in a wooded setting near open fields adjacent to a village of 18th- and 19th-century stone houses, barns and an early mill. The village of Kingtown has historic district potential, and the bridge contributes to the historic character. The period of significance of the potential historic district appears to extend through at least the first decades of the 20th century.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible. Potential Kingtown Historic District. Contributing.

CONSULT DOCUMENTS SHPO Letter 03/12/01

SUMMARY The skewed 4-panel Warren with verticals pony truss bridge is riveted construction and is supported on random ashlar abutments and stone wingwalls. Concrete caps have been added. Riveted outriggers are part of the original design. Minor welded repairs do not compromise the design integrity. It is the latest example of a truss bridge constructed by New Jersey's Dover Boiler Works in the county and is eligible for listing in the National Register of Historic Places under Criterion C. The bridge would also be a contributing element of a Kingtown Historic District under Criteria A and C should such a district be found eligible in the future.

INFOR MATION

Bibliography:
Beers, Comstock & Cline. Hunterdon County Atlas. 1873.
Platt, Charles. Dover Dates 1722-1922. 1922.
Hunterdon County Engineers Office. Bridge file F48.

Physical Description: The 50'-long, 4-panel, riveted Warren pony truss bridge is supported on random ashlar abutments, and the trusses are composed of angles set back to back. The asymmetrical gusset plates are plate set between the angles. The floor beams and stringers are rolled I sections. Outriggers are built up, and they are original to the span as is the line of pipe railings on the inside of the trusses. The pipe is held by stamped brackets. The lower line of pipe railing has been replaced by modern beam guide rails. Both the bridge and its setting on the south edge of the village of Kingtown are well preserved.

Historical and Technological Significance: The small settlement of Kingtown in Franklin Township is historically and architecturally significant as a well-preserved example of an 18th and 19th century crossroads community that grew up around several water-powered mills. In 1873 it consisted of about 10 buildings that included a grist mill and a blacksmith shop. Today stone houses and a nice assemblage of farm-related buildings survive to chronicle the agrarian heritage of the area. The small enclave of buildings appears to be a potential National Register historic district with the 1919 Dover Boiler Works bridge as a contributing resource.

In addition to its historic association with a potential historic district, the span is a well-preserved example of the work of a local fabricator, the Dover Boiler Works of Dover (Morris County). Established in 1874 as a small repair shop doing hand work, it developed into an albeit small but internationally represented producer of stacks, boilers, hoppers, and related metal equipment for the materials handling industry. Locally it fabricated bridges out of steel purchased from any number of American mills including Bethlehem and Lukens. Their bridges are documented in northwest New Jersey from about 1900 until 1919. The Upper Kingtown Road bridge is a late but complete example of the company's work.

Boundary Description and Justification: The bridge appears to be a contributing resource to a potential historic district with a period of significance through the first two decades of the 20th century. Capoolong Creek appears to be a boundary of the district. The bridge, substructure and superstructure, and the west approach appear to be within the potential historic district.

PHOTO: 616:24-25, 617:35-36 (02/92 JPH (5/96 REVISED BY (DATE): QUAD: Pittstown

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 10XXF54 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED LOWER KINGTOWN ROAD OVER CAPOOLONG CREEK **FACILITY** LOWER KINGTOWN ROAD

TOWNSHIP FRANKLIN TOWNSHIP

TYPE PONY TRUSS **DESIGN** WARREN **MATERIAL** Steel

 # SPANS 1 **LENGTH** 53 ft **WIDTH** 14.1 ft

CONSTRUCTION DT 1925 **ALTERATION DT** 1965 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries one lane of a lightly traveled country road over a minor stream in a wooded rural setting near an abandoned mill. Scattered altered 19th-century houses are visible from the bridge. The setting is unspoiled.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 4-panel Warren with verticals pony truss bridge uses riveted plate construction. It is supported on concrete abutments. The top chord and end posts are built-up box member of channels with cover plate. Many welded repairs and alterations, including replacing the inside angle of the bottom chord with rebars and plates, diminish the integrity of the bridge. A late example of the over 25 county examples of its type, the span is not technologically or historically distinguished.

INFOR MATION

PHOTO: 617:37-38 (02/92) REVISED BY (DATE): QUAD: Pittstown

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 10XXF55 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED LOWER KINGTOWN ROAD OVER CAPOOLONG CREEK **FACILITY** LOWER KINGTOWN ROAD

TOWNSHIP FRANKLIN TOWNSHIP

TYPE PONY TRUSS **DESIGN** WARREN **MATERIAL** Steel

 # SPANS 1 **LENGTH** 52 ft **WIDTH** 14.4 ft

CONSTRUCTION DT 1916 **ALTERATION DT** 1974 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** SAM C HALL

SETTING / CONTEXT The bridge carries one lane of a lightly traveled country road over a minor stream in a wooded rural setting with sparse housing. An abandoned railroad right-of-way parallels the vehicular road. The bridge is located on a sharp curve.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed 4-panel Warren with verticals riveted pony truss bridge is relatively unaltered. It is supported on random ashlar abutments and wingwalls with concrete extensions added in 1974. The bridge is composed of angles set back-to-back with members joined by riveted connections to gusset plates. The bridge exhibits no distinctive construction details and is a representative example of a bridge type that is common in Hunterdon County. It is not individually distinguished.

INFOR MATION

PHOTO: 617:39-42 (02/92) REVISED BY (DATE): QUAD: Pittstown

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 10XXF62 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED HAMDEN ROAD OVER SOUTH BRANCH RARITAN RIVER **FACILITY** HAMDEN ROAD

TOWNSHIP FRANKLIN TOWNSHIP

TYPE PONY TRUSS **DESIGN** PRATT **MATERIAL** Steel

 # SPANS 2 **LENGTH** 152 ft **WIDTH** 15 ft

CONSTRUCTION DT 1900ca **ALTERATION DT** 1957 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries one lane of a moderately trafficked paved rural road over the South Branch of the Raritan River. On a sharp curve, it is located in a rural setting of open fields, adjacent to a nature preserve. A modern subdivision of attached homes is also nearby.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed pin-connected Pratt pony truss bridge has two spans, each five panels. It is supported on cut ashlar abutments and center pier. Spans share a common bearing plate at the pier. Alterations include welded plates added to the end posts, outriggers, plates added to counters, and modern guide railings. One of over 10 similar spans in the county, it is an undocumented example of a type well represented in the county, and it is not technologically or historically distinctive.

INFOR MATION

PHOTO: 618:2-6 (02/92) REVISED BY (DATE): QUAD: Pittstown

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 10XXF65 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED HAMDEN ROAD OVER SOUTH BRANCH RARITAN RIVER **FACILITY** HAMDEN ROAD

TOWNSHIP FRANKLIN TOWNSHIP

TYPE PONY TRUSS **DESIGN** PRATT **MATERIAL** Wrought Iron

 # SPANS 2 **LENGTH** 162 ft **WIDTH** 15.6 ft

CONSTRUCTION DT 1885 **ALTERATION DT** 1993 **SOURCE** PLAQUE

DESIGNER/PATENT PHOENIX BRIDGE COMPANY **BUILDER** DEAN & WESTBROOK, NYC

SETTING / CONTEXT The bridge carries one lane of rural Hamden Road (River Road) over the South Branch of the Raritan River. It is located on a sharp curve of an unimproved, lightly traveled road that parallels the river. The surrounding area has scattered 19th-century farm houses. The bridge enjoys integrity of setting.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 2-span pin-connected Pratt pony truss bridge built in 1885 uses patented Phoenix columns for the end posts and top chord. The cast footing bearings on ashlar abutments and pier appear unaltered. The outriggers are part of the original design. The bridge is in a nearly complete state of preservation with no apparent welded repairs or alterations. One of the better preserved Phoenix column pony truss spans in the state, it is the only known multi-span example.

INFOR MATION

BIBLIOGRAPHY:

Hunterdon County Engineer's Office, Bridge card F 65.
Waddell, J.A.L. Bridge Engineering. New York: John Wiley & Sons, Inc.,1925.
Darnell, Victor C. A Directory of American Bridge-Building Companies, 1840-1900. Washington, D.C.: Society for Industrial Archeology, 1984.
Hagely Museum & Library. Phoenix Bridge Co. records.

PHYSICAL DESCRIPTION: The two-span, cast- and wrought-iron pin-connected Pratt pony truss bridge survives in a remarkably complete state of preservation. The trusses and floor beams are original and unaltered. Each five panel truss consists of Phoenix column section top chords and inclined end posts. All of the truss verticals are built up from a pair of angles with lacing rather than Phoenix sections. The pins at both the top and bottom of the verticals pass through the gusset plates. Because the verticals are not Phoenix sections, the cast connecting pieces at the intermediate chord panel points are not needed. At these locations, the pins pass through the walls of the Phoenix section. Castings are present at the top chord/end post connections and the bottom chord/end post connection, or feet. The expansion bearing feet sit on nested rollers, a standard period detail. The bottom chord consists of round-headed eyebars. The principal diagonals consist of needle-headed eyebars. The counters are rods which thread into devises at both ends which pass around the pins. The floor beams are built up from a web plate with four riveted flange angles. The two top flange angles extend out to form part of the knee brace at each vertical. The floor beams hang from the bottom chord pins on U suspenders. All bridge components are stamped with the order number. The spans bear on stone abutments and a mid-stream pier.

HISTORICAL AND TECHNOLOGICAL SIGNIFICANCE: The well-preserved 2-span 1885 pony truss bridge is historically and technologically significant as an example of the a Dean & Westbrook built Phoenix-section bridge (criterion C). The use of the Phoenix section without all of the castings at the nodes (panel points), as in this truss design, represents a transitional stage where the Phoenix truss system was being simplified to be competitive with "standard" pin connected trusses of built-up members. The bridge is one of four Phoenix-section pony truss spans in the state.

The patented Phoenix column, developed in 1864 by David Reeves of the Phoenix Iron Company at Phoenixville, Pennsylvania, "was a great factor causing the substitution of wrought iron for cast iron in compression members of pin-connected bridges," according to noted engineer and author J.A.L. Waddell. It enjoyed tremendous popularity in the 1870s and 1880s, and was one of the most important details in the general acceptance of metal truss bridge technology in those decades. In the earliest days, Phoenix-section bridges were designed by, marketed by, and erected by the Clarke, Reeves Company, a separate company with some of the same owners as the Phoenix Iron Company. They primarily built railroad bridges. In 1884 Clarke, Reeves & Company was reorganized as the Phoenix Bridge Company, and in 1885 it entered into an agreement with Dean & Westbrook of New York City for the marketing and erection of highway bridges with Phoenix-section compression members. The agreement was in effect until 1895. After that date few metal truss bridges with Phoenix sections were built. Dean & Westbrook built at least 70 bridges with Phoenix sections in New Jersey, and about 10 survive. The bridge is the only documented 2-span Phoenix column span in the state. It enjoys integrity of design and setting.

Boundary Description & Justification: The bridge is evaluated as individually distinguished. The boundary is limited to the substructure and superstructure.

PHOTO: 618:16-25,69:0 (02/92) REVISED BY (DATE): QUAD: Pittstown

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 10XXF72 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED KICENIUK ROAD OVER SOUTH BR RARITAN RIVER **FACILITY** KICENIUK ROAD

TOWNSHIP FRANKLIN TOWNSHIP

TYPE PONY TRUSS **DESIGN** WARREN **MATERIAL** Steel

 # SPANS 3 **LENGTH** 150 ft **WIDTH** 12.6 ft

CONSTRUCTION DT 1927 **ALTERATION DT** **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries one lane of a lightly traveled country road over the South Branch of the Raritan River. The bridge is located adjacent to a park and nature preserve. The sparsely developed wooded rural setting is unspoiled.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 03/12/01

SUMMARY The 3-span (50'-long spans) riveted Warren with verticals pony truss bridge is supported on random ashlar abutments with wingwalls and piers. It is composed primarily of angles, and the riveted outriggers are original, as is the pipe railing. The only alterations appear to be toe walls added to the piers, concrete seats, and encasing the west abutment. Although the bridge is a late example of its type, it is will preserved and the 3 span configuration demonstrates the adaptability of truss bridges to diverse sittings. This adaptability contributed to the popularity, marketability, and continue use of this bridge type and hence, to its significance. It is individually eligible for listing in the National Register under Criterion C.

INFOR MATION

PHOTO: 618:11-15 (02/92) REVISED BY (DATE): QUAD: Pittstown

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 10XXF76 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED SUNNYSIDE ROAD OVER SOUTH BRANCH RARITAN RIVER **FACILITY** SUNNYSIDE ROAD

TOWNSHIP FRANKLIN TOWNSHIP

TYPE PONY TRUSS **DESIGN** WARREN **MATERIAL** Steel

 # SPANS 2 **LENGTH** 128 ft **WIDTH** 15.5 ft

CONSTRUCTION DT 1901 **ALTERATION DT** 1989 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT CANTON BRIDGE COMPANY **BUILDER** CANTON BRIDGE COMPANY

SETTING / CONTEXT The bridge carries one lane of a lightly traveled country road over the South Branch of the Raritan River. It adjoins a smaller stone arch bridge and is adjacent to an altered 19th-century house and milling complex.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The riveted Warren pony truss bridge is supported on random stone abutments, pier and wingwalls. The bottom chord is toe-out angles with battens. Lacing joins the toe-down angles of the diagonals. Alterations include a new detail where new floorbeams are supported by rods bolted to brackets welded to original gusset plates and concrete repairs to the substructure made in 1989. A documented but altered example of a field-riveted bridge by a notable fabricator, it has no distinguishing details.

INFOR MATION

PHOTO: 618:7-10 (02/92) REVISED BY (DATE): QUAD: Pittstown

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 10XXF82 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED LOWER LANSDOWNE ROAD OVER CAPOOLONG CREEK **FACILITY** LOWER LANSDOWNE ROAD

TOWNSHIP FRANKLIN TOWNSHIP

TYPE THRU TRUSS **DESIGN** PRATT **MATERIAL** Cast & Wrought Iron

 # SPANS 1 **LENGTH** 92 ft **WIDTH** 15.4 ft

CONSTRUCTION DT 1885 **ALTERATION DT** 1958 **SOURCE** PLAQUE

DESIGNER/PATENT PHOENIX BRIDGE COMPANY **BUILDER** DEAN & WESTBROOK, NYC

SETTING / CONTEXT The bridge carries one lane of a paved rural road over a minor stream. It is located in a wooded rural setting. Upstream is a railroad thru girder bridge. No buildings are visible from the bridge. The unspoiled setting contributes to the significance of the span.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed 5-panel pin-connected 1885 Pratt thru truss bridge is supported on random ashlar abutments and has Phoenix columns for the compression members. The Phoenix section members are joined by compression fittings into cast iron nodes at the panel points. Shop marks and numbers are cast into all parts. The well-preserved bridge, one of the earliest known examples of Dean & Westbrook of NYC, is historically and technologically significant. It is the only skewed Phoenix section span in NJ.

INFOR MATION

BIBLIOGRAPHY:
Hunterdon County Engineer's Office, Bridge card F82.
Waddell, J.A.L. Bridge Engineering. New York: John Wiley & Sons, Inc., 1925.
Darnell, Victor C. A Directory of American Bridge-Building Companies, 1840-1900. Washington, D.C.: Society for Industrial Archeology, 1984.
Hagley Museum & Library. Phoenix Bridge Company Papers.

PHYSICAL DESCRIPTION: The skewed, single-span, Pratt thru-truss bridge is pin-connected and consists of Phoenix column sections for the portals, top chord and intermediate verticals. The bottom chord consists of circular-headed eyebars. The principal diagonals and end panel hangers consist of needle-headed or loop forged eyebars. The counters consist of rods with clevis which engage the pin at either end for adjustment. All connections except the vertical hangers consist of individual castings which receive the Phoenix- column sections on a flanged lip, and through which the pins pass. At the bearings the castings include integral bearing plates. The expansion bearings sit on nested rollers. The abutments consist of large rusticated ashlar masonry, with flared wingwalls. All pieces are marked with the order number of this span.

A peculiar feature of this bridge is the manner in which the skew of the abutments was accommodated within the truss framing. All floor beams are perpendicular to the bridge centerline with the unequal panel length due to the skew taken up in the end panels. On this bridge the incline of the portals were kept parallel and the end panel of the top chords are of unequal length. This arrangement causes the top chord pins at the end panel points only to be offset from the bottom chord pins so that the end panel hangers are inclined. On the opposing sides are hanger inclines toward the support, while the other hanger inclines toward the floor beam.

Alterations/modifications to the span are minimal and primarily non-intrusive to the original design. The stringers and deck have been recently replaced with a longitudinal laminated timber deck with an asphalt wearing surface. Timber railings have also been added on the inside face of the trusses. The original railings are gone. The intermediate floor beam hangers were strengthened by the addition of a welded "collar" around the Phoenix column section and an additional pair of rod hangers. That work is believed to have been done in 1958, according to county records.

HISTORICAL AND TECHNOLOGICAL SIGNIFICANCE: The 1885 bridge is historically and technologically significant as a well-preserved example of 19th-century bridge technology in both its design and its construction details (criterion C). The pin-connected Pratt truss became the most successful and technologically important of the late-19th century metal truss types. What distinguishes this cast- and wrought-iron example is the use of Phoenix section columns and cast nodes for connection of the Phoenix-section elements and the way the skew of the abutments was accommodated within the truss framing. Its historical significance is increased by the fact that it is a documented example of the work of New York City-based fabricator Dean & Westbrook, a firm that took over the erection of highway bridges through a contractual arrangement with the Phoenix Bridge Company of Phoenixville, PA. Dean & Westbrook built highway bridges with Phoenix columns until 1896. The Lower Lansdowne Road bridge is one of about ten bridges in New Jersey that are built with Phoenix sections between 1878 and 1895. All are evaluated as significant due to the presence of the important patented Phoenix section, a detail that did as much as any other to promulgate the acceptance of metal truss bridges in the 1870s and 1880s.

The Phoenix column was developed in 1864 by David Reeves of the Phoenix Iron Company at Phoenixville, Pennsylvania. It is composed of at least four segmental wrought channels whose flanges were riveted together to produce a circular section with great compressive strength. The Phoenix column, and its cast iron connecting pieces for compression fittings of the various elements, also designed and patented by Phoenix Iron Company engineers, "was a great factor causing the substitution of wrought iron for cast iron in compression members of pin-connected bridges," according to noted engineer and author J.A.L. Waddell. They reflect the then-current understanding of tensile and compressive forces at the panel points.

The bridge is one of three bridges with Phoenix sections, each of a different design, in Hunterdon County. Two of them were built by Dean and Westbrook, the fabricating firm based in New York City that was established in 1885, the same year they entered into an agreement with the Phoenix Bridge Company to act as agents for the construction of Phoenix-column highway bridges. From 1885 until 1895, Dean

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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& Westbrook built over 280 Phoenix column highway bridges from Main to North Carolina, but most of their activity was in New York, New Jersey, and Pennsylvania. They built over 70 in New Jersey alone, and they remain in Mercer, Bergen, Somerset, Hunterdon, and Monmouth counties. This is the only skewed thru truss bridge. Correspondence in the Phoenix Iron Company records preserved at the Hagley Museum and Library reveals that when this bridge was ordered, the wrong skew connecting pieces were shipped to the site. The error was not discovered until the bridge was being erected. The correct connecting pieces had to be ordered from Phoenixville.

Boundary Description and Justification: The bridge is evaluated as individually distinguished. The boundary is limited to the substructure and superstructure of the span.

PHOTO: 617:6-7, 618:39-44,1 (02/92) REVISED BY (DATE): QUAD: Pittstown

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 10XXG62 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BELL AVENUE OVER SPRUCE RUN RIVER **FACILITY** BELL AVENUE

TOWNSHIP GLEN GARDNER BORO

TYPE PONY TRUSS **DESIGN** PRATT **MATERIAL** Steel

 # SPANS 1 **LENGTH** 85 ft **WIDTH** 15.6 ft

CONSTRUCTION DT 1896 **ALTERATION DT** Rehabilitated: 1991 **SOURCE** PLAQUE

DESIGNER/PATENT GROTON BRIDGE & MFG CO **BUILDER** GROTON BRIDGE & MFG CO

SETTING / CONTEXT The bridge carries one lane of traffic over a minor stream. It is located in a wooded village setting of modified 19th and 20th century houses.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 5-panel Pratt pony truss pin-connected bridge bears on random ashlar abutments. The bottom chord is composed of stamped eye bars. 1991 alterations included welded reinforcing plates on floorbeams and a new flooring system with a glulam deck. Otherwise the trusses are well preserved. Lattice web railings with center medallions remain. The span is significant as a good example of its type and as an example of the work of the Groton Bridge Co., a NY fabricator not well represented in the state.

INFOR MATION

Bibliography:
Thurber, Pamela. "The Groton Iron Bridge Company." Historic Ithica and Tompkins County Newsletter. Fall, 1983.

Physical Description: The 5-panel full hip pin-connected pony truss bridge is supported on ashlar abutments. It has some small reinforcing elements added at the panel points, but most of the original fabric survives, including the lattice railing with decorative bosses on the bridge and atop the low stone walls of the approaches. The top chord and inclined end posts are composed of toe-out channels with a top web plate and battens on the bottoms. The verticals are back-to-back angles with a laced web. The connection of the verticals to the panel points is by a plate riveted, bolted, or welded to the angles. Diagonals and the bottom chord are made up of stamped, round-headed eye bars while the counters are loop forged bar stock. The rolled I-section floor beams are hung from the bottom panel points by u-hangers. The bridge exhibits no unusual construction details. Modifications to the original design include outriggers connected by welds and splice plates to the floor beams and top chord and a wood laminated deck added in 1991.

Historical and Technological Significance: The pin-connected Pratt pony truss bridge, built in 1896, is a well-preserved example of a historically important bridge type. One of over 10 examples of the bridge type in Hunterdon County, which is distinguished with having more 19th-century truss bridges than any other county in the state, this span is historically noteworthy because it is a documented example of the work of the Groton Bridge Company of Groton, New York. It is one of less than six documented examples of their work in the state.

Groton is located on a spur of the Southern Central Railroad that was opened in 1869 linking the small town near Ithica with routes to Canada and Pennsylvania coal region. In 1877, two small agriculture-related businesses, the Groton Iron Works, a blacksmith shop, and the Groton Separator Works, a manufacturer of farm implements, merged in 1877 to form the Groton Bridge Company. The firm was established to take advantage of the rapidly increasing metal truss bridge market that was developing as county after county set about improving and upgrading their roads. The company grew and prospered, becoming one of the largest employers in the community and building bridges in at least 27 states. Between 1877 and 1887, the firm built mostly small pony truss bridges in upstate New York. In 1887 the operation was expanded and the product line increased to include larger bridges. It was during this expanded phase of the company's operations that the bridge in Glen Gardner was built and finished with the distinctive demilune plaque atop each top chord. In 1900 the company was absorbed into the new American Bridge Company. The company continued its operations until the 1920s. It also produced structural steel.

The history of the Groton Bridge and Manufacturing Company is reflective of the era during the late-19th century when a host of small companies recognized the economic advantage of designing and manufacturing metal truss bridges as the nation embarked on its most ambitious road improvement campaigns. The era of individual companies, represented regionally and/or nationally by local sales people, was brought to a close in 1900 with incorporation of J.P. Morgan & Company's American Bridge Company, a conglomerate made up of 24 companies that represented half the nation's bridge fabricating capacity. Some plants were closed, and others, like Groton's works, continued in operation.

Boundary Description and Justification: The bridge is evaluated as individually distinguished. Its setting does not appear to have historic district potential. Thus, the boundary is limited to the substructure and superstructure of the span itself.

PHOTO: 610:35-40, 42 (07/91) REVISED BY (DATE): QUAD: High Bridge

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 10XXG63 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED SCHOOL STREET OVER SPRUCE RUN RIVER **FACILITY** SCHOOL STREET

TOWNSHIP GLEN GARDNER BOROUGH

TYPE PONY TRUSS **DESIGN** PRATT **MATERIAL** Iron

 # SPANS 1 **LENGTH** 84 ft **WIDTH** 16.6 ft

CONSTRUCTION DT 1870 **ALTERATION DT** 1992 **SOURCE** INSCRIPTION

DESIGNER/PATENT FRANCIS C. LOWTHROP **BUILDER** WILLIAM COWIN

SETTING / CONTEXT The bridge carries one lane of a local street over a minor stream. It is located in a village of well-maintained 18th- and 19th-century homes. It is adjacent to a small neighborhood park and near a 19th century schoolhouse and mill. The village is undergoing modern residential development. The village is east of NJ 31.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Individually Listed. Listed. Glen Gardner Pony Pratt Truss Bridge. 09/22/1977.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 1870 Pratt pony truss bridge of wrought and cast iron was built by Lambertville contractor William Cowin, using the design of Francis C. Lowthrop. It is one of 3 Cowin/Lowthrop spans extant in New Jersey. The others are 10XXON1 and 2102225, but this is the least altered of the three. It is an extremely significant early example of metal truss bridge technology. The span is of national importance. It was sensitively rehabilitated, including a new flooring system, in 1992.

INFOR MATION

PHOTO: 68M:36-38 (07/91) REVISED BY (DATE): QUAD: High Bridge

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 10XXH64 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0
NAME & FEATURE INTERSECTED MT. JOY ROAD OVER MUSCONETCONG RIVER **FACILITY** MT. JOY ROAD
TOWNSHIP HOLLAND TOWNSHIP
TYPE THRU TRUSS **DESIGN** PRATT **MATERIAL** Steel
 # SPANS 1 **LENGTH** 106 ft **WIDTH** 15.6 ft

CONSTRUCTION DT 1890ca **ALTERATION DT** **SOURCE** COUNTY RECORDS
DESIGNER/PATENT UNKNOWN **BUILDER** G M RUSLING, HACKETTSTOWN

SETTING / CONTEXT The bridge carries one lane of a narrow street over the Musconetcong River, the border between Hunterdon and Warren Counties. The street is in the center of the well-preserved 19th-century village of Finesville which has National Register-historic district potential. The bridge contributes to the historic character of that potential district. The bridge is a few feet downstream from a mill dam. The mill, now converted to housing, remains.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No
CONSULT STATUS Individually Eligible. Agreed Potential Historic District. Contributing.
CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 8-panel pin-connected Pratt thru truss bridge is supported on random ashlar abutments. The floorbeams appear to be original. Welded alterations are minimal and include plates at the lower panel points, cover plate on the end posts, and lateral bracing strengthening. The bridge is the only known example of the work of bridge builder G.M. Rusling of Hackettstown. In addition to its historical significance, it contributes to the character of a potential district.

INFOR MATION

BIBLIOGRAPHY:
Hunterdon County Engineer's Office: County bridge card H64W. Hunterdon County Master Plan: Sites of Historic Interest 1979.

PHYSICAL DESCRIPTION: The eight-panel full hip Pratt thru-truss bridge has a plaque located at the center of the portals identifying the builder and the Hunterdon County Bridge Committee members. The pin-connected bridge is supported upon stone abutments with retaining walls. The top chords and inclined end posts are box members composed of shallow toe-out channels and cover plates with battens. The bottom chord consists of stamped eyebars, to which reinforcing plates have been welded at the panel points. The vertical members are composed of angles with lacing. The portal braces are also composed of angles with lattice. All but the first interior floor beams are hung from U-bolts. The floor beam hangers are forged loop eye bars that have been reinforced by the addition of bars welded to the top chord and the panel point reinforcing plate. Knee braces have been added at lateral struts and portals. Channel end diagonal braces have been added, and cover plates have been welded to the end posts. According to county records, the corrugated steel deck with asphalt overlay was installed in 1958. Some elements are stamped "Passaic R.M. Co.".

HISTORICAL AND TECHNOLOGICAL SIGNIFICANCE: The date of construction of the 8-panel pin-connected Pratt thru truss bridge is not documented, but stylistically it appears to be circa 1890. The fairly well preserved bridge is the only known example of the work of G.M. Rusling, a New Jersey fabricator. In addition to being a good example of an important bridge type and the work of a local fabricator, the bridge is located in the village of Mount Joy, a potential National Register Historic District. It is a contributing resource in that potential historic district. The first house was reportedly erected in 1829 in what was a saw mill and iron ore mining area. The village preserves its historic, 19th- and early-20th century character. The mill dam is located a few feet upstream from the bridge. Although some alterations are present, they are predominantly non-intrusive in nature and the bridge retains its integrity of design.

Boundary Description and Justification: The bridge is individually distinguished, but it is also located in a potential historic district that appears to include resources on both side of the river. Thus both ends of the bridge are within the potential historic district. The bridge and its surroundings are evaluated as significant.

PHOTO: 67:11-14,16,17 (06/91) REVISED BY (DATE): QUAD: Riegelsville, PA

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 10XXL93 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 645 OVER MUSCONETCONG RIVER **FACILITY** CR 645

TOWNSHIP LEBANON TOWNSHIP

TYPE STONE ARCH **DESIGN** ELLIPTICAL **MATERIAL** Stone

 # SPANS 2 **LENGTH** 81 ft **WIDTH** 18.9 ft

CONSTRUCTION DT 1900 **ALTERATION DT** 1980 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a narrow 2-lane county road over the Musconetcong River. It is located in a wooded lightly settled suburban area adjacent to an abandoned mill and mill race. High stone piers from a non-extant railroad are visible from the bridge. The area was known as Changewater.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 2-span stone arch bridge was constructed in 1900. The upstream portion is ashlar with ringstones. It retains its lattice and floral boss railing. The bridge was widened in 1980 by a reinforced concrete addition of corresponding shape on the downstream side. The addition has a paneled concrete parapet. A concrete toe wall was added to the original pier. One of over 10 stone arches in the county, it has lost significance due to the alterations and is thus not a noteworthy example of the type.

INFOR MATION

PHOTO: 63:43A-44A, 1A (06/91) REVISED BY (DATE): QUAD: High Bridge

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 10XXL95 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MOWDER HILL ROAD OVER MUSCONETCONG RIV **FACILITY** MOWDER HILL ROAD

TOWNSHIP LEBANON TOWNSHIP

TYPE PONY TRUSS **DESIGN** PRATT HALF HIP **MATERIAL** Ferrous

 # SPANS 1 **LENGTH** 64 ft **WIDTH** 15.4 ft

CONSTRUCTION DT 1897 **ALTERATION DT** **SOURCE** COUNTY RECORDS

DESIGNER/PATENT WROUGHT IRON BRIDGE CO. **BUILDER** WROUGHT IRON BRIDGE CO.

SETTING / CONTEXT The bridge carries one lane of a rural road over the Musconetcong River, the boundary between Hunterdon and Warren counties. It is located in a wooded rural setting near open fields and pastures.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 4-panel half hip Pratt pony truss is pin connected. One abutment is fieldstone while the other is concrete. An unusual construction detail is cast iron connectors and bearing shoes similar to the bridge on Hamp Road (10WD120). Minor modifications made in 1977 include repairs to the vertical members and the addition of outriggers. This is a well-documented example of the Wrought Iron Bridge Co. of Ohio. Several other local spans by the company have the same cast connectors.

INFOR MATION

BIBLIOGRAPHY:

Hunterdon County Engineer's Office, Bridge card L-95-W.
Darnell, Victor C. A Directory of American Bridge-Building Companies, 1840-1900. Washington, D.C.: Society for Industrial Archeology, 1984.

PHYSICAL DESCRIPTION: The four-panel, pin-connected, half-hip Pratt pony truss bridge is traditionally composed. The top chord and inclined end posts are composed of shallow channels, toe out and a cover plate and closely spaced lacing, riveted to make a box member. The bottom chord is comprised of stamped, round- headed eyebars. Vertical members are angles with lattice bracing. Floor beams are hung from typical U-bolt hangers. One abutment is random fieldstone, while the second is concrete. Wingwalls have been repointed and repaired. An unusual detail is the cast-iron bearing shoe containing the roller nest. The cast bearing serves as the connection for the bottom chord and inclined end posts.

Alterations are minimal. Modern metal guide railings have been added to either side. A glue-laminated deck replaces a 1962 metal plank deck. Other alterations include welded repairs on vertical members and the addition of outriggers in 1977.

HISTORICAL AND TECHNOLOGICAL SIGNIFICANCE: One of over 20 Pratt half hip pony truss bridges in Hunterdon County, the well-preserved span is historically and technologically distinguished. It was fabricated by The Wrought Iron Bridge Company (WIBC) of Canton, Ohio in 1897. The company, noted for its prolificacy and technological accomplishments, was founded in 1864 by David Hammond, and it was incorporated in 1871. It operated as such until 1899 when it was absorbed by the American Bridge Company (Darnell, 48.). Nationally successful by marketing its designs through a network of regional salesmen, the company is well represented in New Jersey. What distinguishes this span are the bearing castings, a detail used on some of the company's bridges since at least the 1880s (criterion C). It is also found on 10WD120. The span thus documents the evolution of metal truss bridge design, but also the manner in which bridges were designed and marketed in the pre-American Bridge Company era.

Boundary Description and Justification: The bridge evaluated as individually distinguished. The boundary is limited to the substructure and the superstructure.

PHOTO: 63:38A-42A (06/91) REVISED BY (DATE): QUAD: Washington

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US
November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 10XXQ40 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED EVERITTS ROAD OVER BRANCH OF NESHANIC RIVER **FACILITY** EVERITTS ROAD

TOWNSHIP RARITAN TOWNSHIP

TYPE PONY TRUSS **DESIGN** PRATT **MATERIAL** Steel

 # SPANS 1 **LENGTH** 80 ft **WIDTH** 13 ft

CONSTRUCTION DT 1923 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT GRANT DAVIS, CO ENG **BUILDER** SNOOK & SONS

SETTING / CONTEXT The bridge carries one lane of a lightly traveled country road over a branch of the Neshanic River in an unspoiled wooded rural setting. The land surrounding the bridge is used for agriculture.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 03/12/01

SUMMARY The 6-panel riveted Pratt pony truss bridge has ashlar abutments, one of which has been widened with concrete. The bridge, designed by the county engineer is traditionally composed with the center-panels diagonals joined to a center gusset plate. The original pipe railing survives. Largely unaltered and although a relatively late example of a Pratt pony truss, the bridge is individually eligible for listing in the National Register under Criterion C.

INFOR MATION

PHOTO: 61:39A-41A (06/91) REVISED BY (DATE): QUAD: Hopewell

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 10XXQ48 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED KUHLS ROAD OVER BRANCH OF NESHANIC RIVER **FACILITY** KUHLS ROAD

TOWNSHIP RARITAN TOWNSHIP

TYPE PONY TRUSS **DESIGN** PRATT **MATERIAL** Steel

 # SPANS 1 **LENGTH** 70 ft **WIDTH** 18.2 ft

CONSTRUCTION DT 1936 **ALTERATION DT** **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** STACY (WIDDICOMBE?)

SETTING / CONTEXT The bridge carries a lightly traveled rural road over a branch of the Neshanic River. It is located in a rural setting with nearby open fields and encroaching suburban housing development.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 03/12/01

SUMMARY The skewed 5-panel 1936 Pratt pony truss bridge is of rolled section welded construction. It is supported on random ashlar abutments. An uncommon detail is the connecting of the center-panel diagonals to a mid-panel gusset plate. Alterations are minimal and include outriggers and guide rail railings. Although the structure is a representative example of the pony truss technology, it is not individually eligible for listing in the National Register of Historic Places, nor does it currently contribute to an identified historic district.

INFOR MATION

PHOTO: 61:37A-38A (06/91) REVISED BY (DATE): QUAD: Hopewell

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 10XXR19 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED ISLAND ROAD OVER ROCKAWAY CREEK **FACILITY** ISLAND ROAD

TOWNSHIP READINGTON TOWNSHIP

TYPE PONY TRUSS **DESIGN** PRATT HALF HIP **MATERIAL** Steel

 # SPANS 1 **LENGTH** 70 ft **WIDTH** 13.8 ft

CONSTRUCTION DT 1900ca **ALTERATION DT** **SOURCE** STYLE

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries one lane of an unimproved country road over a minor stream in a lightly wooded rural setting near a working farm complex. It is near open fields and scattered houses.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 8'-high 5-panel Pratt half hip pony truss bridge is pin connected. It is supported on concrete abutments with wingwalls. The bottom chord is stamped eye bars and the top chord and end posts are built-up box members. Diagonals are also stamped eye bars. The floor system is new and the bottom chord has been patched and reinforced. Plates have been welded to panel points, but the pins and hangers remain. The undocumented span is too altered to be evaluated as significant.

INFOR MATION

PHOTO: 622:27-29 (02/92) REVISED BY (DATE): QUAD: Raritan

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 10XXR20 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED LAMINGTON ROAD OVER ROCKAWAY CREEK **FACILITY** LAMINGTON ROAD

TOWNSHIP READINGTON TOWNSHIP

TYPE THRU TRUSS **DESIGN** PRATT **MATERIAL** Wrought Iron

 # SPANS 1 **LENGTH** 58 ft **WIDTH** 16.2 ft

CONSTRUCTION DT 1890ca **ALTERATION DT** **SOURCE** STYLE

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries one lane of a lightly traveled country road over Rockaway Creek. It is located in a wooded rural setting adjacent to a well-preserved 18th-century farmstead. The unspoiled setting contributes to the significance of the bridge.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 4-panel pin-connected Pratt thru-truss bridge is supported on random ashlar abutments. The span is technologically significant because of its distinctive details including beveled bearing plates, paddle-shaped ends on the verticals, and bottom chord eyebars that pass under the pin connection. Portals are set on the top chords, which end in faceted stops. The fabricator is not documented, but the construction details are unusual and distinctive. It is technologically notable.

INFORMATION

BIBLIOGRAPHY:
Hunterdon County Engineer's Office, County Bridge card R20.
Hunterdon County Master Plan: Sites of Historic Interest, 1979.

PHYSICAL DESCRIPTION: The single-span Pratt thru-truss bridge is almost entirely original except for an asphalt filled corrugated metal deck. The bridge consists of what appears to be wrought iron I-beam stringers and floor beams hung with U-bolts from two truss lines. The trusses consist of inclined end posts and top chords built up from two channels and a cover plate with widely spaced battens. An unusual detail is that the ends of the top chords extend slightly beyond the portal diagonals and are finished with a decorative paling-ended end cap. The principal diagonals and bottom chord consists of round headed eyebars. The counters consist of rods with turnbuckles for adjustment. The verticals consist of channels with lacing. The original diagonal-pattern lattice railings are present along both truss lines. The bearing plate is an incline which results from the masonry plates having inclined web extensions. The rationale behind this bearing type is unclear. The bearings at both abutments are inclined back away from the span. There is no clear indication if one or both sets of bearings were intended to be the expansion bearings. The pins in the bearings have been welded in position.

The abutments consist of rubble stone masonry of poor quality, with U-type wingwalls. Concrete toe walls have been placed in front of both abutments to protect from scour.

HISTORICAL AND TECHNOLOGICAL SIGNIFICANCE: The date of construction and fabricator of the well-preserved pin-connected Pratt thru truss bridge has not been documented in the County Engineer's records, but the span is mostly original, with few alterations, making it a good representative example of the important bridge type (criterion C). It is technologically distinguished by two unusual features not found on other thru truss bridges in the county. The top chord portal connection connotes extraordinary attention to detail. The inclined bearings appear to indicate a unique design philosophy. In addition to the preservation of the unusual construction details, the span enjoys integrity of setting in a wooded rural area adjacent to the Ten Eick-Weed farmstead, which includes a frame farmhouse with a stone wing, an English barn, and a smaller frame barn.

Boundary Description and Justification: The bridge is located adjacent to an 18th-century farmstead, but the history and significance of the two resources are separate and distinct. The bridge is evaluated as significant in its own right. Its boundary is the limits of the substructure and superstructure.

PHOTO: 622:20-26 (02/92) REVISED BY (DATE): QUAD:

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 10XXT80 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED ROCKAWAY ROAD OVER ROCKAWAY CREEK **FACILITY** ROCKAWAY ROAD

TOWNSHIP TEWKSBURY TOWNSHIP

TYPE PONY TRUSS **DESIGN** PRATT **MATERIAL** Steel

 # SPANS 1 **LENGTH** 60 ft **WIDTH** 14.7 ft

CONSTRUCTION DT 1900ca **ALTERATION DT** Demolished: 2001 **SOURCE** STYLE/COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries one lane of a lightly trafficked country road over a minor stream. It is located in an area of woods and agricultural fields.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Bridge was Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed 4-panel Pratt pony truss is pin connected. It is supported on random ashlar abutments with wingwalls. Original components are limited to the chords, some diagonal members, and the U-hanger detail. Welded repairs since 1973 include plates added to the floor beams and diagonals. The verticals are modern replacements and guide rails and outriggers have been added. One of over 9 full hip Pratt pony truss spans in the county, it is an undocumented and altered example of the type.

INFOR MATION

PHOTO: 66:1A-6A 623:12 (06/91) REVISED BY (DATE): QUAD: Califon

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 10XXT85 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED OLD MOUNTAIN ROAD OVER ROCKAWAY CREEK **FACILITY** OLD MOUNTAIN ROAD

TOWNSHIP TEWKSBURY TOWNSHIP

TYPE PONY TRUSS **DESIGN** PRATT HALF HIP **MATERIAL** Metal

 # SPANS 1 **LENGTH** 52 ft **WIDTH** 12.1 ft

CONSTRUCTION DT 1895ca **ALTERATION DT** Unknown **SOURCE** STYLE

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a private driveway over a minor stream in a rural, wooded setting. The driveway services an altered 19th-century house.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 3-panel pin-connected Pratt half hip pony truss bridge is too long for the crossing, indicating that it may have been moved to this location. It bears on concrete abutments. Although it has been strengthened by a rolled girder from which the floor beams are suspended, the trusses themselves appear to be well preserved. The most unusual detail is the tapered-shape verticals which are composed of latticed back-to-back angles. The bridge is an altered example of a common county type.

INFOR MATION

PHOTO: 28:22-26 (05/92) REVISED BY (DATE): QUAD: Califon

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1100002 **CO** MERCER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED SOUTH BROAD STREET (US 206) OVER ASSUNPINK CREEK **FACILITY** SOUTH BROAD STREET (US 206)

TOWNSHIP TRENTON CITY

TYPE STONE ARCH **DESIGN** ELLIPTICAL **MATERIAL** Stone

 # SPANS 1 **LENGTH** 60 ft **WIDTH** 36 ft

CONSTRUCTION DT 1843 **ALTERATION DT** **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT Located in downtown Trenton on the main east-west street, the 1843 stone arch bridge is not visible from the roadway. Assunpink Creek, the feature it crosses, has been diverted underground west of the bridge and it reemerges at the bridge. Open park land, created by urban renewal, is on both sides of the bridge which has been widened to 36'.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible. Historic District Status Unresolved.

CONSULT DOCUMENTS DOE 05/31/80

SUMMARY The well-proportioned random ashlar elliptical stone arch was built in 1843 to replace the 1822 stone arch bridge lost in a freshet. On the historic main road from New York to Philadelphia, a stone arch was first built here in 1774. The bridge was widened on the east side several times, but the west elevation survives with its handsome voussoirs and keystone. It is the oldest bridge in Trenton, and is of great historical value to the community.

INFOR MATION

PHOTO: 1:28-31 (04/91 JPH (5/96)) REVISED BY (DATE): QUAD: Trenton West

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1100005 **CO** MERCER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PRINCETON PIKE (CR 583) OVER STONY BROOK **FACILITY** PRINCETON PIKE (CR 583)

TOWNSHIP PRINCETON TOWNSHIP

TYPE STONE ARCH **DESIGN** BARREL **MATERIAL** Stone

 # SPANS 3 **LENGTH** 111 ft **WIDTH** 22 ft

CONSTRUCTION DT 1809 **ALTERATION DT** 1973 **SOURCE** COUNTY BRIDGE CARD

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The 3-span stone arch bridge is on the historic Princeton & Kingston Branch Turnpike, a road constructed in 1807 between Trenton the Kings Highway in Kingston. The bridge is on a sharp curve, and it crosses a wide shallow stream in a wooded residential area just south of the borough of Princeton.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible. Listed. Princeton Battlefield / Stony Brook Village Historic District 10/15/1966, amended 11/21/1979 10/10/1989. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY Reportedly built in 1809, the impressive 3-span rubble-coursed stone arch bridge is well proportioned. It has been extensively rebuilt over the years. The north arch and ice breakers collapsed partially in 1973, but were rebuilt as were the parapets. A slab was added to carry live loads. The bridge is still a significant early engineering accomplishment and a remnant of the Princeton Turnpike, chartered in 1804. It is one of three ca. 1800 3-span stone arches in the area. All are eligible.

INFOR MATION

PHOTO: 7:10-11 (05/91 JPH (5/96)) REVISED BY (DATE): QUAD: Princeton

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US
November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1100007 **CO** MERCER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED YARDVILLE-GROVEVILLE ROAD OVER DOCTORS CREEK (672.2) **FACILITY** YARDVILLE GROVEVILLE ROAD

TOWNSHIP HAMILTON TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 46 ft **WIDTH** 30 ft

CONSTRUCTION DT 1929 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT H. KERSEY, CO BRIDGE ENGINEER **BUILDER** WM DRIVER (TRENTON)

SETTING / CONTEXT The bridge is located away from the center of the village of Yardville in a wooded setting over a brook. A large post-1960 apartment complex is to the northeast of the bridge. A concrete ruin of a foot bridge is just upstream and visible from the bridge.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The unaltered encased stringer bridge on concrete abutments was built by the county and is a representative example of the popular pre-WW II structural type. It is not technologically innovative, and is one over 40 encased stringer bridges in the county. Its concrete balustrade is also representative of the period.

INFOR MATION

PHOTO: 3:14A-16A (05/91) REVISED BY (DATE): QUAD: Trenton East

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1100009 **CO** MERCER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PROSPECT STREET OVER SHABAKUNK CREEK **FACILITY** PROSPECT STREET

TOWNSHIP EWING TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 59 ft **WIDTH** 20 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT **BUILDER** PETER DIANTONIO (TRENTON)

SETTING / CONTEXT The bridge is located in a mixed use suburban area dominated by mid- to late-20th century development.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The concrete-encased stringer bridge is one of a series of 3 built in Ewing over the Shabakunk by the county in 1930-31. It is technologically undistinguished, as are the other two, and is a representative example of a common bridge type. Over 40 encased stringer bridges were built before 1942 in Mercer County alone. The bridge has a well detailed concrete parapet originally fitted with light standards that have been removed.

INFOR MATION

PHOTO: 2:5-6 (04/91) REVISED BY (DATE): QUAD: Trenton West

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1100010 **CO** MERCER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED NORTH OLDEN AVENUE OVER SHABAKUNK CREEK (441.21) **FACILITY** NORTH OLDEN AVENUE

TOWNSHIP EWING TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 24 ft **WIDTH** 60 ft

CONSTRUCTION DT 1931 **ALTERATION DT** **SOURCE** COUNTY RECORDS

DESIGNER/PATENT **BUILDER** HARRY W. RICKARD

SETTING / CONTEXT Located in a late-20th century commercial area dominated by small "strip" centers and small businesses on a busy arterial road, the bridge over a small stream was originally built as a 2-lane facility. It and the road have been widened to four lanes.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY Originally constructed by the county as one of a series of three encased stringer bridges in Ewing over Shabakunk Creek, the bridge was extensively altered when it was widened to 4 lanes. Only the east side is original. It retains the original concrete balustrade while the new west side has a modern concrete barrier. The bridge has lost its integrity of design and is not well preserved.

INFOR MATION

PHOTO: 2:3-4 (04/91) REVISED BY (DATE): QUAD: Pennington

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1100011 **CO** MERCER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED EWINGVILLE ROAD OVER SHABAKUNK CREEK (442.1) **FACILITY** EWINGVILLE ROAD

TOWNSHIP EWING TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 35 ft **WIDTH** 44 ft

CONSTRUCTION DT 1931 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT **BUILDER** PETER DIANTONIO TRENTON

SETTING / CONTEXT The bridge crosses a small stream and is located in a wooded setting. It is located on a collector road in a sparsely developed area north of Trenton.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge is one of a series of three encased stringers built by the county across Shabakunk Creek as part of a routine road-improvement program in Ewing. Each bridge has concrete paneled parapet typical of the period. Like the other two (1100009 and 1100010), this bridge is a representative example of period technology and is not technologically or historically distinguished. It is one of over 40 encased stringer bridges in Mercer County.

INFOR MATION

PHOTO: 2:7-8 (04/91) REVISED BY (DATE): QUAD: Pennington

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1100012 **CO** MERCER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED EWINGVILLE ROAD OVER SHABAKUNK CREEK (442.4) **FACILITY** EWINGVILLE ROAD (442.4)

TOWNSHIP EWING TOWNSHIP

TYPE STRINGER **DESIGN** JACK ARCH **MATERIAL** Steel, Masonry

 # SPANS 1 **LENGTH** 28 ft **WIDTH** 30 ft

CONSTRUCTION DT 1889 **ALTERATION DT** 1926 **SOURCE** PLANS

DESIGNER/PATENT H. KERSEY, 1926 PLANS **BUILDER**

SETTING / CONTEXT Bridge is located over a small stream in low-density single family residential portion of the county.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY Composed of rolled I-beams with shallow brick arch infill between the beams, the 1889 bridge was widened in 1926 with concrete-encased stringers. It is one of the few surviving brick jack arch bridges in the county, but the type is well represented within the county in spans of less than 20'. While the brick jack arch span is strong, the stone abutments are not and are braced. The brick arch added strength and stability to the I beams. A better, unaltered example of the type is 18E0104.

INFOR MATION

Bibliography:
Mercer County Engineers Office. Transfer File 422.4.
A.G. Lichtenstein & Associates. "Report of Finding of Historic Significance of Structure No. 442.4 Ewingville Road over Shabakunk Creek. 2/15/90.

Physical Description: The 24'-long span was built in two phases. The earliest is the northern portion composed of 7 rolled stringers spaced 4' apart with brick jack arch fill with a 6" rise. Tie rods through the I beams resist the lateral thrust of the brick arches. The jack arches are in good condition, The bridge was widened to the south in 1926 when five concrete encased stringers were installed. The original ashlar abutment is not well founded and is braced. Any historic railing has been lost. Modern beam guide rail is now in place.

Historical and Technological Significance: The Ewingville Road bridge is a documented example of a stringer and brick jack arch span. It was built in 1889 and widened with rolled steel I-beam stringers in 1926. Bridges with brick jack arches were built during a period between about 1885 and 1905. The detail is reportedly more common in Mercer County for culverts (spans of less than 20') than bridges. While considered a ferrous stringer bridge, the area between the webs was filled with longitudinal brick arches to assist in the load capacity of the span. The technique was copied from fireproof floor beam construction in buildings. A notable and early use of the barrel arch floor system was in the Custom House in Wheeling, West Virginia, begun in 1856 and completed in 1859. Interestingly, the I beams used in the building were among the first 7" beams rolled by the New Jersey Iron Company in Trenton. The use of brick in jack arches persisted until surpassed by reinforced concrete starting about 1905.

While the Ewingville Road bridge is a good example of its type, it has been altered with an addition to one side, and it is not as noteworthy as the one on River Road over Van Horn Brook in Somerset County (18E0104). That example is longer, has a higher clearance, and has not been widened.

PHOTO: 2:11-13 (05/91) REVISED BY (DATE): QUAD: Pennington

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1100014 **CO** MERCER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PROVINCE LINE ROAD OVER BRANCH STONY BROOK (533.5) **FACILITY** PROVINCE LINE ROAD

TOWNSHIP LAWRENCE TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 24 ft **WIDTH** 27 ft

CONSTRUCTION DT 1926 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT H. KERSEY, CO BRIDGE ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge crosses a small stream and is located in a wooded setting on a heavily traveled 2-lane road in a sparsely developed portion of the county.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased stringer bridge was designed by county engineer of bridges Harry Kersey and is a representative example of a common structural type that was frequently used in Mercer County prior to WW II. The stringers are supported on concrete abutments, and the paneled concrete parapet is typical of the period. While well preserved, the bridge is not technologically or historically distinguished. It is one of over forty encased stringers in the county.

INFOR MATION

PHOTO: 7:6-7 (05/91) REVISED BY (DATE): QUAD: Princeton

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1100016 **CO** MERCER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED QUAKER BRIDGE ROAD OVER ASSUNPINK CREEK (6-540.7) **FACILITY** QUAKER BRIDGE ROAD

TOWNSHIP LAWRENCE TOWNSHIP

TYPE SLAB **DESIGN** CONTINUOUS **MATERIAL** Reinforced Concrete

 # SPANS 3 **LENGTH** 80 ft **WIDTH** 44.4 ft

CONSTRUCTION DT 1941 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge is located on a busy four-lane road in a suburban area. Mixed use, 20th-century development is on both sides of the bridge.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The concrete slab bridge with a concrete balustrade is supported on concrete bents and abutments. It is representative of 1920s technology but is not distinguished in its own right. It is one of over a dozen slab bridges in the county. A modern beam guardrail protects the road side of the somewhat deteriorated balustrade.

INFOR MATION

PHOTO: 3:37A-38A (05/91) REVISED BY (DATE): QUAD: Princeton

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1100017 **CO** MERCER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PRINCETON PIKE OVER SHABAKUNK CREEK (541.2) **FACILITY** PRINCETON PIKE

TOWNSHIP LAWRENCE TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 59 ft **WIDTH** 30.5 ft

CONSTRUCTION DT 1939 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge over a small stream is located in a wooded setting in a suburban area. No historic resources appear in the immediate vicinity.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed encased stringer bridge has paneled fascia stringers and a pipe railing on one side. The pipe railing is one of the few surviving examples of the once common barrier in the county, but that feature does not make the span significant. It is an undistinguished example of a structural type that is common in the county. There are over 40 encased stringer bridges in Mercer County.

INFOR MATION

PHOTO: 5:39-40 (05/91) REVISED BY (DATE): QUAD: Princeton

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1100018 **CO** MERCER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PRINCETON PIKE OVER 5 MILE RUN (542.2) **FACILITY** PRINCETON PIKE

TOWNSHIP LAWRENCE TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 35 ft **WIDTH** 36 ft

CONSTRUCTION DT 1928 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT HARRY KERSEY, CO. BRIDGE ENG. **BUILDER** WM DRIVER, INC. TRENTON

SETTING / CONTEXT The bridge in a wooded setting, is located on a busy 2-lane road in a suburban part of the county that is dominated by mid-20th century development.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY Designed by county bridge engineer Harry Kersey, who did most of the 1920s bridges in the county, the encased stringer bridge with a paneled concrete parapet is a representative example of the bridge type that dominates Mercer county. Over 40 encased stringers were built in Mercer prior to WW II. This bridge is not historically or technologically distinguished. The parapet is somewhat deteriorated.

INFOR MATION

PHOTO: 7:36 (05/91) REVISED BY (DATE): QUAD: Princeton

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1100019 **CO** MERCER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED LAWRENCE STATION BAKERSVILLE ROAD CROSSING OVER SHIPETAUKIN CREEK **FACILITY** LAWRENCE STATION BAKERSVILLE ROAD (543.1)

TOWNSHIP LAWRENCE TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 36 ft **WIDTH** 24 ft

CONSTRUCTION DT 1937 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT H. KERSEY, CO BRIDGE ENGINEER **BUILDER**

SETTING / CONTEXT The bridge over a small stream is located on a heavily used collector road in a wooded setting in the extensively redeveloped central portion of the county. The road runs from US 1 to Lawrence Station and Quaker Bridge Road.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The short encased stringer bridge is one of over forty examples of its structural type in Mercer County, and it is not technologically or historically distinguished. The combination concrete post and iron bar railing is original, and it is the earliest documented use of its type in the county. Examples of the railing style are also found on county-designed bridges in Warren County.

INFOR MATION

PHOTO: 7:34 (05/91) REVISED BY (DATE): QUAD: Princeton

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1100021 **CO** MERCER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CARTER ROAD OVER SHIPETAUKIN CREEK (543.7) **FACILITY** CARTER ROAD

TOWNSHIP LAWRENCE TOWNSHIP

TYPE ARCH **DESIGN** DECK **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 45 ft **WIDTH** 30 ft

CONSTRUCTION DT 1921 **ALTERATION DT** **SOURCE** COUNTY PLANS

DESIGNER/PATENT MORRIS GOODKIND **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in a wooded setting on a busy county collector road with large post-1960s residential and corporate development.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The handsome, well proportioned and well preserved arch bridge with paneled spandrels and corresponding parapet was designed by Morris Goodkind (1888-1968), State Bridge Engineer from 1925 until 1955. Goodkind also did consulting and was one of the most influential engineers in the state. Concrete arch bridges are not common in Mercer County, where the County Engineer favored concrete-encased stringers. The Carter Road bridge is eligible under the theme of Goodkind bridges.

INFOR MATION

Bibliography:
Mercer County Engineer. Transfer file: 543.7.
The Daily Home News (New Brunswick, NJ), September 7, 1968, p. 1. Lichtenstein, Abba G. Interview with m. McCahon, 4 January 1991.

Physical Description: The well-proportioned elliptical earth-filled reinforced concrete deck arch bridge has solid paneled spandrels with a brush hammered finish. The concrete parapets are also finished with flat panels. The bridge stands in a good state of preservation and is an excellent example of its structural type.

Historical and Technological Significance: The well-proportioned reinforced concrete arch bridge was designed in 1921 by Morris Goodkind (1888-1968) who worked briefly for Mercer County before going on to a distinguished career as chief bridge engineer with the New Jersey State Highway Department from 1925 until 1955 when he went into private practice as a principal of the firm Goodkind and ODea. He was Engineer of Bridges during one of the periods of greatest road expansion that the state has ever experienced. Goodkind started with NJDOT's bridge division in 1922, and he was largely responsible for the used of concrete-encased steel stringer bridges throughout the state as he recognized the benefit of encasing the concrete to protect it. Additionally, he is honored by his peers as a leader in long-lasting bridge design by setting state standards that exceeded those of AASHO, like an 8" concrete bridge deck depth and 1/1200 maximum span deflection. The body of his design work chronicles the transition from the truss era to the use of modern materials, especially concrete, and the role of the professional engineer in the development of both politically controlled policy and transportation networks. In addition to influencing the choice of technologies, Goodkind was responsible for the aesthetics of bridges in the state for over three and a half decades.

The 1921 Carter Road arch bridge is an early example of his work. One of two bridges in the county designed by Goodkind, it is distinguished by its handsome proportions and nearly complete state of preservation. Concrete arch bridges are not common in Mercer County.

PHOTO: 6:31-32 (04/91) REVISED BY (DATE): QUAD: Princeton

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1100023 **CO** MERCER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 641 QUAKER BRIDGE ROAD OVER MIRY RUN **FACILITY** QUAKER BRIDGE ROAD

TOWNSHIP HAMILTON TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 27 ft **WIDTH** 44.3 ft

CONSTRUCTION DT 1936 **ALTERATION DT** 1971 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge is located on a busy 4-lane road in a modern commercial area. Quaker Bridge Road has become a collector road through a suburban section of the county. It crosses a small stream just east of an earlier span. Remnants of the previous abutments are all that remain.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The steel stringer bridge on concrete abutments was built by the county in 1936. The original balustrade was replaced by a concrete parapet with a steel railing top in 1971. The altered bridge has no historical or technological significance. It is one of over forty steel stringer bridges built in Mercer county before World War II.

INFOR MATION

PHOTO: 108:34-36 (10/91) REVISED BY (DATE): QUAD: Trenton East

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1100024 **CO** MERCER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED HUGHES DRIVE OVER MIRY RUN **FACILITY** HUGHES DRIVE (641.8)

TOWNSHIP HAMILTON TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 35 ft **WIDTH** 27 ft

CONSTRUCTION DT 1931 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT H. KERSEY, CO BRIDGE ENGINEER **BUILDER** WM DRIVER, INC. TRENTON

SETTING / CONTEXT The bridge is located on a 2-lane collector road in a suburban area dominated by post-1960 development on former agricultural acreage. It crosses a small stream.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The undistinguished encased stringer bridge with a deteriorating paneled concrete parapet is one of over forty such structures built by Mercer County prior to World War II. The bridge is neither historically nor technologically distinguished. It was designed by county bridge engineer Harry Kersey who was responsible for most county bridges from the 1920s and 1930s.

INFOR MATION

PHOTO: 3:35A (04/91) REVISED BY (DATE): QUAD: Trenton East

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1100027 **CO** MERCER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED SOUTH BROAD STRRET OVER DOCTORS CREEK **FACILITY** SOUTH BROAD STREET (672.4)

TOWNSHIP HAMILTON TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 66 ft **WIDTH** 40 ft

CONSTRUCTION DT 1931 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT H. KERSEY, CO BRIDGE ENGINEER **BUILDER** EDWARD H. ELLIS

SETTING / CONTEXT Located in a wooded setting over a wide stream, the bridge is on a fairly busy collector road in the southeastern part of the county. The surrounding area is dominated by mid-20th residential development. There is nothing significant about the setting.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 2-span encased stringer bridge with concrete balustrades is supported on concrete abutments and is a representative example of the most common pre-World War II bridge type in the state. It was designed by the county's engineer of bridges and is typical of the structures the county was erecting during the 1920s and 1930s, a period of great bridge development. This bridge is not technologically or historically distinguished. It is unaltered.

INFOR MATION

PHOTO: 2:43-44 (05/91) REVISED BY (DATE): QUAD: Trenton East

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1100028 **CO** MERCER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED GROVEVILLE-ALLENTOWN ROAD OVER DOCTORS CREEK **FACILITY** GROVEVILLE ALLENTOWN ROAD

TOWNSHIP HAMILTON TOWNSHIP

TYPE PONY TRUSS **DESIGN** PRATT **MATERIAL** Metal

 # SPANS 1 **LENGTH** 47 ft **WIDTH** 15 ft

CONSTRUCTION DT 1882ca **ALTERATION DT** **SOURCE** STYLE

DESIGNER/PATENT WROUGHT IRON BRIDGE CO. **BUILDER** WROUGHT IRON BRIDGE CO.

SETTING / CONTEXT The one-lane bridge is located in a wooded setting on a quiet rural road. The area is sparsely developed.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 4-panel pin-connected Pratt half hip pony truss, moved to this location in 1930, is one of the two examples in Mercer County. Two verticals on the south end of upstream side are replacements, but the others are composed of an unusual rolled T section, a detailed unique to Wrought Iron Bridge Co. spans. The bridge is well preserved and is supported at one end on ashlar abutments from the previous span. The bridge is eligible because it is a documented early example of a WIBC span.

INFOR MATION

Bibliography:
Mercer County Engineer's Office: Transfer File 672.7.
Waddell, J.A.L. Bridge Engineering. 1925.

PHYSICAL DESCRIPTION The 15'-wide 4-panel pin-connected half hip Pratt pony truss with a plank deck survives with few modifications to its original design. Its top cord, inclined end posts are composed of plates and channels riveted to make a box member. The most distinctive feature of the bridge are the rolled or cast "beaded Tee" sections used for the original laced verticals. The heavier angle verticals with lattice and batten plates at the southwest corner appear to be not recent replacements that are consistent in style and type with the original design of the bridge. The diagonals are bars with loop forged eyes and sleeve nuts in the middle panels where the load is the greatest. Counters are lighter rods with loop forged eyes. A gusset plate riveted to the bottom on the verticals serves as the connection at the pin. The rolled section floor beams, which appear to the originals, are connected by typical U-bolts hangers. Strengthening knee braces, or outriggers, are bolted with regular bolts to the floor beam but riveted at their upper connection. A steel curb and original/early pipe railing provide impact protection for the truss on the downstream side, but modern beam guide rail has been welded to the road side on the upstream truss. The modern guide rail is the most drastic modification to the span.

The abutment for the previous span (also a pony truss) was modified to accept this structure which was moved to the site in 1930. The ashlar west abutment was not altered, but a new reinforced concrete abutment was added to the existing ashlar abutment on the east side because this structure is shorter than the earlier span.

HISTORICAL AND TECHNOLOGICAL SIGNIFICANCE The date of construction of the well-preserved Pratt half hip pony truss is not documented, it is known to have been designed and fabricated by the Wrought Iron Bridge Company of Canton, Ohio prior to 1885. Originally erected over Jacobs Creek on the Washington Crossing-Pennington Road in Hopewell Township (#214.4), it was dismantled truss by truss, and moved to Groveville-Allentown Road in 1930 (Mercer County Engineer's Transfer File 672.7). Reusing of pony truss bridges was apparently a common practice in Mercer County. Other documented examples of a similar relocation is Iron Bridge Road in Hamilton Township. Despite the relocation, the pin-connected truss survives in a remarkably complete state of preservation with no readily visible welded repairs. Outriggers or knee braces have been added at the panel points to brace the top chord against buckling outward, a modification frequently made to pony trusses.

The most distinctive feature of the bridge are the seldom-seen rolled or cast "beaded Tee" sections employed in the vertical members. As explained in its 1885 catalog, the "beaded Tee" was a Wrought Iron Bridge Company patented detail designed to be used in "the wide Lattice Post ... to give perfect lateral bracing to the girders, and is much neater in appearance than the cross or side braces formerly used for this purpose." The same patented section shape is used on the Devereux Road bridge over the East Branch of Brandywine Creek in Chester County Pennsylvania (Chester County #138). That bridge was fabricated by the Wrought Iron Bridge Company and has a patent date of 1877, according to Chester County records.

Boundary Description and Justification: The bridge is evaluated as individually significant. The boundary is limited to the superstructure. The substructure is not original to the truss lines as the span was moved to this location in 1930.

PHOTO: 2:39-42,108:21 (05/91) REVISED BY (DATE): QUAD: Trenton East

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NJDOT updated data 03-01-2001.
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1100029 **CO** MERCER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CROSSWICKS-HAMILTON SQUARE ROAD OVER DOCTORS CREEK **FACILITY** CROSSWICKS HAMILTON SQUARE ROAD

TOWNSHIP HAMILTON TOWNSHIP

TYPE PONY TRUSS **DESIGN** WARREN **MATERIAL** Steel

 # SPANS 1 **LENGTH** 64 ft **WIDTH** 22.9 ft

CONSTRUCTION DT 1915 **ALTERATION DT** 1966 **SOURCE** PLAQUE

DESIGNER/PATENT THEODORE TOBISH, CO. ENGINEER **BUILDER** BROWN & MACKENTHUM

SETTING / CONTEXT The bridge is located on a 2-lane road in the agricultural southeast corner of the county near the Burlington County line. A NJ Turnpike overpass is located just north of bridge, and a small roadside park is adjacent to the southwest side. The setting is undistinguished.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 06/21/94, Letter 03/12/01.

SUMMARY The 4-panel riveted Warren with verticals pony truss bridge with original knee braces was fabricated in 1915. It is supported on concrete reinforced ashlar abutments that have been undermined. While the trusses themselves are in reasonably complete condition with only minor welded repairs, the bottom chord and bearings have been encased in concrete, and a concrete deck has been added. The bridge represents a type which was designed in the late nineteenth and early twentieth centuries for the light vehicular traffic characteristic of rural America at the time. Despite an alteration which affects the functioning of the bottom chord, the bridge retains integrity of its original materials, construction and configuration, and is individually eligible for listing in the National Register under Criterion C.

INFOR MATION

PHOTO: 3:17A-19A (04/91) REVISED BY (DATE): QUAD: Trenton East

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1100032 **CO** MERCER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CLARKSVILLE ROAD OVER BEAR BROOK **FACILITY** CLARKSVILLE ROAD # 762.2

TOWNSHIP WEST WINDSOR TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 24 ft **WIDTH** 33 ft

CONSTRUCTION DT 1931 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT H. KERSEY, CO BRIDGE ENGINEER **BUILDER** PETER DIANTONIO

SETTING / CONTEXT The bridge is an element in dam/bridge structure located in the center of the historic mill village of Grovers Mill. The 19th-century mill and races are located on the northwest side of the bridge while the large mill pond is to the east. The bridge crosses the overflow channel. 19th- and early 20th-century houses and barns dominate the surroundings area which appears to have National Register historic district potential.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Potential Grovers Mill Historic District. Contributing.

CONSULT DOCUMENTS SHPO Letter 03/12/01

SUMMARY The encased stringer bridge and dam are the most modern elements in Grovers Mill, a well-preserved crossroads settlement clustered around the 19th-century Grover mill and pond. The mill was powered by water until the early 1950s. The 1931 bridge/dam was built within the period of significance of the mill. The bridge with a paneled concrete parapet is a good unaltered example of a structural type commonly used in prior to WW II. It and its historic setting are well preserved. It is eligible listing in the National Register of Historic Places as a contributing element of the Grovers Mill Historic District, eligible under Criteria A and C.

INFOR MATION

Bibliography:
Woodward & Hageman. Histories of Burlington and Mercer Counties. 1888. Everts & Peck. Dennison, William.
Phone Conversation with Mary E. McCahon. 23 August 1991. (919-799-4417).
Trenton Public Library. Trentoniana Collection. Vertical File: Radio.

Physical Description: The 24'-long concrete-encased rolled stringer bridge with a concrete paneled parapet is one element in a larger reinforced concrete dam and spillway adjacent to the intersection of Clarksville and Cranbury roads in the rural northeast portion of the county. The concrete dam has a buttressed hexagonal spillway to a concrete floor. The flow of the stream is further channeled by wing walls. The head race for the turbine-powered mill is at the northeast corner of the downstream side. The dam has no separate overflow, a feature not needed with the hexagonal shape of the spillway, which also serves as the overflow. The approach on the south side of the bridge is lined with the original pipe and concrete post railing.

Historical and Technological Significance: The 1931 bridge and dam were designed by County Bridge Engineer Harry Kersey. Kersey designed nearly all the bridges built in the county during the 1920s and 1930s, and his preference was the concrete-encased rolled steel stringer span, a straightforward structure noted for its economy and durability. He also frequently used paneled concrete parapet.

Grovers Mill is a crossroads community that developed around the grist mill on Bear Creek. The earliest mill dates to the Revolution, and the present flour mill was acquired by John Grover in 1860. When William Dennison's father purchased the mill about 1930, it was powered by a water-driven turbine (still in place). William Dennison took over operation of the mill after his father's death in 1945, and he gradually converted operation of the milling equipment to electricity. The water-powered turbine was taken out of service in the early 1950s. Thus the dam and bridge were an integral part of the water-powered operation of the historic mill during its period of significance. William Dennison used the sluice gate in the dam/bridge structure consistently until the mill was converted to electricity. The head race, which goes under Clarksville Road, is still in place. While the mill itself has been converted to residential/commercial use, much of the historic fabric, including the races, some shafting, and the historic appearance of the building itself survive making it one of the important elements in any potential historic district.

Grovers Mill gained national notoriety in 1938 when writer Howard Koch named it as the landing site of the Martians in the Orson Wells Halloween eve production of Koch's adaptation of "War of the Worlds."

Boundary Description and Justification: The bridge crosses the overflow of the mill pond associated with a potentially eligible mill. The mill and pond are also located in a potential historic district. The bridge is evaluated as contributing to that historic district. Thus the bridge and its surroundings appear to be significant.

PHOTO: 3:43-2 (05/91) REVISED BY (DATE): QUAD: Hightstown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1100034 **CO** MERCER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED EAST WARD AVENUE OVER PEDDIE LAKE **FACILITY** EAST WARD AVENUE

TOWNSHIP HIGHTSTOWN BOROUGH

TYPE THRU TRUSS **DESIGN** DOUBLE INTERSECTION WARREN **MATERIAL** Steel

 # SPANS 2 **LENGTH** 254 ft **WIDTH** 21.2 ft

CONSTRUCTION DT 1896 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT UNKNOWN **BUILDER** NJ STEEL & IRON CO.

SETTING / CONTEXT Located in the borough of Hightstown immediately west of Peddie School, a private prep school, the bridge carries a 2-lane city street over Pedddie Lake, a former mill pond. Open land is to the east side of the bridge. The bridge contributes to the 19th-century character of the town.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The well-preserved 2-span bridge is a rare example of a double-intersection Warren truss with hangers. It was fabricated by the important New Jersey Steel & Iron Co. of Trenton and is a late but significant example of the firm's bridge work. Since only a masonry plan survives, the span may have been a proprietary design. It is one of most significant thru trusses in the county because of its type, maker, and state of preservation. The steel grate deck was installed in 1969.

INFOR MATION

Bibliography:
Geiger, Carl. The Peddie School First Century.
Mercer County Engineers Office. Transfer File & Plans #863.4.

Physical Description: The well-preserved 2-span thru truss bridge on coursed ashlar abutments and mid-stream pier is an unusual and possibly unique double intersection Warren with floor beam hangers. The panel points and hangers carry built-up floor beams which appears to be original. The present steel deck and stringers were installed in 1969. The inclined end posts and top chord are composed of channels and plates while the diagonals are toe-out angles joined by battens. The tension members have narrower battens and pass through the wider-spaced compression members. The lattice portal brace is topped with cresting at the outside panels, and the roller bearing of each span is also located at the abutment end. The pipe railing which passes through the compression members is original. With the exception of the steel open grid deck, the bridge is in remarkably complete condition with no visible major welded repairs. The grid does not detract from the integrity of the bridge.

Historical and Technological Significance: The 2-span thru truss built in 1896 is a nearly complete example of the uncommon double-intersection Warren with floor beam hangers. It was fabricated and possibly designed by the New Jersey Steel and Iron Company of Trenton, one of the most important mills in the country prior to its absorption into the Carnegie's American Bridge Company in 1901. The company was established as the Trenton Iron Company in 1846 when Peter Hewitt received a $180,000. contract for rolled iron rail from the Camden & Amboy Railroad. In 1854 the company produced the first rolled 7" I-beams. The rolled beams were to revolutionize building construction. Trenton Iron & Steel Co. produced all kinds of structural steel, including shaped steel for many New York City skyscrapers, elevated street railways in New York and Brooklyn, and even Civil War-era gun barrels. Mercer County records indicate that many New Jersey Steel and Iron Company bridges once stood in the county. The non-extant mid-1880s viaducts over North Olden and Southard Streets in Trenton were their work as is the extant 1888 Jackson Street Pratt truss in Trenton

The well-preserved East Ward Avenue bridge survives as one of the best albeit late examples of a New Jersey Steel and Iron Company bridge in the region. It is an unusual example of a double intersection Warren with floor beam hangers. Technologically it represents one of the many variations on the traditionally used trusses that were promoted and marketed during the last quarter of the 19th century. Prior to the consolidation of smaller bridge fabricating companies into the American Bridge Company conglomerate in 1901, the independent fabricators both designed and fabricated the trusses they marketed.

The bridge spans Peddie Lake, a long narrow mill pond created in the 18th century by damming Rocky Creek, a tributary of the Millstone River. The pond's water powered grain mills through the 19th century. The lake is now named for the private school located on its western shore. Founded in 1864 as the New Jersey Classical and Scientific Institute by the state's Baptists, the name of the preparatory school was changed in 1872 to honor its chief benefactor. The bridge carries a local street and serves as a more direct route to the northeast section of town, a predominantly 19th century community.

Boundary Description and Justification: The bridge does not appear to be located in or contiguous to a potential historic district. It is not historically related to the Peddie School that is located on the west side of the span. Therefore, the significant boundary is limited to the span itself and does not include surrounding property.

PHOTO: 7:21-24 (04/91) REVISED BY (DATE): QUAD: Hightstown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1100037 **CO** MERCER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WASHINGTON ROAD (CR 571) OVER CARNEGIE LAKE **FACILITY** WASHINGTON ROAD (CR 571)

TOWNSHIP PRINCETON TOWNSHIP

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 4 **LENGTH** 454 ft **WIDTH** 38 ft

CONSTRUCTION DT 1905 **ALTERATION DT** 1938 **SOURCE** PLANS

DESIGNER/PATENT UNKNOWN **BUILDER** M. BUGBEE & CO.

SETTING / CONTEXT The bridge, a contributing element in the Carnegie Lake Historic District, is located immediately south of the Princeton campus, and it crosses the scenic long, narrow lake created in 1905-06 by damming the Millstone River. Its setting is well-preserved.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Listed. Lake Carnegie Historic District. 06/28/1990. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The well-proportioned 4-span stone-faced "concrete-steel bridge," as it was labeled on the original plans, is an important and dominant element in the historic district. It is also a good example of the architectonic structures favored for metropolitan civic projects in the early decades of this century. The bridge was widened and refaced in 1938. It contributes to the historic theme of the National Register district and is thus a contributing resource.

INFOR MATION

PHOTO: 7:13-14 (04/91) REVISED BY (DATE): QUAD: Hopewell

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1100038 **CO** MERCER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 518 SPUR (PENNINGTON-HOPEWELL RD) OVER STONY BROOK **FACILITY** CR 518 SPUR (PENNINGTON-HOPEWELL ROAD)

TOWNSHIP HOPEWELL TOWNSHIP

TYPE THRU GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 102 ft **WIDTH** 36 ft

CONSTRUCTION DT 1928 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT H. KERSEY, CO BRIDGE ENGINEER **BUILDER** WM DRIVER, INC. (TRENTON)

SETTING / CONTEXT The bridge is located in a wooded setting in the northern part of the county adjacent to a golf course and abandoned railroad right of way. The wooded setting of bridge is well preserved. The rail line is carried on an overhead bridge.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge is a combination 1- and 2-span thru girder bridge on concrete abutments and pier. The design and structural type were mandated by the skew angle of the crossing, and the floor beams are perpendicular to the girders, but not the abutment of the west span. The cantilevered sidewalk on the west span was removed to reduce the dead load, according to the county. It survives on the east span as does the concrete balustrade. While unusual, the bridge is not technologically significant.

INFOR MATION

PHOTO: 6:18-21 (04/91) REVISED BY (DATE): QUAD: Pennington

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1100040 **CO** MERCER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 518 OVER STONY BROOK **FACILITY** CR 518 (LAMBERTVILLE-HOPEWELL TURNPIKE)

TOWNSHIP HOPEWELL TOWNSHIP

TYPE STRINGER **DESIGN** JACK ARCH **MATERIAL** Steel

 # SPANS 1 **LENGTH** 28 ft **WIDTH** 30 ft

CONSTRUCTION DT 1905 **ALTERATION DT** 1941 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge crosses a small stream and is located on a heavily used road in a rural, sparsely developed portion of the county. The setting is undistinguished.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge is composed of steel stringers with 6"-deep concrete jack arch strengthening. It was widened in 1941 from its original 18' width to 30' by the addition of 6' to each side. A successor to brick jack arch technology which was used from about 1885 until 1910, concrete jack arches are not a common structural type. This one, however, is not a well preserved example owing to the 1941 addition. It is scheduled to be replaced by the county in 1991-92.

INFOR MATION

PHOTO: 2:16-17 (04/91) REVISED BY (DATE): QUAD: Hopewell

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1100041 **CO** MERCER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED ROSEDALE ROAD OVER STONY BROOK **FACILITY** ROSEDALE ROAD

TOWNSHIP PRINCETON TOWNSHIP

TYPE RIGID FRAME **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 80 ft **WIDTH** 38 ft

CONSTRUCTION DT 1937 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT H. KERSEY, CO BRIDGE ENGINEER **BUILDER** JOS. JINGOLI

SETTING / CONTEXT The stone-faced bridge over a wide, shallow stream is located in a well-maintained mid- to late-20th century residential area of Princeton. The setting is wooded.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The reinforced concrete rigid frame bridge with a stone veneer is one of several of its type built by the county in the late 1930s and 1940s. While attractive, it is common mid-century technology and is not historically or technologically distinctive. Other stone-veneer bridges are on Quaker Road (1100082) and US 206 over Stony Brook (1129155). All are located in affluent residential areas and were designed to be aesthetically pleasing. It was built by a Trenton contractor.

INFOR MATION

PHOTO: 7:44,1 (05/91) REVISED BY (DATE): QUAD: Princeton

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1100042 **CO** MERCER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 518 OVER BEDENS BROOK **FACILITY** CR 518

TOWNSHIP HOPEWELL TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 38 ft **WIDTH** 30 ft

CONSTRUCTION DT 1933 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT H. KERSEY, CO BRIDGE ENGINEER **BUILDER** HERBERT BAILEY

SETTING / CONTEXT The bridge is located in a wooded setting east of the 19th century village of Hopewell. It is not close enough, however, to be historically associated with the village. Area immediately surrounding the bridge is sparsely developed.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY One of over forty surviving encased stringer bridges designed by and built for the county between the world wars, the span is not technologically innovative. It is supported on concrete abutments and has the paneled parapet commonly found in the county. A modern beam guard rail protects the road side of the parapet. The contractor, Herbert Bailey, was from Trenton.

INFOR MATION

PHOTO: 6:29-30 (04/91) REVISED BY (DATE): QUAD: Hopewell

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1100044 **CO** MERCER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CLARKSVILLE ROAD OVER DUCK POND RUN **FACILITY** CLARKSVILLE ROAD

TOWNSHIP WEST WINDSOR TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 24 ft **WIDTH** 34 ft

CONSTRUCTION DT 1931 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT H. KERSEY, CO BRIDGE ENGINEER **BUILDER** HILL CONSTRUCTION COMPANY

SETTING / CONTEXT The bridge is located in a rural setting that is being redeveloped for research complex and residential use. Its immediate environs are wooded.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased stringer span on concrete abutments has a paneled concrete parapet. It was designed by county bridge engineer Harry Kersey, and is one of over forty encased stringer bridges in the county. A representative example of a common type, the bridge is neither historically or technologically significant. The builder, Hill Construction Company, was based in Mt. Holly, New Jersey.

INFOR MATION

PHOTO: 3:39A-40A (04/91) REVISED BY (DATE): QUAD: Princeton

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1100046 **CO** MERCER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED OLD TRENTON ROAD OVER BIG BEAR BROOK **FACILITY** CR 535

TOWNSHIP WEST WINDSOR TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 27 ft **WIDTH** 30 ft

CONSTRUCTION DT 1925 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge in a wooded setting carries a busy 2-lane county road over a slow-moving stream. The area surrounding the bridge was once agricultural, but it has been extensively developed with modern houses and corporate buildings.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The undistinguished skewed span stringer bridge is supported by concrete abutments and has been widened by one stringer added to the west side. A modern beam guard rail replaces any original/early railing. The bridge is historically and technologically insignificant. It is one of over 40 stringer bridges built in Mercer County prior to World War II.

INFOR MATION

PHOTO: 2:28.106:17 (06/91) REVISED BY (DATE): QUAD: Hightstown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1100047 **CO** MERCER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED EDINBURG-ROBBINSVILLE ROAD (CR 526) OVER MIRY RUN **FACILITY** CR 526

TOWNSHIP WASHINGTON TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 35 ft **WIDTH** 33 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT H. KERSEY, CO BRIDGE ENGINEER **BUILDER** WM DRIVER, TRENTON

SETTING / CONTEXT The bridge crosses a small stream and carries a 2-lane collector road in a wooded, sparsely developed portion of the county. No historic structures are contiguous to the bridge.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The modest encased stringer bridge with paneled reinforced concrete parapets and concrete abutments is typical of the many such spans the county was designing and building with local contractors in the 1920s and 1930s. It is not historically or technologically distinctive and is in deteriorating condition. It was originally paved with asphalt pavers. It is one of over 40 stringer bridges built in Mercer County prior to 1942.

INFOR MATION

PHOTO: 2:35-36 (05/91) REVISED BY (DATE): QUAD: Allentown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1100049 **CO** MERCER **OWNER** COUNTY **MILEPOINT** 1.04

NAME & FEATURE INTERSECTED SOUTHARD STREET OVER CONRAIL & US 1 **FACILITY** SOUTHARD STREET

TOWNSHIP TRENTON CITY

TYPE THRU GIRDER **DESIGN** BUILT UP **MATERIAL** Steel

 # SPANS 6 **LENGTH** 360 ft **WIDTH** 32 ft

CONSTRUCTION DT 1921 **ALTERATION DT** 1943 **SOURCE** PLANS

DESIGNER/PATENT J.A.L. WADDELL (NEW YORK) **BUILDER**

SETTING / CONTEXT The bridge originally crossed the tracks and yard of the Camden & Amboy Railroad (later PA RR) and the Delaware & Raritan Canal. The canal has been redeveloped as the Trenton Freeway (US 1). The area is industrial with most of the development dating to the 20th century. There is no National Register historic district potential. Neither the bridge nor the surroundings have integrity of setting or design.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Listed. D&R Canal. 05/11/1973. Noncontributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY Designed by J.A.L. Waddell as a thru girder viaduct with a vertical lift span, the viaduct was drastically altered in 1943 when the towers and operating mechanism of the lift span on the north end were removed and the span was fixed. It is supported on concrete piers, encased steel bents, and concrete abutments that incorporate the ashlar abutments from the earlier pinned thru truss. The viaduct is similar to N. Olden Ave. (1100050) which was found not eligible in 8/20/90 SHPO Finding.

INFORMATION

Bibliography:
Mercer County Engineers Office; Transfer File #120.2.
Dictionary of American Biography. Vol. XI, 1958. Charles Scribner's Sons.

Physical Description: The 6-span, 360'-long thru girder viaduct was originally constructed with a vertical lift span at the north end. The riveted built-up girders with knee braces rest on an ashlar abutment from an earlier span on the north end while the southern abutment is reinforced concrete. There are also intermediate concrete columns. Portions of the brownstone ashlar wing wall and iron lattice railing from the ca. 1885 bridge survive on the south side. Each end of the outermost girders are protected by a concrete pedestal with a commemorative plaque. The cantilevered sidewalk has a chain link fence for a pedestrian protective barrier.

The vertical lift span was removed in 1943. Evidence of its existence can be found in the span division and reinforcing of the shoes at the former lift span. The bridge has functioned as a simple multi-span thru girder since 1943, and as such it is a representative example of its type. The thru girder with floor beams was favored for longer spans for its economy and rigidity. Because it is in an industrial rather than a residential portion of the city, it was acceptable to have an exposed, unadorned girder. The floor beams are encased, but the encasing is in poor condition.

Historical and Technological Significance: The present appearance and setting of the multi-span steel thru girder bridge does not reflect the original design or context of the bridge. Designed by the firm established by the noted engineer and author John Alexander Low Waddell of New York, the bridge was originally a vertical lift built in 1921-22 over the former main line of the Camden & Amboy Railroad and the Delaware and Raritan Canal. Neither the water-filled portion of the canal at this location nor the movable span survive. The North Olden Avenue viaduct, the viaduct immediately north of this one, was a nearly identical structure, also designed by the Waddell firm.

The viaduct replaced a 4-span pin-connected Pratt thru truss with a bobtail swing over the canal. The new bridge reused the north abutment from the ca. 1885 truss, and some of the lattice railing and brownstone ashlar wing walls also survive. The lift span, which existed for only twenty years, was operated by a train of gearing driving four spiral-grooved drums located at the center of the span. The drums were fastened by four wire ropes that passed under deflecting sheaves under the sidewalks at the four corners of the lift span, thence up to the tops of the towers, where they were fastened. Four similar ropes passed over the deflecting sheaves, then downward to fastenings on the towers. By rotating the drums in one direction, the uphaul ropes were wound on the drums causing the span to rise. The bridge was operated by an electric motor. When the canal was closed to navigation and turned over to the state by the Pennsylvania Railroad in the early 1940s, the need for a movable span over the waterway was unnecessary. The bearing points of the lift span were reinforced, and in 1943 the towers were removed by Bugbee & Company, a Trenton firm, with the material donated to the federal Metal Reserve Company for the nation's scrap pile.

J.A.L. Waddell (1854-1938) was one of the best-known bridge engineers of his day. His writings, which promoted the importance of the consulting engineer, were as much responsible for that fame as his bridges. He is credited with developing the modern vertical lift bridge. Waddell moved his practice from Kansas City to New York in 1920, where he practiced alone until taking his long-time associate Shortridge Hardesty into partnership in 1927. Mr. Hardesty was the supervising engineer on this project.

The history of the bridge and its predecessor are well documented in the Mercer County Engineers Office, but both the structure and its setting have been drastically altered and thus no longer appear as they did during their period of significance. Although the bridge was designed by an important engineering firm, it is not a noteworthy or innovative example of their work. Waddell had been designing vertical lift bridges since the Halsted Street bridge in Chicago in 1893. Even more significantly, the bridge lost its integrity of original design when the lifting mechanism was removed in 1943. Additionally the canal was diverted and its right-of-way redeveloped as the 4-lane limited access Trenton Freeway beginning in 1951, erasing the original/historic setting of the bridge.

PHOTO: 1:2-5 (05/91) REVISED BY (DATE): QUAD: Trenton West

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1100050 **CO** MERCER **OWNER** COUNTY **MILEPOINT** 0.83

NAME & FEATURE INTERSECTED NORTH OLDEN AVENUE OVER US 1 & CONRAIL **FACILITY** NORTH OLDEN AVENUE

TOWNSHIP TRENTON CITY

TYPE THRU GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 5 **LENGTH** 389 ft **WIDTH** 32 ft

CONSTRUCTION DT 1923 **ALTERATION DT** 1943 **SOURCE** PLANS

DESIGNER/PATENT J.A.L. WADDELL **BUILDER** FT. PITT BRIDGE WORKS

SETTING / CONTEXT The bridge originally crossed the Camden & Amboy's initial rail line through Trenton and the D & R Canal. The canal was redeveloped in the 1950s as the Trenton Freeway (US 1). It carries a 2-lane road through an industrial area that developed along the canal and railroad. The surrounding buildings are not historic. The canal was closed to navigation in the early 1940s making the moveable span an unnecessary feature of the viaduct.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Listed. D&R Canal. 05/11/1973. Noncontributing.

CONSULT DOCUMENTS SHPO Finding 08/20/90, Letter 6/30/95.

SUMMARY The skewed 5-span thru girder viaduct had a vertical lift span on the north end designed by J.A.L. Waddell. It is supported on earlier ashlar abutments and concrete piers with struts. The span was drastically altered in 1943 when the operating mechanism and towers were removed and the span was fixed. Neither the setting or the original design of the viaduct is preserved. It is one of 2 similar parallel viaducts designed by Waddell (11000049). The span was determined not eligible.

INFOR MATION

PHOTO: 1:44,1 (05/91) REVISED BY (DATE): QUAD: Trenton East

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1100051 **CO** MERCER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MONTGOMERY STREET OVER ASSUNPINK CREEK **FACILITY** MONTGOMERY STREET

TOWNSHIP TRENTON CITY

TYPE STONE ARCH **DESIGN** ELLIPTICAL **MATERIAL** Stone

 # SPANS 2 **LENGTH** 59 ft **WIDTH** 32.8 ft

CONSTRUCTION DT 1873 **ALTERATION DT** **SOURCE** COUNTY RECORDS

DESIGNER/PATENT HENRY E. FINCH, ARCHITECT **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a city street over Assunpink Creek in an urban, mid-19th century mixed use neighborhood in downtown Trenton. The surroundings are dominated by row houses that are being restored. Some modern, incompatible redevelopment has occurred to the north and east of the bridge. The span contributes greatly to the historic character of area.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible. Listed. Mill Hill Historic District. 12/12/1977. Contributing.

CONSULT DOCUMENTS SHPO Letter 03/12/01

SUMMARY The handsome 2-span rubble-coursed stone arch bridge with its original cast iron balustrade, the only known example of its type in the area, was designed by Trenton architect Henry E. Finch. He also did the 1869 S. Clinton St. stone arch bridge. The well-preserved bridge with voussoirs contributes to the architectural significance of the Mill Hill Historic District. The 1977 NR nomination does not include an inventory, but the bridge is mentioned in the text as a contributing resource. It is also individually significant based on its type, completeness, and association with architect Finch. The bridge is individually eligible for listing in the National Register under Criterion C and is a contributing element to the Mill Hill Historic District.

INFOR MATION

PHOTO: 1:32-33 (04/91 JPH (5/96)) REVISED BY (DATE): QUAD: Trenton West

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1100052 **CO** MERCER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED SOUTH CLINTON AVENUE OVER ASSUNPINK CREEK **FACILITY** SOUTH CLINTON AVENUE (140.6)

TOWNSHIP TRENTON CITY

TYPE STONE ARCH **DESIGN** BARREL **MATERIAL** Stone

 # SPANS 2 **LENGTH** 109 ft **WIDTH** 24.1 ft

CONSTRUCTION DT 1869 **ALTERATION DT** **SOURCE** COUNTY RECORDS

DESIGNER/PATENT HENRY FINCH, ARCHITECT **BUILDER** A. CARLILE

SETTING / CONTEXT The bridge over channeled Assunpink Creek in downtown Trenton is next to the former Pennsylvania RR passenger station. The station was moved to this location in the early 1860s. The south end of the stone bridge serves as the abutment for the contiguous 1892 truss bridge that crosses the tracks immediately east of the channeled creek. Much of the area surrounding the bridge has been cleared or redeveloped.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY One of several well-preserved multi-span stone arches in downtown Trenton, the 1869 rubble ashlar double barrel arch bridge with high spandrels was designed by local architect Henry Finch. The beam guard rail and pipe railing are modern as is the icebreaker. The arch bridge serves the abutment of an 1892 thru truss span, and the pair provide a rare tandem example of 19th-century solutions to engineering and transportation considerations. The crossing is one of the most historic in Trenton.

INFOR MATION

Bibliography:
Mercer County Engineers Office. Transfer File # 140.6.
Trenton Public Library. Trentoniana Collection: Vertical File; Architecture.

Physical Description: The well-proportioned 2-span random ashlar brownstone stone arch bridge with a deep spandrel has uniform ring stones, a keystone, and cap stones. Each arch has a 20' rise and is 36' wide. The structure continues into a curved wing wall on the north side. The bridge is the northern portion of a two-bridge arrangement that carries the local street over Assunpink Creek and the main line of the Camden & Amboy Railroad (Pennsylvania Railroad after 1871) which parallels the creek. The railroad right-of-way was established in 1862 as part of the line's realignment and double tracking through Trenton. Any original railing has been replaced by 20th-century pipe railing and modern steel guide rail. A concrete bullnose cutwater has been added to the upstream side, and a concrete wall directs the upstream channel of Assunpink Creek. The bridge is well preserved.

Historical and Technological Significance: The handsome stone arch bridge, designed by notable local architect Henry E. Finch, is part of the most significant pair of bridges in the area. Serving as the seat for the 1891 pin-connected double intersection Pratt truss that crosses four active lines of track at the west end of the main Trenton station, the stone arch is an integral part of the engineering solution to separate rail and local vehicular traffic as well as cross a water feature. The integrated pair of bridges represent two distinct epochs of 19th-century bridge technology, and that juxtaposition is rare if not unique.

The arch was designed by Henry E. Finch, a prominent Trenton architect who designed approximately 2,000 buildings in the city (Trenton Public Library. Trentoniana Collection. Architects Vertical File). He came to Trenton in 1855 and served his apprenticeship with architect Chauncey Graham, his first partner. In 1863 Mr. Finch established his own practice and went on to become the most prominent and prolific local architect. He designed residences, many in brownstone, the material he specified for his arch bridges, and factories. In addition to the South Clinton Street arch also designed the E. State Street (1100053) and Montgomery Street (1100051) stone arch bridges. Finch had retired from practice by 1923.

The stone arch bridge is one of four of its type from the 19th century that remain in downtown Trenton. No original plans for the bridge survive, but A. Carlile is listed in county records as the contractor.

PHOTO: 4:36-38 (05/91) REVISED BY (DATE): QUAD: Trenton West

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1100053 **CO** MERCER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED EAST STATE & FAIRVIEW STREETS OVER ASSUNPINK CREEK **FACILITY** EAST STATE & FAIRVIEW STREETS

TOWNSHIP TRENTON CITY

TYPE STONE ARCH **DESIGN** ELLIPTICAL **MATERIAL** Stone

 # SPANS 1 **LENGTH** 48 ft **WIDTH** 54.6 ft

CONSTRUCTION DT 1856 **ALTERATION DT** 1963 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT HENRY E. FINCH, ARCHITECT **BUILDER** UNKNOWN

SETTING / CONTEXT Located in downtown Trenton, the bridge has been increased in width by a 1963 addition so that it now carries both E. State St. and Fairview St. over Assunpink Creek. The surrounding area was built up in the 19th century with row houses and detached houses and some pottery factories. The H.D. Lee Company developed the northwest corner of the bridge in the 1920s. E. State St. is a historic main road.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY Although one of the three stone arch bridges in Trenton designed by local architect Henry E. Finch, the single-span arch with ring stones has been compromised by large insensitive post-WW II additions to both sides. Its soffit was gunited in 1940. The bridge has no integrity of original design and setting. The other Finch-designed mid-19th century stone arch bridges as S. Clinton St. and Montgomery St. are evaluated as eligible.

INFOR MATION

PHOTO: 1:40-43 (04/91) REVISED BY (DATE): QUAD: Trenton West

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1100054 **CO** MERCER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MONMOUTH STREET OVER ASSUMPINK CREEK **FACILITY** MONMOUTH STREET

TOWNSHIP TRENTON CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 71 ft **WIDTH** 30 ft

CONSTRUCTION DT 1938 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT **BUILDER** JOS. JINGOLI, TRENTON

SETTING / CONTEXT The bridge carries a 2-lane city street over Assunpink Creek in the late-19th century industrial and row house neighborhood on the northeast side of Trenton. The east side of the bridge has been redeveloped through urban renewal, but the west side retains its turn-of-the-century character. The bridge, however, is well outside the period of significance for the area. Assunpink Creek is the major stream through downtown Trenton.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY Built during the Depression with financial assistance from the Federal Emergency Administration of Public Works, the encased stringer bridge is supported on concrete abutments and has a concrete balustrade. Its inner face is now protected by a modern beam guard rail. The bridge is a representative example of the most common pre-WW II bridge type in the state and is not technologically distinguished. Its construction was not part of a large or noteworthy WPA project in the county.

INFOR MATION

PHOTO: 1:36-37 (05/91) REVISED BY (DATE): QUAD: Trenton West

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1100055 **CO** MERCER **OWNER** COUNTY **MILEPOINT** 56.24

NAME & FEATURE INTERSECTED LINCOLN AVENUE OVER AMTRAK & ASSUNPINK CREEK (140.9) **FACILITY** LINCOLN AVENUE

TOWNSHIP TRENTON CITY

TYPE THRU GIRDER **DESIGN** BUILT UP **MATERIAL** Steel

 # SPANS 8 **LENGTH** 687 ft **WIDTH** 36 ft

CONSTRUCTION DT 1932 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT H. KERSEY, CO BRIDGE ENGINEER **BUILDER** PARKER & GRAHAM, INC.

SETTING / CONTEXT The viaduct carries a 2-lane collector road in an industrial section of Trenton over 6 tracks of Amtrak's electrified Northeast Corridor. A railroad yard is immediately northeast of the bridge. The historic setting of the viaduct in the heart of Trenton's old industrial area is not well preserved as there is considerable modern redevelopment and renewal, including a large high-rise housing project east of the bridge. The right-of-way was developed in the 1860s by the Camden & Amboy.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The partially encased 8-span thru girder with floor beams viaduct is supported on reinforced concrete columns with struts and crash walls. The built-up girder style with stiffeners has squared ends protected by concrete posts. It is similar in design to other viaducts in Trenton (see 1100057). The cantilevered sidewalks are enclosed by 6' high paneled concrete parapets. The bridge is not technologically innovative.

INFOR MATION

PHOTO: 1:34-35, (04/91) REVISED BY (DATE): QUAD: Trenton West

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1100056 **CO** MERCER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED NORTH OLDEN AVENUE OVER ASSUNPINK CREEK **FACILITY** NORTH OLDEN AVENUE

TOWNSHIP TRENTON CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 76 ft **WIDTH** 36 ft

CONSTRUCTION DT 1937 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT H. KERSEY, CO BRIDGE ENGINEER **BUILDER** TRENTON CONCRETE CO.

SETTING / CONTEXT The bridge is located in the industrialized section of Trenton once dominated by rubber, textile, and pottery operations and the Pennsylvania Railroad's main line to New York. Because of deterioration and urban renewal, the area does not have historic district potential.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed encased stringer bridge erected in 1937 is a representative example of the most common pre-WW II bridge type in the county. Designed by county bridge engineer Harry Kersey, it is one of over forty stringer bridges in the county. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 9:25A, 1:8 (08/91) REVISED BY (DATE): QUAD: Trenton East

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1100057 **CO** MERCER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED NOTTINGHAM WAY OVER ASSUNPINK CREEK **FACILITY** NOTTINGHAM WAY

TOWNSHIP TRENTON CITY

TYPE THRU GIRDER **DESIGN** PARTIALLY ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 87 ft **WIDTH** 30 ft

CONSTRUCTION DT 1922 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT MORRIS GOODKIND **BUILDER** F. B. JOHNSON CO. TRENTON

SETTING / CONTEXT The bridge is located in the main industrial district in Trenton next to the former Empire Rubber Company plant. It crosses Assunpink Creek, the historic source of power in the area. The bridge carries a local 2-lane collector street.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The partially encased thru girder bridge with floor beams and concrete end posts was designed by Morris Goodkind who at the time was the Engineer of Bridges with the State Highway Department. The girders are not technologically innovative, and the cantilevered sidewalks have a traditional concrete balustrade. The bridge is adjacent to the former Empire Rubber Co. plant, which may NR-eligible, but the bridge does not appear to be historically associated with the facility.

INFOR MATION

Bibliography: Mercer County Engineers Office. Transfer File 140.12.

Physical Description:

PHOTO: 1:6 106:24 (04/91) REVISED BY (DATE): QUAD: Trenton East

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1100058 **CO** MERCER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WALL STREET OVER ASSUNPINK CREEK **FACILITY** WALL STREET

TOWNSHIP TRENTON CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 84 ft **WIDTH** 40.3 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT H. KERSEY, CO BRIDGE ENGINEER **BUILDER** GRANT CONST. CO.

SETTING / CONTEXT The bridge is located at the intersection of Wall, E. State and Chestnut streets in downtown Trenton, and it crosses Assunpink Creek, the major stream through Trenton. H.D. Lee Co. is on the west side of the bridge. In addition to the overall manufacturer, the neighborhood features vernacular workers housing. Wall Street was not extended across the creek until ca. 1920.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Potential Historic District. Contributing.

CONSULT DOCUMENTS SHPO Letter 03/12/01

SUMMARY The skewed 2-span encased stringer bridge on concrete abutments and piers is significant for its historical association with the adjacent H.H. Lee Co. factory. The bridge with balustrade enclosed cantilevered sidewalks was built to provide better access to the factory. A well preserved example of its structural type, the bridge is a contributing resource to the potential H.D. Lee historic district. The Lee factory is one of the finest local examples of the Moderne style of architecture. The bridge is not individually eligible for listing in the National Register of Historic Places, but may be a contributing element to a local residential / manufacturing historic district which appears to be potentially eligible under Criteria A and C.

INFOR MATION

Bibliography:
Trenton Times. "Lee Moving..." 3/28/66.
Sanborn Insurance Maps. 1885-1927.

Physical Description: The skewed (41 degree) 2-span simply supported encased steel stringer bridge has reinforced concrete abutments and central pier with an upstream cutwater. It is typical period construction and style. The cantilevered sidewalk is finished with a reinforced concrete balustrade that is severely deteriorated.

Historical and Technological Significance: Located over Assunpink Creek at the intersection of E. State Street, the bridge is important for its associative significance with the H.D. Lee factory rather than its technological importance. Representing typical period technology, the bridge was constructed as the second span to carry Wall Street, a residential thoroughfare, over Assunpink Creek and to provide vehicular access to the freight entrance of the Lee factory. East State Street was an unimproved road until the 1860s. In 1920 H. D. Lee secured the previously undeveloped parcel on the corner of E. State Street and Assunpink Creek for its Trenton plant. The overall and work clothing manufacturer started in Kansas City in 1912 and came to Trenton in 1917. In 1916 it became the first clothing maker to start carrying a union label and consequently identified its popular coverall as "unionalls." The 6-story reinforced concrete frame plant was built in 1920 and was used until 1967. It survives in a remarkably complete state of preservation and ranks as one of the finest examples of the Moderne style in the area. Lee, employing as many as 600 workers at its peak, was an important Trenton industry. The well-preserved facility, which symbolizes both Lee's corporate history and the industrial development and prosperity of Trenton, appears to be an eligible resource. The bridge was constructed to accommodate the historic use of the building, and thus is also eligible as part of the Lee Historic District.

Boundary Description and Justification: The bridge is not individually significant. Its importance is for its association with the potential National Register-eligible building at its northwest quadrant. The other quadrants of the bridge are not significant. Thus the bridge and the northwest quadrant are evaluated as significant. If the building is determined to be a not eligible resource, then the bridge is likewise.

PHOTO: 1:38-39 (04/91 MEM (5/96)) REVISED BY (DATE): QUAD: Trenton West

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1100060 **CO** MERCER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BEAR TAVERN ROAD OVER JACOBS CREEK **FACILITY** BEAR TAVERN ROAD

TOWNSHIP HOPEWELL TOWNSHIP

TYPE THRU TRUSS **DESIGN** PRATT HALF HIP **MATERIAL** Metal

 # SPANS 1 **LENGTH** 75 ft **WIDTH** 17.5 ft

CONSTRUCTION DT 1882 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT KING IRON BRIDGE CO. **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge in a wooded setting is located in a well-maintained low-density suburban residential portion of the county and it carries a busy county road over a small stream. The historic name of the road is derived from a 19th-century tavern located well north of the bridge.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 4/30/91

SUMMARY The 4-panel half hip pin-connected Pratt thru truss bridge supported on ashalr abutments was designed and fabricated by the King Iron Bridge and Manufacturing Company of Cleveland in 1882. It is the oldest thru truss bridge in the county. The bridge is nearly identical to, although 27' (one panel) shorter than, the 1885 King Iron Bridge Co. span on Mine Road (1100072), which is also eligible. The bridge is well preserved, with welded repairs limited to the lower portions of some verticals.

INFOR MATION

Bibliography:
Simmons, David A. "Bridge Building on a National Scale: The King Iron Bridge and Manufacturing Company." The Journal of the Society for Industrial Archeology. Vol. 15, No. 2, 1989. Mercer County Engineers Office.

Physical Description: The six panel half-hip Pratt pin-connected thru truss with a wood deck rests on an ashlar abutments. The inclined end posts and upper chords are built-up box members composed of shallow channels with a face plate. 3" by 2" angles are used for the laced verticals. Diagonals and counters are both rods fitted with turnbuckles for tuning the bridge, and the bottom chords are made up of square eyebars with drop forged eyes. The originality of the rolled I beam floor beams is not known, but a 1972 inspection report states that they are wrought iron. The lateral bracing is connected to brackets riveted to each beam. The plain portal struts have diagonal corner braces and each strut carries a King Iron Bridge and Manufacturing Co. plaque. A few welded repairs to the verticals at the panel points are visible, but otherwise the bridge is very well preserved. Some verticals have also been bent from impact damage.

Historical and Technological Significance: The well-preserved 75'-long pin-connected thru truss fabricated by the King Iron Bridge and Manufacturing Company of Cleveland, Ohio was erected in 1882, according to its plaque, and is one of two King thru trusses from the 1880s in Mercer County. The bridge is an excellent example of a standardized pin-connected Pratt design, the most common late-19th century bridge type. On a road named for an early-19th century tavern located to the north, the Bear Tavern Road Bridge, as well as its counterpart on Mine Road (1100072), is a regionally important survivor of a historic bridge type that has become rare.

The King Iron Bridge and Manufacturing Company was established by Zenas King in Cleveland about 1860. Learning the bridge selling business in the 1850s as a salesman representing the Moseley Bridge Company (a patented tubular bowstring), King patented his own tubular bowsting bridge that was to be the company's chief product through the 1870s, and he successfully marketed it nationally through a network of regional representatives. He published catalogues in 1875 and 1884 as well as annual reports, and, as the market moved away from the light bowstring truss about 1880, he diversified his product line to include what was becoming standard thru and pony truss bridges. The King company was one of the largest and most prolific bridge fabricating firms in the country yet only less than half a dozen documented examples of the firm's work survive in New Jersey. While the company remained an active, viable concern for about a decade after the founder's death in 1892, it was not a regional force this century.

The King Iron Bridge and Manufacturing Company, known as the King Bridge Company after 1892, represents, in addition to period engineering and technology, the manner in which iron and early steel bridges were marketed in this country. The fabricator served as both engineer and builder. That practice was to disappear with the rise of the consulting engineer and the professionally trained county engineer in the early years of this century.

Boundary Description and Justification: The bridge is evaluated as individually significant. The boundary is thus limited to the span itself.

PHOTO: 1:19-21, 108:9 (06/91) REVISED BY (DATE): QUAD: Pennington

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1100062 **CO** MERCER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED JACOBS CREEK ROAD OVER EWING CREEK **FACILITY** JACOBS CREEK ROAD

TOWNSHIP HOPEWELL TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 48 ft **WIDTH** 24 ft

CONSTRUCTION DT 1926 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge carries a 2-lane road over a shallow stream in a low-density residential area. The setting is wooded.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The steel stringer bridge with a modern beam guardrail is of no technological or historical significance. Initially composed of 4 rolled I beams, it has been widened by a bracketed addition to the east side. The high rusticated ashlar abutment from a previous span has been reused. The stringer span is one of over 40 built in Mercer County prior to WW II.

INFOR MATION

PHOTO: 1:17-18 (05/91) REVISED BY (DATE): QUAD: Pennington

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1100063 **CO** MERCER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WASHINGTON CROSSING-PENNINGTON ROAD OVER WOOLSEYS CREEK **FACILITY** WASHINGTON CROSSING PENNINGTON ROAD (CR 546)

TOWNSHIP HOPEWELL TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 41 ft **WIDTH** 28.5 ft

CONSTRUCTION DT 1923 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT H. KERSEY, CO BRIDGE ENGINEER **BUILDER** CENTRAL ENG. & CONCRETE

SETTING / CONTEXT In a wooded setting across a short, narrow stream, the bridge is located in a low-density residential portion of the county.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased stringer bridge with a pipe railing is supported on concrete abutments. A modern beam guard rail has been added inside the pipe railing. It was designed by county engineer of bridges Harry Kersey and is one of over 40 stringer bridges in the county. The bridge is not technologically innovative or unusual, and it has no historic significance.

INFOR MATION

PHOTO: 1:22-23 (04/91) REVISED BY (DATE): QUAD: Pennington

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1100066 **CO** MERCER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WHITEHEAD ROAD OVER ASSUNPINK CREEK **FACILITY** WHITEHEAD ROAD

TOWNSHIP LAWRENCE TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 5 **LENGTH** 84 ft **WIDTH** 30 ft

CONSTRUCTION DT 1907 **ALTERATION DT** Demolished: 1998 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT H. KERSEY, CO BRIDGE ENGINEER **BUILDER** JOS. JINGOLI, TRENTON

SETTING / CONTEXT The bridge is located over Assunpink Creek on a busy 2-lane road that is an exit from US 1. The historic Whitehead rubber factory is on the south side of the bridge while the mill pond is to its east. The bridge is an integral part of the industrial complex.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible. Potential Whitehead Brothers Historic District. Contributing.

CONSULT DOCUMENTS SHPO Letter 03/12/01

SUMMARY The 5 short span encased stringer bridge was built in 1907 and then enlarged in 1938 because of the Whitehead Brothers Rubber Company plant. A good, unaltered example of its structural type, the bridge is individually eligible for listing in the National Register and is a contributing resource to the potential Whitehead Bros. Rubber Co. NR historic district. The bridge was enlarged to meet the needs of the company, and its significance is based on its historical association with the Whitehead Bros. plant.

INFOR MATION

Bibliography:
Mercer County Engineers Office. Transfer File #6-540.2.
Trenton Public Library. Trentoniana Collection: Vertical File: Rubber Industry.

Physical Description: The 84'-long five-span encased stringer bridge with cantilevered sidewalks and a concrete balustrade was built in two sections. In 1907 a 5-span pony truss was replaced by encased rolled stingers supported by the existing masonry abutments and piers that were capped with concrete. That span, 18'-7" wide, was deemed too narrow and was widened to 30' plus two sidewalks in 1938. Encased stringers were again used. The reinforced concrete balustrade is from the 1938 widening, and its style with bold paneled posts is typical of the period. The bridge is well preserved.

Historical and Technological Significance: The 1907 bridge is adjacent to the former Whitehead Brothers Rubber Company, a well-preserved 19th- and 20th-century industrial complex that appears to meet the criteria for inclusion in the National Register of Historic Places. The bridge was widened in 1938 to provide better access to the Whitehead mill and to provide adequate sidewalks for the workers. The size and appearance of the bridge are directly related to the plant which, beginning in 1870, produced rubber goods including hoses, valves, springs, belting, packing, and bicycle tires. The factory was initially located in a converted woolen mill that the Whitehead brothers had operated during the Civil War. Between 1937 and 1955 the plant was acquired by another rubber product manufacturer, the Goodall Company, which closed the facility in 1990. The complex, of which the bridge is a contributing resource, is one of the best preserved rubber factories in the city. Rubber products ranked second only to pottery as a leading industry in Trenton. The Whitehead Brothers were among the earliest manufacturers in the city.

Boundary Description and Justification: The bridge is located in potential historic district. It crosses the stream that was dammed to form a mill pond. The water originally powered the 1870 factory that is the nucleus of the present industrial complex. The mill pond would be a contributing resource to the potential historic district, as would the bridge that was originally built and then improved to meet the needs of the eligible factory. The bridge and the features on both sides of it are evaluated as significant.

PHOTO: 3:5a-7a (06/91 MEM (5/96)) REVISED BY (DATE): QUAD: Trenton East

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1100068 **CO** MERCER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED HUNTER ROAD (ABANDONED) OVER MOORES CREEK **FACILITY** HUNTER ROAD (211.13)

TOWNSHIP HOPEWELL TOWNSHIP

TYPE PONY TRUSS **DESIGN** PRATT PIN CONNECTED **MATERIAL** Metal

 # SPANS 1 **LENGTH** 43 ft **WIDTH** 15.8 ft

CONSTRUCTION DT 1889 **ALTERATION DT** **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located on Howell Farm, a living history Mercer County park that documents turn-of-the-century agrarian life. Its integrity of setting is extremely well preserved. The bridge was closed to vehicular traffic in 1983, when a crack and buckling on the top chord was discovered. The bridge presently serves as a pedestrian bridge from a parking area to the farmhouse and farm-related buildings.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible. Listed. Phillips / Howell Farm Historic District. 05/02/1977. Contributing.

CONSULT DOCUMENTS SHPO Letter 03/12/01

SUMMARY The basically unaltered 3-panel 1889 pin-connected Pratt half hip pony truss supported on ashlar abutments is individually eligible for listing in the National Register of Historic Places and is a contributing element to the National Register-listed Phillips Farm, now the Howell Farm county park, under Criteria A and C. The bridge is one of the most complete examples of its type in the county, and its significance is enhanced by the integrity of its well-preserved pastoral setting. One other Pratt half hip pony truss was identified (1100028), and both are evaluated as eligible.

INFORMATION

Bibliography:
ONJH. National Register of Historic Places File: Mercer Co.; Hopewell; Phillips Farm.
Mercer County Engineers Office. File 211.13.

Physical Description: The 10 degree skew 3-panel pin-connected half hip Pratt pony truss bridge with a plank deck survives in a good state of preservation. With the exception of a floor beam replaced in 1945 and a corresponding outrigger added, the span appears to be unaltered. End posts and the spliced top chord (cracked and buckled because of corrosion and overloading) are built-up box members, and the verticals are channels with both battens and lacing. Eye bars compose the bottom chords while the diagonal and counters in the central panel are rods with loop-forged eyes. The abutments are rusticated ashlar with some concrete repairs to the south end. The one original built-up floor beam is deeper in the middle where more strength was needed. The bridge was closed to vehicular traffic in 1983 by the county. It serves as a foot bridge from a parking area to the Phillips Farm (Howell Farm) farmhouse.

Historical and Technological Significance: Few bridges in Mercer County survive in their original setting as well as the basically unaltered pin-connected half hip Pratt pony truss on the grounds of the Phillips Farm (Howell Farm), individually listed in the National Register of Historic Places in 1977. The 127-acre farm was donated to Mercer County in 1976 by Inez Howell for use as a living history museum that preserves turn-of-the-century farm life. She was the widow of former New Jersey Senator Charles Howell who died in 1973. The couple had purchased it as their retirement home. The farm, which includes a host of well-preserved farm related buildings and a two-section homestead that dates from both the 18th and 19th centuries, is historically associated with the Phillips family which owned it from the 1730s until the 1880s. From 1920 until 1948 it was the Cromwell dairy farm.

While the single-lane 1889 pin-connected Pratt truss (located on a now abandoned section of Hunter Road that is within the National Register-listed parcel) is not rated in the nomination, it clearly falls within the period of significance of the property. The nomination states that the farm is "unchanged since the early 20th century, including the setting" of which the bridge is a major element. The bridge is one of the most complete examples of the once-common Pratt pony truss in the area. Another well-preserved half hip Pratt pony truss is located on the Groveville-Allentown Road over Doctors Creek (1100028). It is larger, wider, and has different verticals.

Boundary Description and Justification: The bridge is located well within a 172-acre National Register-listed property. The bridge is a contributing element to that historic district. The bridge and its setting are significant.

PHOTO: 1:14-16,108:10 (04/91 JPH (5/96)) REVISED BY (DATE): QUAD: Lambertville

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1100071 **CO** MERCER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PENNINGTON-HARBOURTON ROAD OVER JACOBS CREEK **FACILITY** PENNINGTON HARBOURTON ROAD (214.12)

TOWNSHIP HOPEWELL TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 23 ft **WIDTH** 24 ft

CONSTRUCTION DT 1915 **ALTERATION DT** 1945 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in a low-density residential area and carries a busy 2-lane road over a small brook.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY Little more than a culvert, the reinforced concrete slab span with a replacement concrete deck installed in 1945 is not historically or technologically significant. It is supported on an undistinguished earlier ashlar abutment with concrete buttressing. The lattice railing with octagonal cast posts may to date to 1915. It is known to have been in place in 1927 according to county engineers office photographs. A modern beam guard rail has been added to the bridge.

INFOR MATION

PHOTO: 1:24-25 (04/91) REVISED BY (DATE): QUAD: Pennington

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1100072 **CO** MERCER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MINE ROAD OVER STONY BROOK (230.3) **FACILITY** MINE ROAD

TOWNSHIP HOPEWELL TOWNSHIP

TYPE THRU TRUSS **DESIGN** PRATT HALF HIP **MATERIAL** Metal

 # SPANS 1 **LENGTH** 102 ft **WIDTH** 16.8 ft

CONSTRUCTION DT 1885 **ALTERATION DT** **SOURCE** COUNTY RECORDS

DESIGNER/PATENT KING IRON BRIDGE CO. **BUILDER** KING IRON BRIDGE CO.

SETTING / CONTEXT On a rural two-lane road, the one-lane bridge crosses a small stream. The bridge enjoys integrity of setting in a rural area dominated by working farms. It is located in the sparsely developed northwestern portion of the county east of busy NJ 31.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY One of two well-preserved King Iron Bridge Co. pin-connected Pratt thru trusses in Mercer County, the Mine Road bridge is three years later than Bear Tavern Road (1100060), but is nevertheless an important example of its type. Supported on unaltered ashlar abutments, the 5-panel bridge has few visible repairs. The floor beams may not be original. It is one of four thru truss bridges in the county and ranks as the second oldest and one of the least altered.

INFORMATION

Bibliography:
Simmons, David A. "Bridge Building on a National Scale: The King Iron Bridge and Manufacturing Company." The Journal of the Society for Industrial Archaeology. Vol. 15, No. 2, 1989.
Mercer County Engineers Office. Transfer File 230.3.

Physical Description: The seven panel half-hip pin-connected Pratt thru truss with a steel grate deck installed in 1976 has true hangers that twist 90 degrees out of phase and then pick up the end floor beams. The bearings rest on ashlar abutments. The inclined end posts and upper chord are built-up members composed of shallow channels with a face plate. The same dimension channels are used for the laced verticals. Diagonals (of bar stock with loop-forged eyes) and counters (rods) are fitted with turnbuckles for tuning the bridge, and the bottom chord is die-forged eyebars. The originality of the rolled I beam floor beams is not known, but it is believed that they are not original. They are cut back in section for the suspenders and large square nuts that do appear to be original. The floor beams are fitted with the original brackets for the lateral bracing. The portal struts have a lattice bracing, as does the sway bracing, and each end carries a King Iron Bridge and Manufacturing Co. plaque. The lateral bracing is connected to a crimped bracket that connects at the upper panel point pins. A few welded repairs to the verticals at the panel points are visible, but otherwise the bridge is very well preserved. The modern beam guide rail is attached to the verticals by bolts.

Historical and Technological Significance: The well-preserved 102'-long pin-connected thru truss by the King Iron Bridge and Manufacturing Company of Cleveland, Ohio was erected in 1885, according to its plaque, and is one of two well preserved King thru trusses from the 1880s in Mercer County. The Mine Road bridge, the longer, heavier, and newer of the two, as well as its counterpart on Bear Tavern Road (1100060), are of statewide importance as early examples of a historic bridge type. They are also examples of bridges fabricated by one of the largest and most successful late-19th century manufacturers. The two Mercer County bridges are believed to be the only documented King Iron Bridge and Manufacturing Company in the state. Technologically they reflect early metal truss bridge construction details, such as the true floor beam hangers, the lateral bracing connections, and the prong-like floor beam connectors at the verticals. The bridge is an early and very well preserved example of its type.

The King Iron Bridge and Manufacturing Company was established by Zenas King in Cleveland about 1860. Learning the bridge selling business in the 1850s as a salesman representing the Moseley Bridge Company (a patented tubular bowstring), King patented his own tubular bowsting bridge that was to be the company's chief product through the 1870s, and he successfully marketed it nationally through a network of regional representatives. He published catalogues in 1875 and 1884 as well as annual reports. As the market moved away from the light bowstring truss about 1880, he diversified his product line to include the what was becoming standard thru and pony trusses. The King company was one of the largest and most prolific bridge fabricating firms in the country yet only approximately half a dozen documented examples of the firm's work survive in New Jersey. While the company remained an active, viable concern for about a decade after the founder's death in 1892, it was not a regional force in this century.

The King Iron Bridge and Manufacturing Company, known as the King Bridge Company after 1892, represents, in addition to period engineering and technology, the manner in which iron and early steel bridges were marketed in this country. The fabricator served as both engineer and builder. That practice was to disappear with the rise of the consulting engineer and the professionally trained county engineer in the early years of this century.

PHOTO: 6:21-26 (06/91) REVISED BY (DATE): QUAD: Pennington

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1100075 **CO** MERCER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED OLD MILL ROAD OVER STONY BROOK **FACILITY** OLD MILL ROAD

TOWNSHIP HOPEWELL TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 3 **LENGTH** 62 ft **WIDTH** 22.9 ft

CONSTRUCTION DT 1937 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge carries a 2-lane road over a shallow but wide stream in a rural portion of the county. The bridge is on a severe curve, and it is adjacent to a mill site. Only concrete ruins from the water-powered mill remain.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The continuous 3-span slab bridge utilizes the random ashlar and rubble coursed piers and abutments from an earlier span. Any early railing has been removed and replaced with a modern concrete curb and steel guide rail. The present span is technologically and historically undistinguished. It is one of over 14 pre-World War II slab bridges in the county. None were evaluated as significant.

INFOR MATION

PHOTO: 5:3 (05/91) REVISED BY (DATE): QUAD: Pennington

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1100076 **CO** MERCER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED FEDERAL CITY ROAD OVER SOUTH BRANCH OF STONY BROOK **FACILITY** FEDERAL CITY ROAD 233.8

TOWNSHIP HOPEWELL TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 26 ft **WIDTH** 18 ft

CONSTRUCTION DT 1907 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The short bridge over one of the several meandering branches of Stony Brook is in a wooded section with mid-20th century development. The setting has no associative historical significance.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The undistinguished 26' span composed of 5 encased stringers originally had a pipe railing. It is one of the earlier stringer bridges in the county, but the bridge is not a significant or particularly early example of its type. The reinforced concrete abutments wing walls were in place in 1947. How much earlier than that is not known.

INFOR MATION

PHOTO: 6:2-3 (04/91) REVISED BY (DATE): QUAD: Pennington

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1100077 **CO** MERCER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED STONY BROOK ROAD OVER NORTH BRANCH OF STONY BROOK **FACILITY** STONY BROOK ROAD

TOWNSHIP HOPEWELL TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 23 ft **WIDTH** 15.4 ft

CONSTRUCTION DT 1915ca **ALTERATION DT** **SOURCE** STYLE

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in a sparsely developed wooded area in the northern part of the county. It carries a lightly traveled narrow road over a small stream.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The short stringer bridge composed of rolled I beams with wooden blocks as diaphrams is supported on ashlar abutments. The deck is concrete and modern beam guard rails are used for the railing. The bridge is similar to a parallel span to the north. Both are technologically and historically undistinguished.

INFOR MATION

PHOTO: 2:22-23 (04/91) REVISED BY (DATE): QUAD: Hopewell

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1100079 **CO** MERCER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED VAN DYKE ROAD OVER NORTH BRANCH OF STONY BROOK **FACILITY** VAN DYKE ROAD

TOWNSHIP HOPEWELL TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 2 **LENGTH** 22 ft **WIDTH** 17.3 ft

CONSTRUCTION DT 1915 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The short bridge is located in a rugged, sparsely developed section of the county near the Hunterdon County line. Area is wooded, and span crosses a small rocky stream.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The short continuous, 2-span bridge composed of steel stringers has fieldstone abutments and a modern concrete central pier. A modern beam guide rail serves as the railing. The bridge is similar to one to the south (1100077) over the same feature. This span is not technologically or historically distinguished. It has also been modified by the addition of the pier.

INFOR MATION

PHOTO: 2:18,19 (04/91) REVISED BY (DATE): QUAD: Hopewell

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1100082 **CO** MERCER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED QUAKER ROAD OVER STONY BROOK **FACILITY** QUAKER ROAD (CR 533)

TOWNSHIP PRINCETON TOWNSHIP

TYPE RIGID FRAME **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 2 **LENGTH** 80 ft **WIDTH** 23.9 ft

CONSTRUCTION DT 1942 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT H. KERSEY, CO BRIDGE ENGINEER **BUILDER** JOS. JINGOLI, TRENTON

SETTING / CONTEXT The bridge is located over a shallow stream and flood plain in a sparsely developed agricultural area. It carries a 2-lane road.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The handsome 34 degree skewed stone-faced 2-span rigid frame bridge with contrasting concrete arched fascias was constructed in 1942. While more elaborately detailed than most mid-20th century county bridges, it is not technologically or historically distinguished. Skewed rigid frame bridges are not as common as right-angle crossings, but they are not uncommon either. County Bridge Engineer Harry Kersey gave it a stone face for "best appearance." It replaced a damaged Pratt pony truss.

INFOR MATION

PHOTO: 7:8-9 (05/91) REVISED BY (DATE): QUAD: Princeton

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1102150 **CO** MERCER **OWNER** NJDOT **MILEPOINT** 4.39

NAME & FEATURE INTERSECTED US 1B OVER SHABAKUNK CREEK **FACILITY** US 1 BUSSINESS

TOWNSHIP LAWRENCE TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 68 ft **WIDTH** 72.5 ft

CONSTRUCTION DT 1928 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located on a busy 4-lane road that was once part of the Lincoln Highway. Originally designated NJ 13, the route was changed to NJ 26 in the 1927 highway expansion. The heavily used road is lined with mixed use modern development. The bridge crosses a substantial stream.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 4-lane encased stringer bridge on concrete abutments and cutwater pier has a concrete balustrade typical of the period. The bridge dates to the 1927 dualization of the highway, and it is a representative example of the bridge type and style used extensively by the State Highway Department before World War II. It is not technologically or historically distinguished. The center pier has settled causing the superstructure to lower.

INFOR MATION

PHOTO: 5:41-42 (04/91) REVISED BY (DATE): QUAD: Princeton

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1103151 **CO** MERCER **OWNER** NJDOT **MILEPOINT** 6.33

NAME & FEATURE INTERSECTED US 1 OVER SHIPETAUKIN CREEK **FACILITY** US 1

TOWNSHIP LAWRENCE TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 68 ft **WIDTH** 74 ft

CONSTRUCTION DT 1938 **ALTERATION DT** 1959 **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HIGHWAY DEPT **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge over a small stream is located on busy US 1, the major arterial road between Trenton and New Brunswick. Modern development dominates the surrounding area.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased stringer on concrete abutments with a nicely proportioned concrete balustrade was two lanes when originally constructed. When it was widened to its present width in 1959, the east balustrade was demolished. Now carrying a 6-lane roadway, the bridge has a concrete parapet with a steel railing cap on the east side. The bridge has been so dramatically altered that it has no integrity of design or setting.

INFOR MATION

PHOTO: 8:24.106:21-13 (05/91) REVISED BY (DATE): QUAD: Princeton

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1103153 **CO** MERCER **OWNER** NJDOT **MILEPOINT** 9.1

NAME & FEATURE INTERSECTED US 1 OVER DUCK POND RUN **FACILITY** US 1

TOWNSHIP WEST WINDSOR TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 23 ft **WIDTH** 78.5 ft

CONSTRUCTION DT 1928 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT **BUILDER**

SETTING / CONTEXT The single-span concrete encased stringer on concrete abutments is located on the west (south bound) side of busy US 1, the main road to New Brunswick. A Jersey barrier divides the 4-lane road dominated by scattered late-20th century commercial development. It crosses a small stream.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased stringer bridge with a concrete balustrade is an example of the most common pre-WW II bridge in the state. It was used ubiquitously by the State Highway Dept. in its post-1927 road expansion program. It is a representative example of its type and is not innovative or historically noteworthy. Concrete encasing was promoted by Morris Goodkind, state Bridge Engineer from 1925 until 1955. The bridge is one of over forty pre-World War II stringer spans in Mercer County.

INFOR MATION

PHOTO: 8:22-23 (05/91) REVISED BY (DATE): QUAD: Princeton

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1103155 **CO** MERCER **OWNER** NJDOT **MILEPOINT** 11.97

NAME & FEATURE INTERSECTED US 1 OVER MILLSTONE RIVER **FACILITY** US 1 SOUTHBOUND

TOWNSHIP WEST WINDSOR TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 111 ft **WIDTH** 76.5 ft

CONSTRUCTION DT 1937 **ALTERATION DT** 1959 **SOURCE** INSCRIPTION

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge over the Millstone River carries 4 lanes plus shoulders of busy US 1, a main divided highway from Trenton to New Brunswick. The grassy median survives. The surrounding area is a mix of undeveloped parcels and modern commercial and corporate complexes.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 3-span encased stringer bridge with a well proportioned concrete balustrade is supported on concrete piers and abutments. The encased fascia girder is finished with flat panels. While the west elevation is complete, the east side was removed when the span was widened to its present width in 1959. The modern concrete parapet with a steel top railing on the east side was added as part of the 1959 work. The bridge has no integrity of original design or setting.

INFOR MATION

PHOTO: 7:19 (06/91) REVISED BY (DATE): QUAD: Princeton

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1105150 **CO** MERCER **OWNER** NJDOT **MILEPOINT** 2.36

NAME & FEATURE INTERSECTED NJ 27 OVER HARRYS BROOK **FACILITY** NJ 27

TOWNSHIP PRINCETON TOWNSHIP

TYPE STONE ARCH **DESIGN** **MATERIAL** Stone

 # SPANS 1 **LENGTH** 54 ft **WIDTH** 28 ft

CONSTRUCTION DT 1908 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The culvert and retaining wall structure is located on the east side of NJ 27 between Princeton and Kingston over a stream that feeds Lake Carnegie. It is in a wooded setting with low-density residential development. The bridge is located on the western edge of the Lake Carnegie Historic District.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Listed. Lake Carnegie Historic District. 06/28/1990. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY More a pair of culverts (one arched, one trabeated, linked by a rubble-coursed brownstone retaining wall and low parapet), the structure was built as part of the development of Lake Carnegie. It crosses the principal subsidiary stream contributing water to the lake. It was judged to be a contributing resource to the historic district.

INFOR MATION

PHOTO: 7:15-16 (05/91) REVISED BY (DATE): QUAD: Princeton

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1105151 **CO** MERCER **OWNER** NJDOT **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED OLD NJ 27 OVER MILLSTONE RIVER **FACILITY** OLD NJ 27

TOWNSHIP PRINCETON TOWNSHIP

TYPE STONE ARCH **DESIGN** BARREL **MATERIAL** Stone

 # SPANS 4 **LENGTH** 110 ft **WIDTH** 22.2 ft

CONSTRUCTION DT 1798 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge, over the Millstone River, is now bypassed by a new NJ 27. It is a dominant element in the Kingston Mill Historic District and is just north of the historic water-powered mill on the west side of the river. The bridge is located in the D & R Canal State Park and is primarily a pedestrian bridge. The setting of the bridge is more original and historic than any of the other two large stone arch bridges in the township.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Individually Eligible. Listed. Kingston Mill Historic District 01/09/1990; D&R Canal 05/11/1973; Listed. King's Highway (Upper Rd) Historic District. 12/21/2000. Contributing.

CONSULT DOCUMENTS SHPO Letter 03/12/01

SUMMARY The well-preserved four-span rubble-coursed stone arch bridge dates to 1798 and was part of the main road from Philadelphia to New York. The bridge is individually significant as one of the best examples of its type based on its date of construction, size, integrity of setting, and relatively complete state of preservation. Located in a state park, it serves primarily as a pedestrian bridge. The bridge is individually eligible for listing in the National Register of Historic Places under Criterion C and as a contributing element of three historic districts: Kingston Mill Historic District, Delaware & Raritan Canal Historic District, and the King's Highway (Upper Road) Historic District (currently in the nomination process).

INFOR MATION

PHOTO: 7:17-19 (05/91 JPH (5/96)) REVISED BY (DATE): QUAD: Hightstown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1105302 **CO** MERCER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PROVINCE LINE ROAD OVER STONY BROOK **FACILITY** PROVINCE LINE ROAD

TOWNSHIP LAWRENCE TOWNSHIP

TYPE PONY TRUSS **DESIGN** WARREN **MATERIAL** Steel

 # SPANS 3 **LENGTH** 140 ft **WIDTH** 11.7 ft

CONSTRUCTION DT 1903 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT UNKNOWN **BUILDER** BERLIN CONSTRUCTION CO.

SETTING / CONTEXT The well-preserved 3-span bridge, accessed by a steep descending curve, is located on a closed portion of road in a wooded setting. Some of the surrounding land is dedicated to green space by its corporate owners. The bridge was closed to vehicular traffic by the county because of constant disregard for weight limits and damage from vehicular impact. It is now a pedestrian and bicycle bridge. There are no plans to remove the bridge.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The documented and well-preserved riveted Warren pony truss is the longest of its type in the county and is one of the best preserved. It was fabricated by Berlin Construction Company of Berlin, CT, a firm that built riveted Warren trusses into the 1920s. The ashlar piers may predate the bridge, and they added to significance of the span. Warren pony trusses were the most common type of bridge in America prior to 1925, but it is not as common in New Jersey.

INFOR MATION

Bibliography:
Darnell, Victor. Interview with Mary McCahon. 10/18/91.
Mercer County Engineer's Office.

Physical Description: The 3-span bridge is composed of three sets of riveted Warren pony trusses supported on high ashlar abutments and piers. The substructure may well be from an earlier span. The inclined end posts and top chord are built up box members of channels and plate while the diagonals (there are no verticals) are toe-in channels that are either laced or connected by battens. Connections at panel points are riveted to gusset plates. The most unusual design detail of the bridge is the square-headed bolts that serve as the floor beam hangers. The hanger bolts pass through a plate riveted to the top of the lower panel point. The rolled I-section floor beams appear to be original, but the stringers were replaced in 1930. Repair work in the 1950s included replacing "rotted" gussets and bottom chord angles in kind. The original lattice railing survives. The bridge is well preserved in both setting and design, and it serves as a pedestrian bridge.

Historical and Technological Significance: The well-preserved 3-span riveted Warren pony truss is an important example of a once-common bridge type. One of three surviving Warren pony trusses in Mercer County, the Province Line Road bridge is the longest as well as most complete of the group. It was designed and fabricated by the Berlin Construction Company of Berlin, Connecticut in 1903. The Berlin Construction Company is an offshoot of the Berlin Iron Bridge Company, which was acquired by the American Bridge Company in 1900. When Berlin Iron Bridge Company, made famous by its lenticular truss bridges, was taken over, three executives formed a new company for the purpose of fabricating and erecting structural steel. Incorporated in New Jersey in 1900 and in Connecticut in 1905, the Berlin Construction Company leased a fabricating plant in Pottsville, Pennsylvania and maintained offices in New York and Boston. Its headquarters and fabricating yard, however, remained in Berlin, and the company produced building structural steel as well as bridges. It ceased bridge fabrication by the mid-1920s. According to bridge historian Victor Darnell, Berlin Construction Company's bridge work was dominated by straight-forward riveted Warren trusses. Original plans for the bridge survive in the Mercer County Engineer's Office. The bridge was designed by the Berlin Construction Company.

The corporate history of the firm illustrates the dominant influence the American Bridge Company had on bridge fabrication at the turn-of-the-century. As first J.P. Morgan and Company and then U.S. Steel acquired 50% of the nation's fabricating capacity, new firms were established in the wake of the reorganization. Berlin Construction, still in business as the Berlin Steel Construction Company specializing in building steel, was for a time able to be a profitable small fabricator making standardized designs. While not technologically innovative, the Province Line Road bridge stands as not only a well-preserved example of a small post-American Bridge Company fabricator but also a record of the history of technology at the turn of the century. The riveted Warren pony truss, according to J.A.L. Waddell, was the most common bridge type in the country prior to 1925.

Boundary Description and Justification: The bridge is evaluated as individually significant, and the boundary is thus limited to the substructure and superstructure itself. While the wooded setting contributes to the integrity of setting, the acreage does not appear to have significant historical value. The road itself once served as the boundary between the east and west Jersey provinces, but it has lost its integrity due to modern development.

PHOTO: 7:39-43 (06/91) REVISED BY (DATE): QUAD: Princeton

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1106704 **CO** MERCER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED IRON BRIDGE ROAD OVER CROSSWICKS CREEK **FACILITY** IRON BRIDGE ROAD

TOWNSHIP HAMILTON TOWNSHIP

TYPE PONY TRUSS **DESIGN** WARREN **MATERIAL** Metal

 # SPANS 2 **LENGTH** 103 ft **WIDTH** 16.6 ft

CONSTRUCTION DT 1905ca **ALTERATION DT** 1924 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT CO. ENGINEER (1924) **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in the rural southeastern portion of the county on the line with Burlington County. Area immediately north of the bridge is a modern subdivision.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 07/09/90, Letter 03/12/01.

SUMMARY Moved to its present location in 1924, the riveted Warren pony truss appears to date to ca. 1905. It is composed of angles, set back-to-back with spacers. The top chord is braced at the panel points with a laced outrigger. There are numerous welded repairs and strengthening. The trusses were too short for the crossing, so a stringer approach span and concrete pier were added. The ashlar abutments date to 1869. The undocumented span is individually eligible for listing in the National Register of Historic Places under Criterion C.

INFOR MATION

Bibliography:
Mercer County Engineer's Office. Bridge Transfer File # 670.4.

PHYSICAL DESCRIPTION The 78'-long 7-panel riveted Warren pony truss was relocated to this site in 1924. The south end of the trusses bears on a deteriorating ashlar abutment built in 1868, according to the date stone. Because the trusses were too short for the crossing, a concrete pier and rolled stringer approach span were built in 1924 to accommodate using the truss lines at this location. Both spans have a plank deck. The truss members, including the top and lower chords, are composed of angles riveted back-to-back. The inclined end posts and diagonals have washers or spacers at the rivets. The floor beams are suspended from U-bolt hangers that rest on a two-piece saddle fitted beneath what remains of the gusset plate at the panel point. The floor beams, with punched holes in the top flanges and in some webs, are hung from two U hangers with hex-headed bolts. All other connections are riveted, including the original laced knee braces with square-headed bolts. Portions of the original/early lattice railing survive on the truss spans, but it has been replaced elsewhere by modern beam guide rail barriers. There are numerous small welded repairs and strengthening to the lower portion of the trusses, and they also have impact damage.

HISTORICAL AND TECHNOLOGICAL SIGNIFICANCE The present 2-span bridge over Crosswicks Creek, erected in 1924 as an intercounty (Mercer and Burlington) project, is at least the second bridge at the crossing. It utilizes the handsome but deteriorated random ashlar abutments that date to 1868. The abutments are early, complete, and documented, making them a noteworthy feature of the crossing.

The date of construction and fabricator of the riveted Warren trusses is not known. They date stylistically to ca. 1905, and they exhibit no distinctive or innovative details. The trusses were moved to this site in 1924. Since they were too short for the crossing, a new concrete pier and stringer approach span were added to the north side. The trusses are not without numerous welded patches installed as repairs or strengthening. Physical evidence suggests that the flooring system has been modified, probably when the trusses were moved. The rolled I-section floor beams have punched holes in the top flanges, and some have similar holes in the web suggesting that they are salvaged material. A similar detail of hung floor beams on otherwise all rivet-connected truss bridge is the 1904 pony truss bridge at Cedar Lane in Burlington County (03D3760). The floor beam hangers are original on that bridge making it a more complete and significant example of the detail.

The laced outriggers appear to be original. They are found on some other Warren pony truss bridges in the state, so this in not a rare example of the detail.

The undocumented span is one of three riveted Warren pony truss spans in Mercer County. It is not as complete as the 3-span 1903 Berlin Construction Company bridge on Province Line Road (1105302). Its setting, with a modern residential subdivision at to the northwest, is also not as well preserved as the Province Line Road span. The fact that is was moved is also not unusual as Mercer County was frequently moving serviceable trusses during the 1920s. A better documented example of a moved truss within the county is the Groveville-Allentown Road span over Doctors Creek (1100028). What is unusual about the Iron Bridge Road span is the hanging of the floor beams on an otherwise all riveted bridge, but that detail is believed to be a modification rather than the original arrangement. The undocumented bridge is a representative example of a common truss type and design that appears to be too altered to retain its integrity of design.

PHOTO: 3:20A,108:22-28 (05/91) REVISED BY (DATE): QUAD: Allentown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1106713 **CO** MERCER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED HAMILTON YARDVILLE ROAD OVER BACK EDGE BROOK **FACILITY** HAMILTON YARDVILLE ROAD (671.3)

TOWNSHIP HAMILTON TOWNSHIP

TYPE DECK GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 36 ft **WIDTH** 30.3 ft

CONSTRUCTION DT 1921 **ALTERATION DT** 1958 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT H. KERSEY, CO BRIDGE ENGINEER **BUILDER** WILLARD KONOVER, TRENTON

SETTING / CONTEXT The bridge is located in a low-density residential area on a 2-lane collector road. It crosses a small brook in a wooded setting.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The original shallow built-up plate girder bridge on concrete abutments was widened with encased stringers on the east side in 1958. When the pony truss at the crossing collapsed in 1920, the quickest replacement span was a pair of girders fabricated by Newton Bugbee & Co. of Trenton. According to county records, rolled I beams would take too long to be made. That is why the bridge is a girder instead of a stringer. It is not historically or technically significant.

INFOR MATION

PHOTO: 3:33A-34A (05/91) REVISED BY (DATE): QUAD: Allentown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1107402 **CO** MERCER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED OLD TRENTON ROAD (CR 535) OVER ASSUNPINK CREEK **FACILITY** OLD TRENTON ROAD (CR 535)

TOWNSHIP WEST WINDSOR TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 71 ft **WIDTH** 30 ft

CONSTRUCTION DT 1927 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT H. KERSEY, CO BRIDGE ENGINEER **BUILDER** GRANT & DRIVER

SETTING / CONTEXT The bridge over a stream carries a local collector road through a mid-20th century residential portion of the county. The stream banks are wooded.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY Representative of the most common type of bridge in the state, the 2-span encased 1927 stringer span has a modern beam guard rail carried on the earlier concrete post and pipe railing. The abutments and pier are concrete. Designed by county engineer of bridges Harry Kersey, it was built by a local contractor. The bridge is not historically or technologically distinctive. It is one of over 40 pre-WW II stringer bridges in Mercer County. A better example of the type is 1100058.

INFOR MATION

PHOTO: 2:30-31 (04/91) REVISED BY (DATE): QUAD: Hightstown

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1107628 **CO** MERCER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED SOUTHFIELD ROAD OVER BEAR BROOK **FACILITY** SOUTHFIELD ROAD

TOWNSHIP WEST WINDSOR TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Wood

 # SPANS 2 **LENGTH** 35 ft **WIDTH** 18 ft

CONSTRUCTION DT 1934 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge over a small stream is located in a rural portion of the county. Modern housing development is encroaching on the agricultural land use in the area.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The simple 2-span timber stringer bridge with timber wing and back walls and concrete piles has a braced pile bent center pier. Much of the wood in the bridge appears to be in kind replacement of the original/early fabric, and there are many bolts used, which also indicates modern material. Beam guard rails on rolled posts compose the railing. The bridge is not technologically innovative, and it is not in a historic setting.

INFOR MATION

PHOTO: 3:3A-4A (05/91) REVISED BY (DATE): QUAD: Hightstown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1108602 **CO** MERCER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED OLD TRENTON ROAD OVER MILLSTONE RIVER **FACILITY** OLD TRENTON ROAD (CR 535)

TOWNSHIP EAST WINDSOR TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 3 **LENGTH** 68 ft **WIDTH** 22.5 ft

CONSTRUCTION DT 1937 **ALTERATION DT** **SOURCE**

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge carries a busy 2-lane county road over a slow-moving stream in a wooded setting. Much of the surrounding area has been redeveloped since 1960 for residential and corporate use.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 3 simple span rolled I beam stringer bridge is supported on wood piles and pier caps as well as earlier ashlar abutments that have reinforced with concrete wing walls and bridge seats. Some of the piles have also been encased. The stringers are placed on about 2' centers and are braced by diaphrams. A modern steel grate deck has been installed as have beam guard rails for the railing. The bridge is technologically and historically undistinguished.

INFOR MATION

PHOTO: 106:15-16 (10/91) REVISED BY (DATE): QUAD: Hightstown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1109402 **CO** MERCER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WINDSOR ROAD OVER TRIBUTARY OF ASSUNPINK CREEK **FACILITY** WINDSOR ROAD

TOWNSHIP WASHINGTON TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 42 ft **WIDTH** 24 ft

CONSTRUCTION DT 1919 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT ENCASED **BUILDER**

SETTING / CONTEXT The bridge is located over a small stream in a wooded setting on a country road in a sparsely developed portion of the county.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The modest 42'-long encased stringer bridge on concrete abutments is a representative example of the most common pre-WW II bridge type in the state. Any original railing has been replaced by a modern beam guard rail. The bridge and its setting are not historically or technologically distinguished. It is a representative example of the over 40 pre-1942 steel stringer bridges in Mercer County.

INFOR MATION

PHOTO: 8:15-16 (05/91) REVISED BY (DATE): QUAD: Allentown

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1110152 **CO** MERCER **OWNER** NJDOT **MILEPOINT** 10.51

NAME & FEATURE INTERSECTED NJ 29 OVER JACOBS CREEK **FACILITY** NJ 29

TOWNSHIP EWING TOWNSHIP

TYPE STONE ARCH **DESIGN** BARREL **MATERIAL** Stone

 # SPANS 1 **LENGTH** 25 ft **WIDTH** No Data

CONSTRUCTION DT 1832 **ALTERATION DT** 1940 **SOURCE** STYLE

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge and viaduct carry the D & R Canal Feeder and NJ 29, the historic river road, over Jacobs Creek at its confluence with the Delaware River. It is contiguous to and an integral part of the Somerset Rolling Mill and the canal r-o-w, both National Register-listed properties. The bridge is preserved in its original setting and is an important element in the historic character of the two National Register resources.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Not Individually Eligible. Listed. Somerset Rolling Mill Historic District, 11/19/74; D&R Canal. 5/11/73. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The composite arch bridge/viaduct incorporates a stone arch reportedly built ca. 1832 as part of the construction of the D & R Canal Feeder. The original arch has been widened by concrete additions on both sides, but it is still visible from the underside. Contiguous to two National Register-listed properties, the structure is not cited as a contributing element in either nomination. It is historically significant to both listings and should be rated contributing despite the 1940 alterations.

INFOR MATION

Bibliography:
1875 Beers Atlas Map: Mercer County.
Office of New Jersey Heritage: Mercer County: Somerset Rolling Mills National Register Nomination, 1974.
Mercer Co. Engineers Office. Transfer File 214.3.

Physical Description: The arch bridge/aqueduct that carries NJ 29, the D & R Canal Feeder, and the right-of-way of the former Bel-Del Railroad over Jacobs Creek was originally built 1832-1824 as a barrel-shaped stone arch finished with gauged ring stones. The structure has been widened with concrete extensions on both sides. When the concrete extension was added to the downstream side is not documented, but it appears to date to ca. 1910. A 15' reinforced concrete extension to the upstream side in 1941. The spandrel wall of the extension has been scored. A perpendicular wing wall on the upstream side survives in original condition. The entire structure was gunited in 1941. The earthen embankment above the original level of the bridge illustrates how much the historic 18th-century road level has been raised. A modern beam guard railing has been installed at the road grade.

Historical and Technological Significance: The present arch bridge/aqueduct incorporates a stone arch built as part of the Delaware & Raritan Canal Feeder development in the early 1830s. 1832 is the generally accepted date of construction for the structure. It is located on the historic river road north from Trenton and adjacent to two National Register-listed properties; the Delaware & Raritan Canal right-of-way and the Somerset Rolling Mill. Although the 1974 Somerset Rolling Mill nomination includes only the house and mill, the bridge that crosses Jacobs Creek, power source for the mill, is an integral part of the well-preserved site, both visually and historically, and should be considered a contributing resource. It also carries the Delaware & Raritan Canal Feeder over the creek. The right-of-way of the canal feeder is also listed in the National Register, but the nomination says nothing about structures such as this viaduct.

The structure is one of two similar stone arch bridge/aqueducts in Mercer County between Trenton and Lambertville. The other structure, a 2-span stone arch at Moore's Station (1110152), is in a more complete state of preservation. The Jacobs Creek structure has been extended on both sides. When the concrete extension was added to the downstream side was not documented in the records of the Mercer County Engineer, but 1940 photographs show that it was in deteriorated condition by that date. A 15' extension of reinforced concrete was added to the upstream side in 1940 as a means of preventing collapse of the badly deteriorated upstream portion of the original stone arch. It also accommodated a widening of NJ 29.

The Jacobs Creek aqueduct is significant because of its setting and association with recognized historic resources (criterion A). The canal feeder, which runs from Raven Rock to the north into Trenton and connects with the main canal, was completed in 1834. It was an important route for coal passing from the mines in Pennsylvania to the industries in Trenton and beyond. The area at the confluence of Jacobs Creek and the Delaware River, known as Somerset Junction, was an early mill site. Jonathan T. Crowley bought the grist mill located there in 1841 and enlarged it. The mill flourished through the rest of the 19th century as did the entire area. Located on the railroad line between Ewing and Hopewell, it was the junction of the short-lived Mercer and Somerset Railroad with the Camden & Amboy's Belvidere-Delaware line. The Mercer & Somerset Railroad was a subsidiary of the Camden & Amboy started in 1870 and completed to New Brunswick in 1874. The rail line was on the south side of the creek.

The old River Road, a significant 19th-century thoroughfare, has become the area's scenic highway. In 1912 the state assembly authorized construction of a 111-mile riverside route from Trenton to Port Jervis, New York, in an effort to redistribute the population of the state from the eastern portion to the Delaware Valley. The Delaware Drive Bill in 1929 provided more funds for work on the road which continued through the 1960s. The state took over the road in 1945. The section at Somerset Junction was completed in 1924.

PHOTO: 1:10, (05/91 JPH (5/96)) REVISED BY (DATE): QUAD: Pennington

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1110158 **CO** MERCER **OWNER** NJDOT **MILEPOINT** 15.35

NAME & FEATURE INTERSECTED NJ 29 OVER MOORES CREEK **FACILITY** NJ 29

TOWNSHIP HOPEWELL TOWNSHIP

TYPE STONE ARCH **DESIGN** BARREL **MATERIAL** Stone

 # SPANS 2 **LENGTH** 43 ft **WIDTH** No Data

CONSTRUCTION DT 1832 **ALTERATION DT** 1917 **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT Located well below grade, the bridge that carries scenic NJ 29 over Moores Creek near its confluence with the Delaware River is not visible from the road. It is visible from the D & R Canal Feeder right-of-way, now a park, located immediately west of the bridge and highway. Elements of an abandoned railroad trestle bridge are in the adjacent park. The setting is wooded.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 2-span stone arch bridge (later gunite) dates to the construction of the D & R Canal, and as such it ranks as one of the few surviving original canal-related bridges. It is one of two stone arch bridges on NJ 29 (the historic river road), and it is the better preserved of the two. The bridge was widened in kind in 1917 when NJ 29 was improved to its present width. The gunite coating was added in 1933. The value of the bridge is for its associative significance with the D & R Canal Feeder.

INFOR MATION

Bibliography:
Trenton Public Library. Trentoniana Collection. Vertical File: Roads.
Mercer Co. Engineers Office. Transfer File 211.1.

Physical Description: The 2-span stone barrel arch bridge/aqueduct has splayed wing walls and a high road embankment. It has been widened at least twice, but the 1933 gunite coating hides evidence of the modification. The original stone construction is visible inside the arches and where the gunite coating has spalled. A bullnose cutwater has been added to the upstream side, and a high embankment has been built up on the original deck to accommodate the raising of the road grade.

Historical and Technological Significance: The stone arch bridge/aqueduct was constructed ca. 1832-1834 as part of the original development of the Delaware & Raritan Canal Feeder, one of the important transportation routes in the region. The D & R Canal Feeder, which brought soft coal from rich fields of eastern Pennsylvania to the industrialized regions of Trenton and beyond, was completed between 1832 and 1834. Its right-of-way, which was listed in the National Register of Historic Places in 1973. Since the aqueduct is an original canal structure, and it actually carries the historic waterway, it is evaluated as a contributing resource (criteria A, C).

In addition to the structure's association with the canal feeder, it is also an integral part of the old river road, an important 19th century thoroughfare. The New Jersey legislature designed NJ 29 as "Delaware Drive" in 1912. The purpose of the road was to encourage redistribution of population from the congested northeastern part of the state to the Delaware Valley by providing good transportation. The road was improved over the next fifty years, and it was taken over as a state route in 1945. This arch was extended on the upstream side in 1917 to accommodate the upgrading of the road. When the downstream side was extended is not known. That work would have been done by the Pennsylvania Railroad, owner of the canal feeder and railroad. The entire span was gunited in 1933. Despite the 20th-century alterations to aqueduct, it is of great enough historical significance to be evaluated as an eligible resource (criterion A).

The stone arch is one of two known mid-19th century bridges on the old highway in Mercer County and it is the largest. As such it is a significant remnant of the historical development of an important transportation corridors that contributed markedly to the industrial and physical growth of Trenton and Lambertville. It engineering significance is derived in part from demonstrating how the crossing of the canal, a controlled, manmade feature, and the natural stream were separated.

Boundary Description and Justification: The span is evaluated as significant for historical and technological reasons. Thus the span as well as its setting as part of the canal feeder and the historic river road are all contributing factors to its significance. The boundary includes the entire width of the structure and the area on the downstream portion that is part of the National Register-listed Delaware and Raritan Canal district.

PHOTO: 1:12-13 (05/91) REVISED BY (DATE): QUAD: Lambertville

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1113150 **CO** MERCER **OWNER** NJDOT **MILEPOINT** 7.7

NAME & FEATURE INTERSECTED NJ 33 OVER CONRAIL **FACILITY** NJ 33

TOWNSHIP WASHINGTON TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 119 ft **WIDTH** 40 ft

CONSTRUCTION DT 1928 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The 3-span bridge crosses 1 line of the former Camden & Amboy route from Bordentown, the Delaware River terminus of the D & R Canal, to New Brunswick. The overpass is just west of the junction of NJ 33 and US 130 in a rapidly developing portion of the county. Late-20th century development is adjacent to bridge. The rail line is an infrequently used part of the Conrail system.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 3-span encased stringer supported on concrete abutments and bents has a paneled concrete parapet. While more railroad overpasses are thru girder spans than stringers, the use of encased stringers in overpasses is not uncommon. The bridge is not innovative or historically significant. One set of track has been removed from the right-of-way.

INFOR MATION

PHOTO: 2:33-34 (05/91) REVISED BY (DATE): QUAD: Allentown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1114151 **CO** MERCER **OWNER** NJDOT **MILEPOINT** 10.18

NAME & FEATURE INTERSECTED NJ 33 & US 130 OVER ASSUNPINK CREEK **FACILITY** NJ 33 & US 130

TOWNSHIP WASHINGTON TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 55 ft **WIDTH** 90 ft

CONSTRUCTION DT 1937 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge over a moderate size stream carries a busy 6-lane road and grassy median with a crossover. The modern beam guard rail that lines the road also extends across the bridge and protects the concrete balustrade. The immediate setting of the bridge is wooded, but the surroundings are dominated by modern commercial and residential development.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span encased stringer bridge supported on concrete abutments is a complete example of a typical 1930s state highway department bridge division-designed span. It has a well-proportioned concrete balustrade and paneled stringer fascia. One of over forty stringer bridges in Mercer County, the span is technologically and historically undistinguished. It was built when the road was increased to four lanes in 1937-1938.

INFOR MATION

PHOTO: 8:13-14 (05/91) REVISED BY (DATE): QUAD: Allentown

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1115150 **CO** MERCER **OWNER** NJDOT **MILEPOINT** 14.27

NAME & FEATURE INTERSECTED NJ 33 OVER ROCKY BROOK **FACILITY** NJ 33

TOWNSHIP HIGHTSTOWN BOROUGH

TYPE STONE ARCH **DESIGN** ELLIPTICAL **MATERIAL** Stone

 # SPANS 4 **LENGTH** 75 ft **WIDTH** 37 ft

CONSTRUCTION DT 1890ca **ALTERATION DT** 1981 **SOURCE** STYLE/COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge located at the north end of Hightstown's business district on the main street (NJ 33). It crosses a dammed stream that created a large mill pond (Peddie Lake) on the east side. The area around the bridge on both sides of NJ 33 is now an open park. Tall ashlar piers from a 19th-century railroad bridge (superstructure removed) are located on the west side of NJ 33 in full sight of the bridge.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The low rise 4-span rubble-coursed stone arch bridge with a composite railing dates to at least 1907 (county records), and it contributes to the historic character of Hightstown. Each arch has a steel liner added in 1981 when the bridge was rehabilitated. The bridge and mill pond to its east are important remnant of the area's industrial heritage. A large water- and steam-powered flour and cereal mill stood east of the bridge until ca. 1920. The bridge is notable for historic associations.

INFORMATION

Bibliography;
Sanborn Insurance Maps 1885-1925.
Woodward & Hageman. Histories of Burlington and Mercer Counties. Everts & Peck, 1889.

Physical Description: Located below (west) of the dam that creates a long winding mill pond that separates the northeast corner of town from the rest of the Borough of Hightstown, the 75'-long bridge masonry bridge is composed of four small elliptical arches with ring stones and rubble-coursed spandrel walls. Modern steel liners have been installed in each arch in 1981, but the original configuration of the bridge remains the same. Probably dating to the 19th century, the rubble-coursed bridge has been repointed with modern Portland cement. The date of the composite pipe railing with stone posts is not known. No original/early plans or drawings of the bridge have been located.

Historical and Technological Significance: The undocumented 4-span stone arch bridge is locally significant for its historical association with the industrial development of the borough of Hightstown. The east side of the bridge was the location of water-powered mills dating to the mid-18th century. While no plans or drawings of the bridge were located in state or county records, local histories suggest that the stone arches were in place by 1875, and that a grist mill (non-extant) was standing at its northeast corner. In 1875 it was a flour mill, and a saw mill was located on the southern bank. G.W. Norton's grist and rolling mill, established in 1876 as the successor to William R. Norton's mill, was located in the buildings on both sides of the pond by 1890. The water and steam-powered business expanded into a large cereal rolling mill that was active through the first decade of this century. By 1916 it had changed ownership and was known as the Gross Brothers Cereal Roller Mills. All buildings disappeared by 1925, and it is assumed that they were destroyed by fire. Today the site is a public park with the bridge, dam and mill pond as its focal points.

The 1907 date of construction assigned by Mercer County is unsubstantiated. It appears that the bridge was constructed prior to 1907, which may be a date of rebuilding or rehabilitation. The crossing itself dates to the 18th century.

Boundary Description and Justification: The bridge is evaluated as individually significant. The buildings that provided its historic setting have been lost. The boundary is thus limited to the bridge itself.

PHOTO: 8:17-19 (05/91) REVISED BY (DATE): QUAD: Hightstown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1117150 **CO** MERCER **OWNER** NJDOT **MILEPOINT** 0.13

NAME & FEATURE INTERSECTED NJ 64 (HIGHTSTOWN ROAD) OVER AMTRAK **FACILITY** NJ 64 (HIGHTSTOWN ROAD)

TOWNSHIP WEST WINDSOR TOWNSHIP

TYPE THRU GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 104 ft **WIDTH** 52 ft

CONSTRUCTION DT 1939 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge carries a 2-lane road over 5 tracks of Amtrak's electrified Northeast Corridor just north of the Princeton Junction station and an electrical substation. The surrounding area is an undistinguished mix of modern commercial development and undeveloped parcels.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased deck plate girder bridge with floor beams is supported on concrete abutments and has a high paneled concrete parapet at the cantilevered sidewalks. The bridge is not technologically innovative, and it is a representative example of the most common railroad overpass bridge in the state. The rail line it crosses was developed in the 1860s by the Camden & Amboy as its realigned main line. The line was later acquired by the Pennsylvania Railroad.

INFOR MATION

PHOTO: 3:41A-42A (05/91) REVISED BY (DATE): QUAD: Hightstown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1119150 **CO** MERCER **OWNER** NJDOT **MILEPOINT** 7.19

NAME & FEATURE INTERSECTED NJ 31 OVER NEW YORK BRANCH (CONRAIL) **FACILITY** NJ 31

TOWNSHIP PENNINGTON BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 152 ft **WIDTH** 52 ft

CONSTRUCTION DT 1934 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER** UNKNOWN

SETTING / CONTEXT The well-detailed encased stringer bridge built across 2 tracks is located in a rural, wooded section of the county south of Pennington center. No significant structures or sites are near the bridge, and the surrounding area is dominated by 20th-century residential development.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The custom-detailed 3-span encased stringer bridge designed by NJ State Highway Department Bridge Division is representative of their work with faience tile decoration and identification at the end posts. Its structural type is common for the period. The span is similar to other railroad overpasses in the state. The bridge is neither historically nor technologically distinguished.

INFOR MATION

Bibliography:
NJDOT File: Mercer 1119150.

Physical Description: The 3-span concrete-encased steel stringer bridge is supported by concrete abutments and columns with struts and crash walls. It carries a 2-lane plus shoulder state highway over one active track of the former Reading line that is now used by Conrail. The most distinctive feature of the span is the detailing of the balustrade/parapet. The approach spans have a well-proportioned arcaded concrete balustrade with end plaques while the high center parapet is finished with flat panels with filled corners and faience tile decoration on the end posts or piers. The transition from the balustrades to the parapet is filled with a paneled console. There is loss due to deterioration of the coping.

Historical and Technological Significance: The encased steel stringer bridge was designed by the New Jersey Department of Transportation Division of Bridges in 1927, but it was not built until 1934. It is a good but not unusual example of the nicely detailed steel stringer bridges that are representative of the work of the State Highway Department Bridge Division in the late 1920s and 1930s. It is distinguished by the use of faience tile decoration, a favorite motif of Arthur Lichtenberg, head of the division's architectural section. Such ornament is reasonably common on bridges on major routes in the central part of the state, and similarly detailed overpasses are found in Middlesex County. While it is not known which producer supplied the green tone tiles used on this span, it is probable that they were made in Trenton, a national center of faience tile as well as other ceramic products. The plans specify that whatever tile is used be equivalent "to that manufactured by Mueller Mosaic Co, Trenton, N.J." Other faience tile decoration found around the state includes the state seal and mosaics with nautical themes.

The encased steel stringer bridge is the most common pre-World War II bridge type in New Jersey. Favored for its economy and ease of erection, it came to dominate the state's highways and byways in the decades between the world wars, the period of greatest road improvement in New Jersey. The type as well as the encasing with concrete were promoted by Morris Goodkind (1888-1968), Chief Bridge Engineer from 1925 until 1955.

This bridge is nicely detailed, but it is not so unusual or of such a quality that it merits individual recognition. Other spans with faience tile decoration, like 1810170 and 1209155 are more significant based on type and overall detailing. This bridge is a representative example of the high-quality designs that characterize the work of the division in the decades before World War II.

PHOTO: 6:6-9 (05/91) REVISED BY (DATE): QUAD: Pennington

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1119154 **CO** MERCER **OWNER** NJDOT **MILEPOINT** 9.9

NAME & FEATURE INTERSECTED NJ 31 OVER BRANCH OF STONY BROOK **FACILITY** NJ 31

TOWNSHIP HOPEWELL BOROUGH

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 23 ft **WIDTH** 38.5 ft

CONSTRUCTION DT 1927 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT Located on a busy dual lane divided highway, the area surrounding the bridge is dominated by modern commercial development. The motel on the east side, however, is set on well-landscaped open grounds. The setting is not historic.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The heavily skewed 23'-long box culvert bridge of reinforced concrete is not technologically or historically distinguished. It was built as part of the development of the road as NJ 30, and is typical technology of the period. The bridge has spalling problems. The railing is a modern beam guard rail.

INFOR MATION

PHOTO: 6:14-15 (06/91) REVISED BY (DATE): QUAD: Pennington

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1119156 **CO** MERCER **OWNER** NJDOT **MILEPOINT** 12.23

NAME & FEATURE INTERSECTED NJ 31 OVER BRANCH OF STONY BROOK **FACILITY** NJ 31

TOWNSHIP HOPEWELL TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 37 ft **WIDTH** 40 ft

CONSTRUCTION DT 1929 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge over a small stream is located in a low-density, mixed use development portion of the county. Only two cabins remain at the former tourist court on north side of the bridge, but its well-maintained grounds with a small pond survive. NJ 31 is a state route from Trenton to Warren County via Hunterdon County.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed encased stringer with concrete abutments and wing walls has concrete balustrades. In deteriorating condition, it is not technologically or historically noteworthy. It is an undistinguished example of the most common pre-World War II bridge type in the state. Over forty stringer bridges were built in Mercer County alone.

INFOR MATION

PHOTO: 2:14-15 (05/91) REVISED BY (DATE): QUAD: Pennington

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1123152 **CO** MERCER **OWNER** NJDOT **MILEPOINT** 68.9

NAME & FEATURE INTERSECTED US 130 OVER ROCKY BROOK **FACILITY** US 130

TOWNSHIP EAST WINDSOR TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 57 ft **WIDTH** 90 ft

CONSTRUCTION DT 1936 **ALTERATION DT** 1947 **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located on a busy divided 4-lane highway that is a main north-south route. While the stream passes through a wooded band, much of the former agricultural land on both sides has been redeveloped for commercial use. The road was widened in the late 1940s.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY Originally a 2-lane stringer bridge that carried NJ 25, it was widened in 1947 when the road was dualized. Both sections are encased steel stringers carried on concrete abutments. The same balustrade is used for both sections, and it appears that the 1936 style was copied for the 1947 addition. The bridge is a representative example of the over forty pre-War II stringer spans in the county.

INFOR MATION

PHOTO: 2:24-25 (04/91) REVISED BY (DATE): QUAD: Allentown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1123153 **CO** MERCER **OWNER** NJDOT **MILEPOINT** 70.0

NAME & FEATURE INTERSECTED US 130 OVER MILLSTONE RIVER **FACILITY** US 130

TOWNSHIP EAST WINDSOR TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 55 ft **WIDTH** 90.7 ft

CONSTRUCTION DT 1936 **ALTERATION DT** 1947 **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT **BUILDER**

SETTING / CONTEXT The bridge, in a wooded setting, is located on busy US 130, a divided 4- and 6-lane highway between Camden and New Brunswick. It crosses the Millstone River that separates Mercer and Middlesex counties. The road was originally designated Route 25 in the 1927 highway expansion.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased stringer bridge with a concrete balustrade is supported on concrete abutments. It was built in two sections. The west side dates to 1936 while the east side was built when the roadway was dualized in 1947. The original concrete balustrade was reproduced for the 1947 addition. The bridge is not technologically nor historically significant. Over 300 stringer bridges of this style survive on state highways throughout New Jersey.

INFOR MATION

PHOTO: 6:37-40 (05/91) REVISED BY (DATE): QUAD: Hightstown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1125150 **CO** MERCER **OWNER** NJDOT **MILEPOINT** 0.14

NAME & FEATURE INTERSECTED NJ 156 OVER DOCTOR'S CREEK **FACILITY** NJ 156

TOWNSHIP HAMILTON TOWNSHIP (YARDVILLE)

TYPE THRU GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 54 ft **WIDTH** 29.7 ft

CONSTRUCTION DT 1914 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT MERCER COUNTY ENGINEERS OFF. **BUILDER** UNKNOWN

SETTING / CONTEXT The girder carries a 2-lane road formerly designated NJ 25 over a small stream on the south side of the village of Yardville. It is not located in the village center. The road carried the primary route from New Brunswick to Camden through Yardville until the US 130 bypass was completed in 1952. The bridge marks the southern edge of residential development in the area.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 11/22/91

SUMMARY The partially encased built-up thru girder with floor beams bridge is supported by concrete abutments. The pipe railing is shown on the only surviving drawing of the bridge. While the bridge is a relatively early highway-carrying application of built-up girders, the bridge type was developed in the 1850s. Technologically the span is not innovative or distinctive. Its historical significance is derived from its date of construction.

INFOR MATION

PHOTO: 2:37-38 (04/91) REVISED BY (DATE): QUAD: Trenton East

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1129150 **CO** MERCER **OWNER** NJDOT **MILEPOINT** 45.66

NAME & FEATURE INTERSECTED US 206 OVER SHABAKUNK CREEK **FACILITY** US 206

TOWNSHIP LAWRENCE TOWNSHIP

TYPE THRU GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 56 ft **WIDTH** 30 ft

CONSTRUCTION DT 1924 **ALTERATION DT** Demolished **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located on a busy 2-lane north-south highway in an area of mid-20th century detached housing. It crosses a small stream. Old bridge abutments are visible to the east. A historical marker notes that Col. Hand posted troops at the site on January 2, 1777 and thus delayed the second battle of Trenton.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased thru girder with floor beams bridge with concrete abutments and end posts is one of several from the 1910s and 1920s in the county. The sidewalk with a metal railing on the west side appears to the a mid-20th century addition. The bridge is not historically or technologically distinguished. The road itself was designated Route 13, one of the 15 original state highways created by the new State Highway Commission in 1917.

INFOR MATION

PHOTO: 5:37-38 (05/91) REVISED BY (DATE): QUAD: Princeton

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1129151 **CO** MERCER **OWNER** NJDOT **MILEPOINT** 45.63

NAME & FEATURE INTERSECTED US 206 OVER LITTLE SHABAKUNK CREEK **FACILITY** US 206

TOWNSHIP LAWRENCE TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 36 ft **WIDTH** 30 ft

CONSTRUCTION DT 1924 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge over a small stream is located on an arterial 2-lane road that passes through a mid-20th century residential area. The setting is not historic.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased stringer bridge on concrete abutments is a representative example of the most common pre-World War II bridge type in the state. Its balustrade has been modified by the addition of modern beam guard rails. The bridge is technologically and architecturally undistinguished, and it is one of over forty stringer bridges built before 1942 in Mercer County.

INFOR MATION

PHOTO: 7:37-38 (05/91) REVISED BY (DATE): QUAD: Princeton

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1129153 **CO** MERCER **OWNER** NJDOT **MILEPOINT** 50.4

NAME & FEATURE INTERSECTED US 206 OVER SHIPETAUKIN CREEK **FACILITY** US 206

TOWNSHIP LAWRENCE TOWNSHIP

TYPE ARCH **DESIGN** DECK **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 59 ft **WIDTH** 40 ft

CONSTRUCTION DT 1923 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT Built as part of the state's 1920s realignment of the historic road from Philadelphia to New York, the bridge over a small stream is located in a residential area of both old farm houses and some recent development. Its immediate surroundings are wooded. The bridge was designed to conform with the historic character of the Princeton area. It is just north and in full view of the Fackler Road pony truss bridge (1154319). This span was built to bypass Fackler Road.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The stone-veneer reinforced concrete deck arch bridge with a parapet was built in 1923 as part of the improvement of Route 13. The bridge is well proportioned, and the rubble stone veneer, excluded from the underside of the arch, provides a nice design detail that corresponds to the nearby ca. 1800 stone arch, on the same road. This bridge is not technologically or historically distinguished. It is a custom bridge that reflects the historic character and affluence of the Princeton area.

INFOR MATION

PHOTO: 6:35, 37 (05/91) REVISED BY (DATE): QUAD: Princeton

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1129154 **CO** MERCER **OWNER** NJDOT **MILEPOINT** 52.6

NAME & FEATURE INTERSECTED US 206 OVER STONY BROOK FLOOD CHANNEL **FACILITY** US 206

TOWNSHIP PRINCETON TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 71 ft **WIDTH** 30 ft

CONSTRUCTION DT 1924 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge over a flood plain is adjacent to and serves as an approach span for the historic stone 1792 stone arch on busy US 206, an 18th-century road now designated as a federal route. The 2-lane road is heavily trafficked.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Listed. Princeton Battlefield / Stony Brook Village Historic District 10/15/1966, amended 11/21/1979 10/10/1989. Noncontributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY Although it is adjacent to an eligible resource, this structure, a 1924 encased steel stringer set on what appears to be earlier ashlar piers and contemporary concrete cap, has no historical or technological merit of its own. Stylistically it is dissimilar from the historic span it adjoins. In deteriorating condition, it is one of over forty stringer bridges built in the County before 1942. It is technologically and historically undistinguished, and is outside district period of significance.

INFOR MATION

PHOTO: 7:2-2 (05/91) REVISED BY (DATE): QUAD: Princeton

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1129155 **CO** MERCER **OWNER** NJDOT **MILEPOINT** 52.53

NAME & FEATURE INTERSECTED US 206 OVER STONY BROOK **FACILITY** US 206

TOWNSHIP PRINCETON TOWNSHIP

TYPE STONE ARCH **DESIGN** BARREL **MATERIAL** Stone

 # SPANS 3 **LENGTH** 82 ft **WIDTH** 30 ft

CONSTRUCTION DT 1792 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The stone bridge is located on the historic right of way of the Kings Highway, the main 18th-century road between New York and Philadelphia. On the southwest edge of Princeton Township over a stream on a heavily traveled 2-lane road, it is now part of the federal highway system. The west side of the bridge abutted a non-extant stone mill. A modern stringer bridge (1129154) over the flood plain is now contiguous to the west side.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Individually Eligible. Listed. Princeton Battlefield / Stony Brook Village Historic District 10/15/1966, amended 11/21/1979 10/10/1989. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The well-proportioned 3-span rubble-coursed stone arch has ring stones and a low stone parapet. One of several ca. 1800 stone arch bridges, it is a large and impressive example of late-18th century engineering. The bridge is located in the Princeton Battlefield/Stony Brook Village District Extension (1989), but it is not rated. It was built within the period of significance of the district and should be considered a contributing resource based on its age, structural type, and history.

INFOR MATION

Bibliography:

"Princeton Battlefield/Stony Brook Village Historic District Extension" National Register Nomination. 1972, 1977. NJHPO.

Physical Description: The handsome rubble-coursed fieldstone arch bridge spans meandering Stony Brook on the western edge of Princeton. It carries heavily traveled two-lane US 206. The three-arch span has the largest opening in the middle with slightly smaller flanking arches. All have a ring stone band with no defined keystone. The bridge was built with a slight rise and has solid stone parapets. It has been widened, and the intrados have been covered with a shotcrete material. While the 82'-long bridge has no doubt been rebuilt over the years, the work has been in such a manner as to perpetuate the original scheme.

Historical and Technological Significance: The impressive 3-span barrel arch stone bridge was constructed in 1792, according to its plaque, on what was the main road (formerly known as the Kings Highway) from Philadelphia to New York. The bridge is one of three 1790-1810 multi-span stone arches in the vicinity, with the one across the Millstone River at Kingston being longer (four spans) and better preserved.

Stone arches represent a significant advancement in regional development for the bridge type reflects the progress and prosperity of the region. Due in large part to the quality of construction and the longevity of the technology (early bridges were frequently widened rather than replaced), a good number of late-18th and early-19th century stone arches survive in the state. The US 206 bridge is a representative example of that type, and as such is an important element in the historical development of the Princeton area. It is also a contributing resource in the Stony Brook Village Historic District.

Boundary Description and Justification: The bridge is located within a listed historic district, so the span and the surrounding acreage is evaluated as significant. Please refer to the map on file with the 1989 National Register nomination for the exact district boundary.

PHOTO: 7:4-5 (05/91) REVISED BY (DATE): QUAD: Princeton

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1131158 **CO** MERCER **OWNER** NJDOT **MILEPOINT** 3.95

NAME & FEATURE INTERSECTED MEMORIAL DRIVE OVER ASSUNPINK CREEK **FACILITY** MEMORIAL DRIVE

TOWNSHIP TRENTON CITY

TYPE RIGID FRAME **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 54 ft **WIDTH** 38.2 ft

CONSTRUCTION DT 1940 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT H. KERSEY, CO BRIDGE ENGINEER **BUILDER** JOS. JINGOLI, TRENTON

SETTING / CONTEXT In the middle of the John Fitch Redevelopment Project in downtown Trenton, the bridge is on the river side of the War Memorial Building. It links John Fitch Parkway (NJ 29) with Memorial Drive and Lafayette Boulevard. It is also adjacent to the park along the Delaware River. The area south of the bridge is dominated by undistinguished large modern office buildings.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY Built in 1940 to ease traffic congestion in the center of Trenton, the well-detailed rigid frame bridge was designed by Harry Kersey to blend with the War Memorial building. Finished with glazed ceramic tile decorations and a geometric balustrade, the span is an example of the City Beautiful movement-inspired project. Rigid frame bridges are a common structural type in the 1920s and 1930s, and while not well represented in Mercer County, they are throughout the southern half of the state.

INFOR MATION

PHOTO: 1:26-27 (05/91) REVISED BY (DATE): QUAD: Trenton West

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1149160 **CO** MERCER **OWNER** RAILROAD **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CENTER STREET OVER AMTRAK **FACILITY** CENTER STREET

TOWNSHIP TRENTON CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 68 ft **WIDTH** 40 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The inaccessible bridge carries two lanes and sidewalks over Amtrak's electrified line (Northeast Corridor) in a late-19th century residential area of the city. The area is dominated by 2- and 3-story row houses. The rail right-of-way is a brownstone retaining wall-lined undercut. A high concrete sidewalk protective barrier blocks any view of the railroad from the bridge.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY Although located over the historic right of way of the Camden & Amboy, the first line in the state to connect Philadelphia with New York City, the bridge is not significant. It is a rolled I beam stringer with a 7' high concrete parapet supported on ashlar abutments that continue as the retaining wall lining the roadway. The bridge is not historically or technologically distinguished, and it is of newer construction than the surrounding neighborhood.

INFOR MATION

PHOTO: 5:32 (05/91) REVISED BY (DATE): QUAD: Trenton West

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1149161 **CO** MERCER **OWNER** RAILROAD **MILEPOINT** 42.33

NAME & FEATURE INTERSECTED SOUTH BROAD STREET (US 206) OVER AMTRAK (CAMDEN & AMBOY) **FACILITY** SOUTH BROAD STREET (US 206)

TOWNSHIP TRENTON CITY

TYPE DECK PLATE GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 70 ft **WIDTH** 30 ft

CONSTRUCTION DT 1942 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge is located in the center of Trenton and carries a 4-lane plus sidewalks main street over 4 tracks of Amtrak's Northeast Corridor, electrified through the area in 1933. The street has been extensively redeveloped, so there is no NR district potential. The bridge is also of later construction than any historic buildings in the area. The undercut right-of-way is lined with a brownstone retaining wall. The bridge crosses the 1860s realignment of the Camden & Amboy RR.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span deck plate girder overpass is supported on ashlar seats and abutments that are part of the continuous brownstone retaining wall that lines the depressed road bed. A high plain concrete parapet encloses the sidewalks, and it has been reinforced (made deeper) on the inner face. The bridge is technologically undistinguished and the setting has lost its historic significance through redevelopment.

INFOR MATION

PHOTO: 5:4-5 (06/90) REVISED BY (DATE): QUAD: Trenton West

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1149162 **CO** MERCER **OWNER** RAILROAD **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED SOUTH CLINTON AVENUE OVER AMTRAK **FACILITY** SOUTH CLINTON AVENUE

TOWNSHIP TRENTON CITY

TYPE THRU TRUSS **DESIGN** DOUBLE INTERSECTION PRATT **MATERIAL** Steel

 # SPANS 1 **LENGTH** 118 ft **WIDTH** 24 ft

CONSTRUCTION DT 1891 **ALTERATION DT** 1981 **SOURCE** PLANS

DESIGNER/PATENT PENNSYLVANIA RR OFFICE OF ENG **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in downtown Trenton and carries a 2-lane street over the main electrified line of Amtrak's Northeast Corridor. The depressed right-of-way has a brownstone ashlar retaining wall. The west end of the bridge rests on the 1869 stone arch across Assunpink Creek. The bridge is in full sight of the Pennsylvania Railroad's Trenton passenger terminal (now NJT). Surrounding area has been cleared and/or redeveloped.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The heavily skewed pin-connected double-intersection Pratt thru truss is a rare example of an unusual type. It stands in well preserved condition although a modern aluminum curb barrier covers the lower portion of the truss. The bridge was rehabilitated in 1981. In addition to its engineering significance, it is part of the historic transportation networks in Trenton, a town that grew because of and in response to transportation systems.

INFOR MATION

Bibliography:
Sanborn Insurance Maps, 1890-1923.
A. G. Lichtenstein Project File.

Physical Description: The 10 panel pin-connected double intersection Pratt skewed thru truss bridge is a half hip with the inclined end post and top chord composed of steel channels and plates. Deep trusses designed for heavy live loads, the bridge has upper and lower lattice sway bracing. Laced channels make up the verticals, and the diagonals are bar stock while the counters are rods. The bridge was strengthened in 1981 by post tensioning the trusses with cables. New stringers and wearing surface were also installed as was an aluminum safety shape barrier, attached to the flooring system, not the trusses. The remedial work is not intrusive. The bridge is supported on ashlar abutments that predate the present span. The northeast side bearings rest on the 1869 stone arch that crosses Assunpink Creek.

Historical and Technological Significance: The well-preserved skewed Pratt thru truss bridge was built in 1891 (fabricator unknown) after plans developed by the Pennsylvania Railroad's Office of the Chief Engineer (William H. Brown). It stands as a good example of late-19th century pin-connected metal truss technology and a truss type (double intersection Pratt or Whipple) that is not common. The truss type as well as its depth reflect the anticipated loading the bridge needed to support. Using the 1869 2-span stone arch at its northeast end as its seat, the truss bridge and the stone arch work in tandem to carry a local street over four tracks of the former Pennsylvania Railroad (Amtrak's main electrified line) and the channeled creek the tracks parallel. The pair represent the two dominant bridge technologies of the 19th century and as such are an important record of 19th-century technology.

The truss bridge was apparently installed when the Pennsylvania Railroad four-tracked its main line through Trenton. The right-of-way was established in 1862 when the Camden & Amboy Railroad (absorbed by the Pennsylvania system in 1871) realigned and thus straightened its route through the city. At that time the station was moved to S. Clinton Street. What type of structures serviced the crossing of the tracks and creek prior to 1869 are not known. Assunpink Creek originally crossed under the tracks between the vehicular bridge and the station. The creek was realigned in its present configuration prior to 1891.

A. G. Lichtenstein and Associates prepared bridge rehabilitation plans for NJDOT in 1979, and the work was done in 1981. The aluminum safety shape protects the lower portion of the trusses and the pin connections (not visible but still in place). Any replacement of original/early members was done in kind.

Boundary Description and Justification: The bridge is individually eligible, as is the contiguous stone arch bridge (1100052) that forms the north abutment of this bridge. The two bridges together form one resource that works in tandem to cross the creek and the railroad tracks that parallel the creek. The stone bridge was modified to accommodate the erection of the metal truss bridge. The metal truss bridge was built as part of the Pennsylvania Railroad's improvements of the station and right-of-way, but the setting has been changed greatly with the removal of the historic stations and surrounding buildings. thus, the historic boundary is limited to the substructure and superstructure of the metal truss and stone arch bridges.

PHOTO: 4:39-40 (05/91) REVISED BY (DATE): QUAD: Trenton West

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1149163 **CO** MERCER **OWNER** UNKNOWN **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CHESTNUT STREET OVER AMTRAK **FACILITY** CHESTNUT STREET

TOWNSHIP TRENTON CITY

TYPE THRU GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 125 ft **WIDTH** 26 ft

CONSTRUCTION DT 1911 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT **BUILDER** SCHUYLKILL BRIDGE CO.

SETTING / CONTEXT The overpass carries a 2-lane local street over 4 tracks of Amtrak's electrified Northeast Corridor in a mixed use urban setting. The historic character and thus potential NR district status has been lost due to urban renewal and alterations to the original buildings. The railroad line is the Camden & Amboy's 1860 realignment that passes through western Trenton on a depressed right-of-way. The line became part of the Pennsylvania Railroad system.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased 3-span thru girder bridge with paneled concrete parapets at the sidewalks is supported on ashlar abutments and concrete columns atop ashlar plinths. The stonework appears to date from an earlier span. A plain concrete extension has been added to the parapet. The bridge is one of 3 similar thru girder overpasses built in 1911 in Trenton by the PA RR. Each is a technologically and historically undistinguished example of a common bridge. The grade crossing was eliminated about 1871.

INFOR MATION

PHOTO: 4:39-41 (05/91) REVISED BY (DATE): QUAD: Trenton West

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1149164 **CO** MERCER **OWNER** RAILROAD **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED EAST STATE STREET OVER AMTRAK **FACILITY** EAST STATE STREET

TOWNSHIP TRENTON CITY

TYPE THRU GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 154 ft **WIDTH** 43 ft

CONSTRUCTION DT 1911 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT UNKNOWN **BUILDER** CAMBRIA STEEL STRUCT. DEPT

SETTING / CONTEXT The overpass carries a 2-lane street over Amtrak's Northeast Corridor in a late-19th century urban area that has suffered from neglect and renewal. Consequently the area does not have the concentration of unaltered resources to make it a potential NR district. The east side of the 2-section bridge is contiguous to the intersection of E. State and Monmouth streets, and each street is carried on a separate section of the bridge which has been given 2 structure numbers by the county.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY Built in conjunction with the contiguous Monmouth St. overpass, the skewed 3-span encased thru girder bridge is supported on ashlar abutments and concrete columns on ashlar plinths. The paneled concrete parapets at the sidewalks have plain concrete extensions. The grade crossing was eliminated about 1871, and the support stonework appears to date from a previous span. The historically and technologically undistinguished bridge is one of 3 similar 1911 spans over the PA RR line in the area.

INFOR MATION

PHOTO: 4:39-41 (05/91) REVISED BY (DATE): QUAD: Trenton West

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1149165 **CO** MERCER **OWNER** RAILROAD **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MONMOUTH STREET OVER AMTRAK **FACILITY** MONMOUTH STREET

TOWNSHIP TRENTON CITY

TYPE THRU GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 121 ft **WIDTH** 26 ft

CONSTRUCTION DT 1911 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** CAMBRIA STEEL STRUCT. DEPT

SETTING / CONTEXT The railroad overpass is located in a late-19th and early-20th century mixed use neighborhood in the center of Trenton. It is a 2-section structure carrying Monmouth Street over 5 tracks at its intersection with E. State St. The trackage is Amtrak's electrified Northeast Corridor. The area surrounding the bridge is primarily late-19th century workers housing, but it does not possess the integrity of design necessary for a National Register district.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The partially encased 3-span thru girder bridge with floor beams is supported on ashlar abutments and concrete columns on ashlar plinths. The original paneled concrete parapet at the cantilevered sidewalks has been raised by a plain concrete extension. The Monmouth St. grade crossing was eliminated before 1872, and it appears that the support stonework is from an earlier span. The technologically and historically undistinguished bridge is 1 of 3 similar overpasses over the line in Trenton.

INFOR MATION

PHOTO: 4:43-44 (05/91) REVISED BY (DATE): QUAD: Trenton West

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1149167 **CO** MERCER **OWNER** RAILROAD **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED NORTH OLDEN AVENUE OVER AMTRAK **FACILITY** NORTH OLDEN AVENUE

TOWNSHIP TRENTON CITY

TYPE THRU GIRDER **DESIGN** BUILT UP **MATERIAL** Steel

 # SPANS 1 **LENGTH** 110 ft **WIDTH** 30 ft

CONSTRUCTION DT 1923 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in the transition area from residential Chambersburg to the industrial section that paralleled Assunpink Creek on the northeast side of Trenton. It carries a 2-lane collector road over 5 tracks and a spur of Amtrak's Northeast Corridor. The bridge is north of the former railroad yard. No noteworthy structures are next to the bridge.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The deep built up thru girder with floor beams and stiffeners is supported on earlier ashlar abutments that have been reinforced and augmented with reinforced concrete. The bridge was built with a camber, and the Belgium paver block wearing surface is original. Any original railing/parapet has been removed and replaced by a modern corrugated fence secured by brackets. The bridge is a representative example of the most common overpass type in the state, and it is not noteworthy.

INFOR MATION

PHOTO: 5:33-34 (05/91) REVISED BY (DATE): QUAD: Trenton West

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1149168 **CO** MERCER **OWNER** NJDOT **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WHITEHEAD ROAD OVER AMTRAK **FACILITY** WHITEHEAD ROAD

TOWNSHIP HAMILTON TOWNSHIP

TYPE THRU GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 3 **LENGTH** 273 ft **WIDTH** 25 ft

CONSTRUCTION DT 1917 **ALTERATION DT** Demolished **SOURCE** PLAQUE

DESIGNER/PATENT **BUILDER** AMERICAN BRIDGE COMPANY

SETTING / CONTEXT The bridge carries a 2-lane collector road over the electrified line of Amtrak's Northeast Corridor. The surrounding development is composed of primarily mid-20th century industrial processing and warehouse structures. The right-of-way was developed as the realigned route of the Camden & Amboy which was acquired by the Pennsylvania Railroad in 1871. Three electrified lines and one spur remain in service.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Bridge was Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed 3-span thru girder with floor beams bridge with bullnose ends is supported by concrete abutments and built-up columns on concrete plinths. The cantilevered sidewalk, one side only, has a metal railing. The thru girder, favored for its rigidity, is the most common railroad overpass type in the state. The bridge is not technologically innovative nor is it in a historic setting.

INFOR MATION

PHOTO: 5:35-36 (05/91) REVISED BY (DATE): QUAD: Trenton East

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1149173 **CO** MERCER **OWNER** RAILROAD **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED ALEXANDER ROAD OVER AMTRAK **FACILITY** ALEXANDER ROAD

TOWNSHIP WEST WINDSOR TOWNSHIP (PRINCETON JUNCTION

TYPE THRU GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 3 **LENGTH** 146 ft **WIDTH** 20 ft

CONSTRUCTION DT 1941 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge carries a 2-lane local street over the main Amtrak line on the north side of Princeton Junction. It is far enough away from the concentration of houses that it is not an element in the village streetscape. The station at Princeton Junction is of modern construction and thus not historic.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 3-span bridge consists of rolled I beam approaches and a main thru girder span where the built-up girder with a metal barrier fixed to the top flange of the each girder. The spans are supported on concrete abutments and bents with longitudinal beams. The bridge is a representative example of a common type and is not technologically or historically noteworthy.

INFOR MATION

PHOTO: 7:20,106:18-20 (05/91) REVISED BY (DATE): QUAD: Princeton

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1150159 **CO** MERCER **OWNER** UNKNOWN **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 546 OVER NY BRANCH RAILROAD **FACILITY** CR 546

TOWNSHIP HOPEWELL TOWNSHIP

TYPE THRU GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 128 ft **WIDTH** 36 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT **BUILDER** PHOENIX BRIDGE COMPANY

SETTING / CONTEXT The 3-span bridge carries a wide county road over one active line of the former Delaware and Bound Brook railroad line. It later became part of the Reading system. The bridge is located in a rural portion of the county that is being redeveloped for residential use.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 3-span overpass is composed of a partially encased thru girder main span and deck girder approaches. The concrete parapets and piers have more detailing than many other railroad overpasses in the vicinity, but the superstructure itself is just a representative example of common period technology. The Phoenix Bridge Co. was a major fabricator of girders, and their work is well represented throughout the state. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 6:10-11 (05/91) REVISED BY (DATE): QUAD: Pennington

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1150160 **CO** MERCER **OWNER** UNKNOWN **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED DELAWARE AVENUE OVER NEW YORK BRANCH **FACILITY** DELAWARE AVENUE

TOWNSHIP PENNINGTON BOROUGH

TYPE STRINGER **DESIGN** **MATERIAL** Wood

 # SPANS 3 **LENGTH** 78 ft **WIDTH** 30 ft

CONSTRUCTION DT 1914 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in the 19th-century borough of Pennington adjacent to the campus of the private Pennington School and agricultural land. It crosses one track of the former Delaware and Bound Brook Railroad now operated by Conrail. The setting is not historic.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 3-span wood stringer bridge with a wood railing is supported on braced timber pile bents on concrete plinths and composite stone and concrete abutments. The patina and condition of the wood as well as the use of galvanized bolts suggest that the span has been extensively rebuilt with in kind material. Its supports have also been reinforced with modern material. The bridge is a representative example of a bridge type used since the 18th century. The bridge is not innovative or historic.

INFOR MATION

PHOTO: 6:4-5 (05/91) REVISED BY (DATE): QUAD: Pennington

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1150161 **CO** MERCER **OWNER** UNKNOWN **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MAIN STREET OVER NEW YORK BRANCH **FACILITY** MAIN STREET

TOWNSHIP PENNINGTON BOROUGH

TYPE STRINGER **DESIGN** **MATERIAL** Wood

 # SPANS 3 **LENGTH** 78 ft **WIDTH** 22.5 ft

CONSTRUCTION DT 1920 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge is located on a sharp curve at the north end of Main St. on the edge of Pennington. It is next to a feed processing plant. The area north of the bridge is a mix of residential and agricultural land use. The bridge is not close enough to the center of Pennington to be considered part of any historic district.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 3-span wooden stinger bridge supported on wood braced pile bents and ashlar abutments has a timber deck. The patina and condition of the wood as well as the number of galvanized bolts suggest that the bridge is extensively rebuilt with in kind material. The bridge is technologically and historically undistinguished and is representative example of a bridge type developed in the 18th century and still used today. It is one of two wood stringer overpasses in Pennington. Neither is eligible.

INFOR MATION

PHOTO: 6:12-13 (05/91) REVISED BY (DATE): QUAD: Pennington

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1150162 **CO** MERCER **OWNER** NJDOT **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED VAN DYKE ROAD OVER NEW YORK BRANCH **FACILITY** VAN DYKE ROAD

TOWNSHIP HOPEWELL TOWNSHIP

TYPE THRU GIRDER **DESIGN** BUILT UP **MATERIAL** Steel

 # SPANS 1 **LENGTH** 70 ft **WIDTH** 24 ft

CONSTRUCTION DT 1918 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT **BUILDER** PHOENIX BRIDGE COMPANY.

SETTING / CONTEXT The bridge carries a 2-lane road over a single track over the former Reading line. Originally agricultural land, the area is being redeveloped as an affluent residential area. It is curious that a steel girder bridge would have been located in such a rural setting in 1916. The two parallel overpasses to the south are timber stringers, the bridge type more commonly located in rural areas.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The partially encased cambered thru plate girder with floor beams bridge is supported on deteriorating concrete abutments with wing walls. The substructure is finished with scored channels. The bridge is not an innovative design and is a representative example of a common overpass type. It crosses the former Philadelphia & Reading line which was initially built as the Delaware and Bound Brook Railroad and is now ConRail's New York Branch.

INFOR MATION

PHOTO: 6:27 (05/91) REVISED BY (DATE): QUAD: Hopewell

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1150163 **CO** MERCER **OWNER** UNKNOWN **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED GREENWOOD AVENUE OVER NEW YORK BRANCH **FACILITY** GREENWOOD AVENUE

TOWNSHIP HOPEWELL BOROUGH

TYPE THRU GIRDER **DESIGN** PARTIALLY ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 71 ft **WIDTH** 24 ft

CONSTRUCTION DT 1918 **ALTERATION DT** 1998 **SOURCE** PLAQUE

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The overpass is located in an architecturally significant late-19th century residential area in full view of the 1876 Hopewell railroad station that was listed in the National Register as part of the 6/22/84 thematic station nomination. The bridge, located to the north of the station, was not part of the nomination. Originally crossing at least two tracks, only one track remains. The overpass contributes to the historic character of the area.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible. Potential Historic District. May contribute.

CONSULT DOCUMENTS SHPO Letter 03/12/01

SUMMARY The partially encased thru girder bridge with floor beams is supported on concrete abutments and is just north of the National Register-listed Hopewell Railroad station. In addition to the original lattice railing, the concrete jack arches between the floor beams and blocks for blast plates survive. The bridge is an integral part of the station development and its years of operation, and is individually eligible for listing in the National Register of Historic Places under Criteria A and C. Additionally, it is considered a contributing resource to a turn-of-the-century residential area with NR district potential.

INFOR MATION

Bibliography:
Lee, Warren. Down Along the Old Bel-Del. 1987.

Physical Description: The partially encased built up deck plate thru girder bridge on reinforced concrete abutments is well preserved and carries a 2-lane street over two tracks (only one remains). It is just north of the 1876 Hopewell station. The original lattice railing survives on the cantilevered sidewalks. No modern pedestrian protection barrier has been installed. The underside of the bridge is encased, and concrete jack arches are used between some floor beams while others have the concrete panels to which the blast plates were attached. The tie rods running between the stringers are also encased in concrete. The encasing is deteriorating. The girder is constructed of Pencoyd steel.

Historical and Technological Significance: The well-preserved deck plate thru girder overpass is located in a architecturally distinguished late-19th century residential area that appears to have National Register district potential. It is also located just north of the well-preserved 1876 Hopewell station that was listed in the 1984 thematic Operating Passenger Railroad Stations National Register nomination. Although the 1918 bridge was erected by the American Bridge Company after the station and most of the homes were constructed, the span does fall within the period of significance of the station (operating in 1984) and perhaps the neighborhood itself. The bridge is thus an eligible resource because of its historic association with the 1876 station, its location in a well-preserved, architecturally significant residential district, and its contribution to the historical development of that neighborhood. It is also a good representative example of a structural type that was commonly used for railroad overpasses in the early to middle 20th century. The jack arch strengthening and encasing was used by the Reading Railroad, builder of the bridge, on their 1918 Bridge Street Warren thru truss span in Manville (Somerset County, 1850167).

The overpass is one of the few in the county to survive with its original railings intact. Their Eastlake style contributes to the historic character of the streetscape.

PHOTO: 9:19A-22A (08/91 MEM (5/96)) REVISED BY (DATE): QUAD: Hopewell

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1151161 **CO** MERCER **OWNER** UNKNOWN **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CALHOUN STREET OVER BEL-DEL BRANCH (ABANDONED) **FACILITY** CALHOUN STREET

TOWNSHIP TRENTON CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 47 ft **WIDTH** 33.1 ft

CONSTRUCTION DT 1925 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge is located over an abandoned railroad right-of-way near in an urban area near the capitol complex. Some of the original brick pavers survive.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 11/29/90

SUMMARY The encased stringer bridge with a plain concrete balustrade is not historically or technologically significant. The ashlar abutments are earlier than the span. The bridge was determined by the SHPO to be neither historically or technologically significant. It crosses the Belvidere Delaware RR, a subsidiary of the Camden & Amboy built parallel to the canal in the 1850s. The line became part of Conrail in 1977 and was abandoned in 1979.

INFOR MATION

PHOTO: 4:21-22 (05/91) REVISED BY (DATE): QUAD: Trenton West

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1151162 **CO** MERCER **OWNER** UNKNOWN **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PROSPECT STREET OVER BEL-DEL BRANCH (ABANDONED) **FACILITY** PROSPECT STREET (CR 627)

TOWNSHIP TRENTON CITY

TYPE THRU GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 35 ft **WIDTH** 33.5 ft

CONSTRUCTION DT 1913 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane local street over the abandoned right-of-way of the former Belvidere-Delaware Railroad, a line built as a subsidiary of Camden & Amboy in the 1850s. It is located in a once-distinguished late-19th century residential area, but there are alterations to most of the structures. The undercut right-of-way is poorly maintained.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The short encased single-span thru girder with floor beams is supported on scored concrete abutments with wing walls. The cantilevered sidewalks have paneled concrete parapets. The bridge is technologically and historically undistinguished and is a representative example of a common structural type. The rail line, which ran through Lambertville to Phillipsburg and beyond, crossed at grade until after 1890.

INFOR MATION

PHOTO: 3:12A-13 (05/91) REVISED BY (DATE): QUAD: Trenton West

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1154319 **CO** MERCER **OWNER** COUNTY **MILEPOINT** 0.0
NAME & FEATURE INTERSECTED FACKLER ROAD OVER SHIPETAUKIN CREEK **FACILITY** FACKLER ROAD (CR 569) 543.19
TOWNSHIP LAWRENCE TOWNSHIP
TYPE PONY TRUSS **DESIGN** PRATT **MATERIAL** Steel
 # SPANS 1 **LENGTH** 53 ft **WIDTH** 22.6 ft

CONSTRUCTION DT 1896 **ALTERATION DT** **SOURCE** COUNTY RECORDS
DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT Located immediately south of the 1930s realignment of US 206 on a section of the former Lincoln Highway, the bridge is now separated from the newer span, which carries US 206, by a wooded island. The surrounding area is dominated by scattered period homes. The span is located in a high traffic area on the old Lincoln Highway also known historically as the Lawrenceville-Princeton Road.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No
CONSULT STATUS Individually Eligible.
CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 4-panel pin connected Pratt pony truss is one of several that survive in Mercer County. It is a representative example of a once-common type that has increased in value since many have been lost. No plans survive to document the fabricator or designer. The bridge appears to have no distinctive details, but the 26" deep floor beams are unusual and may be that size because of the width of the bridge. The ashlar abutments are original. It is significant for its historical associations and type.

INFORMATION

Bibliography:
Mercer County Engineers Office. Transfer File # 543.19.
Hokanson, Drake. The Lincoln Highway: Main Street to America. University of Iowa Press, 1988.

Physical Description: The 4-panel pin-connected Pratt pony truss appears to survive in reasonably complete condition despite its location at a heavily traveled intersection adjacent to US 206 and the number of times it has been damaged from impact. The approaches are sharp curves in both directions. The top chord and inclined end posts, severely buckled in places, are built-up box members with battens on the underside while the verticals are back to back angles joined by lacing. Double eyebars form the diagonals, and rods with forged loops are used for the counters. U-hangers carry the built-up 26'-deep floor beams, which appear to be original, but the stringers that carry the plank deck are post-1954. Lateral bracing is connected to a pinnel on the floor beam. The original pipe railing survives on the south side only. A modern beam guide rail has been added to the upstream side. The bridge does not appear to possess any noteworthy components. Outrigger braces have been added. The bridge rests on ashlar abutments.

Historical and Technological Significance: The light pin-connected Pratt pony truss was built in 1896, and it is significant as the sole survivor in the county of a full hip pin-connected pony truss bridge and for its historical association with the Lincoln Highway (Criterion A, C). It is located on the Old Princeton-Lawrenceville Road, now known as Fackler Road, that was part of the Lincoln Highway, an early attempt to establish a national coast-to-coast route. Although the bridge was not built as part of the development of the Lincoln Highway, it is evocative of the bridge types in use when the highway was its heyday. The fabricator of the bridge is not recorded in the Mercer County Engineer's records, and a plaque shown on the top cord in a 1953 photograph is gone. The only surviving plan of the structure is for the ashlar abutments, and it was prepared in 1896 by R.B. Budd, Engineer. The bridge, however, appears to survive in fairly original albeit battered condition. It is the only example of a pin-connected full hip Pratt pony truss in the county. The two other pin-connected Pratt pony trusses in Mercer County are the half-hip form. The full hip is less common configuration.

A coast-to-coast rock highway was the dream of Carl G. Fisher, president of the Prest-O-Lite Company, manufacturer of carbide headlights and founder of the Indianapolis Motor Speedway. In 1912, he promoted the idea of a privately financed cross-country improved road with car manufacturers. It was Henry R. Joy, president of the Packard Motor Car Company who came up with the suggestion to name the route in honor of Abraham Lincoln. In an era when there were few improved roads outside of congested areas, the concept of a paved interstate road caught on quickly, and contributions from companies and private individuals poured into the Lincoln Highway Association's office in Detroit. One prominent non-supporter was Henry Ford, who believed that good roads were a public responsibility. His lack of support was critical, and by 1914, it was apparent to the leadership that the goal of 10 million dollars to build the Lincoln Highway would never be realized.

The association's efforts were thus directed to marking the route, which was composed of existing roads like the section of the Old Princeton-Lawrenceville Road. The Lincoln Highway, one of several memorial highways of its day, was to link New York with San Francisco, and the selected route passed through twelve states. Most of the highway in New Jersey was along the old Kings Highway, coming across from Elizabeth to Princeton, and then down to Trenton, cross the Calhoun Street Bridge, and then on to Oxford Valley and Langhorne. To encourage locally funded improvements of the route, the association, like the federal Bureau of Public Roads and some state highway departments, built short sections of concrete roadway to serve as object lessons on the benefit and construction technique of a permanent roadway.

With the passage of the 1921 Federal highway Act and its funding of a "connected system of highways, interstate in character," the need for privately promoted coast-to-coast route was no longer as urgent. The association knew that its days were numbered, and in 1926, when the federal numbering system was put into operation, the Lincoln Highway ceased to be a designated route. Most of its length in New Jersey became US 1. When that right-of-way was itself bypassed, the old Lincoln Highway became parts of US 206 and NJ 27. The Fackler Road bridge was bypassed by an improved alignment and a new bridge (1129153) in 1923. The Lincoln Highway Association ceased "active and aggressive operations" December 31, 1927.

Boundary Description and Justification: The significance of the bridge is based, in part, on its location on the historic right-of-way of the

Lincoln Highway, an early attempt to create a transcontinental route. In New Jersey the highway was comprised of sections of old, and often historic, roads. The bridge and the roadway right-of-way of the old Lincoln Highway are both evaluated as significant. The bridge is also significant in its own right.

PHOTO: 6:33,36 (05/91) REVISED BY (DATE): QUAD: Princeton

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1201151 **CO** MIDDLESEX **OWNER** NJDOT **MILEPOINT** 13.05

NAME & FEATURE INTERSECTED US 1 OVER FORRESTAL ROAD **FACILITY** US 1

TOWNSHIP PLAINSBORO TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 29 ft **WIDTH** 76 ft

CONSTRUCTION DT 1932 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries a heavily travelled 6-lane divided highway over a 2-lane road leading to the James Forrestal Campus of Princeton University. This campus contains research facilities. The bridge is not historically or physically related to any of the structures on the campus. A wooded area directly surrounds the bridge.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one span encased stringer bridge is supported on a concrete substructure. The abutments are scored horizontally. The concrete pierced balustrades are typical of this period. New guiderails and a Jersey-type barrier have been installed across the bridge. The structure is not technologically or historically distinguished, and is representative of the most common pre-WW II bridge type in the state of New Jersey.

INFOR MATION

PHOTO: 123:10-11 (02/92) REVISED BY (DATE): QUAD: Hightstown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1201158 **CO** MIDDLESEX **OWNER** NJDOT **MILEPOINT** 23.1

NAME & FEATURE INTERSECTED US 1 OVER AMTRAK NORTHEAST CORRIDOR **FACILITY** US 1

TOWNSHIP NORTH BRUNSWICK TOWNSHIP

TYPE THRU GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 204 ft **WIDTH** 50 ft

CONSTRUCTION DT 1929 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located in a 20th century industrial area, and carries a divided 4-lane highway and 2 sidewalks over 4 electrified tracks of Amtrak's busy Northeast Corridor. New Jersey Transit also uses the electrified tracks for commuter routes.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 3-span overpass is composed of encased thru girders with floor beams. The main span girders are deeper than the approach spans. They bear on concrete abutments and column bents. The concrete parapets over the electrified tracks have decorative faience tile panels, not an uncommon pre-WWII state-designed detail. A metal railing encloses the approach span sidewalks. Although well preserved, the bridge is representative of a common type and is not technologically or historically distinguished.

INFOR MATION

PHOTO: 124:2-4 (02/92) REVISED BY (DATE): QUAD: New Brunswick

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1202152 **CO** MIDDLESEX **OWNER** NJDOT **MILEPOINT** 25.7

NAME & FEATURE INTERSECTED US 1 OVER RARITAN RIVER RAILROAD & LOCAL ROADS **FACILITY** US 1

TOWNSHIP NORTH BRUNSWICK TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 5 **LENGTH** 191 ft **WIDTH** 104 ft

CONSTRUCTION DT 1928 **ALTERATION DT** 1983 **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge is located in a late-20th century industrial district and carries a 6-lane divided highway with shoulders across a pair of 2-lane roads and a single track of the Raritan River Railroad, a non-electrified route. The highway was widened in 1983. The railroad was built in 1890, completing a line from South Amboy to New Brunswick. The Raritan River Railroad was taken over by Conrail in 1980.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 1928 5-span encased stringer bridge on a concrete substructure was widened on both sides in 1983. The new stringers are not encased, and the new concrete bents are not physically tied to the 1928 bents. The original railing has been replaced with aluminum rails. A Jersey-type concrete barrier divides the highway. The bridge has not retained integrity of design, and is not technologically or historically distinguished.

INFOR MATION

PHOTO: 124:11-13 (03/92) REVISED BY (DATE): QUAD: New Brunswick

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1203150 **CO** MIDDLESEX **OWNER** NJDOT **MILEPOINT** 27.96

NAME & FEATURE INTERSECTED US 1 NB OVER RARITAN RIVER **FACILITY** US 1 NORTHBOUND

TOWNSHIP NEW BRUNSWICK CITY

TYPE OPEN SPANDREL RIBBED ARCH **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 15 **LENGTH** 1902 ft **WIDTH** 50 ft

CONSTRUCTION DT 1929 **ALTERATION DT** 1971 **SOURCE** PLAQUE

DESIGNER/PATENT MORRIS GOODKIND, NJ HWY DEPT **BUILDER** PARKER AND GRAHAM INC.

SETTING / CONTEXT The bridge carries 3 lanes of US 1, a wide shoulder and 2 sidewalks from an undistinguished residential area of New Brunswick to a late-20th century residential area in Edison Township. It crosses an undeveloped strip along the Raritan River and a 2-lane service road. The bridge originally carried two directions of traffic, but a new parallel span carries southbound traffic. Morris Goodkind won an architectural award presented by the ASCE in 1930 for this bridge design.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The well-preserved 15-span ribbed arch bridge is composed of 6 open spandrel arches and 9 closed spandrel arch approach spans. Among the earliest of the large state-designed spans to emphasize the moldable properties of concrete in its handsome detailing, the bridge reflects the New Jersey State Highway Department Bridge Division's emphasis on sound bridge engineering coupled with aesthetics. In 1969, the bridge was posthumously named for its designer, Morris Goodkind, Chief Bridge Engineer.

INFOR MATION

Bibliography:

Condit, Carl W. American Building Art. 1961.
Proceedings of the American Society of Civil Engineers. August 1930.
Hess, Jeffrey A. and Frame, Robert M. Wisconsin Stone arch and Concrete Arch Bridges. 1986.
Plowden, David Bridges: The Spans of North America. 1974.

Physical Description: The well-proportioned open-spandrel reinforced concrete ribbed arch bridge is 1902' long. The 15-span structure is composed of 6 open spandrel arch main spans and 9 closed spandrel arch approach spans. The reinforced concrete structure has 3 ribs in each span. The spandrel arches over the elliptical main span arches are semi-circular, as are the approach arches. The handsome structure is marked by four classically styled towers at the corners, each with an inset commemorative plaque from 1929. The sidewalks are enhanced by the inclusion of exedras at the main span piers, with benches cast into the concrete balustrade. Original luminaries over these bays were replaced in 1971 with modern standards. The concrete deck was replaced in-kind that same year, and guiderails were added at the curblines. With the exception of the 1971 rehabilitation, the bridge remains as it was originally designed.

Historical and Technological Significance: The US 1 open-spandrel ribbed arch bridge is significant because it represents the quality designs that Morris Goodkind(1869-1968) produced throughout his career as the State Bridge Engineer. It is one of approximately 10 open-spandrel arch bridges in New Jersey, a bridge type that defines the highest level of refinement in reinforced concrete arch technology. The well-preserved bridge represents Goodkind's emphasis in the New Jersey State Highway Department Bridge Division to create aesthetically pleasing concrete structures prior to World War II. The moldable qualities of the material were used to create an architectural masterpiece at the same time that its structural qualities were used to efficiently carry a major highway across a wide river. The reinforced concrete arch was capable of relatively long spans while providing graceful and dynamic forms.

Around the turn of the century, reinforced concrete arches were generally limited to relatively short and often single span bridges. The dead load carried by the arches was reduced with the introduction of open spandrel arches. The lighter structures were capable of longer spans and more aesthetically pleasing large bridges. The Walnut Lane bridge (1906-8) over Wissahickon Creek in Philadelphia was a forerunner of the type. A massive structure, the open spandrel arches span 233 feet with virtually no steel reinforcement in the two ribs. In the first two decades of the 20th century, railroads began using reinforced concrete to construct large viaducts across rivers and valleys to eliminate steep grade changes. The length and number of spans increased to create massive structures that dominated the landscape. The Tunkhannock Viaduct (completed 1915) of the Delaware Lackawanna & Western RR in Nicholson, Pennsylvania remains one of the greatest bridges in America. It is a ten-span open spandrel reinforced concrete arch, 2375 feet in total length, each span 180 feet in clear span, and rising 240 feet above the creek bed in the valley floor.

The US 1 Bridge was completed 14 years later in 1929, but is comparable in size and beauty. The main arch spans are 202 feet clear span, though they rise only about 100 feet above the water level of the Raritan River. The bridge is 1902 feet in total length.

Morris Goodkind, designer of the bridge, was a graduate of Columbia University. He worked for the New York City Public Service Commission in the development of the subway system before working on bridge designs for engineering firms and Mercer County, NJ. In 1922 he joined the New Jersey Highway Department, and became the Chief Bridge Engineer in 1925, a post he held through 1955 when he retired to private practice.

The 1920s and 1930s were a time of great expansion of the state's highway system required many bridges to be built. Goodkind emphasized the need for aesthetically pleasing as well as structurally sound bridges. He brought in Arthur Lichtenburg to develop an architectural section in the Bridge Department. Many of the grade elimination bridges of the 1930s and 1940s in congested areas were detailed with Moderne and Deco pilasters and entablature due to the influence of Goodkind and Lichtenburg. The same structures had encased stringers, the most common type built during Goodkind's term. He emphasized the encasement for protection of the steel from the elements, a valid assertion considering the number and condition of such structures remaining in New Jersey.

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

While working for the state, he served as a consultant on bridge construction for the War Department. Upon his retirement as Chief Bridge Engineer, Goodkind became a consultant with the firm of Goodkind and O'Dea in Manhattan. He was internationally known and respected for his bridge engineering. He had been active in local and national engineering societies, and won several awards for the designs of bridges.

Goodkind was awarded the Phoebe Hobson Fowler Architectural Award by the American Society of Civil Engineers for the design of the US 1 bridge. To recognize the contribution which Goodkind made to the State of New Jersey, the name of the bridge was officially changed from the College Bridge to The Morris Goodkind Bridge on April 25, 1969, following his death the previous September.

PHOTO: 118:,124:,163: (02/92) REVISED BY (DATE): QUAD: New Brunswick

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1204150 **CO** MIDDLESEX **OWNER** NJDOT **MILEPOINT** 32.5

NAME & FEATURE INTERSECTED US 1 OVER CONRAIL PERTH AMBOY-SOUTH PLAINFIELD BRANCH **FACILITY** US 1

TOWNSHIP EDISON TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 5 **LENGTH** 190 ft **WIDTH** 50 ft

CONSTRUCTION DT 1929 **ALTERATION DT** 1956 **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located in a mid to late-20th century industrial area, and carries 4 heavily travelled lanes of divided highway traffic over one track of an abandoned rail line, the Perth Amboy - South Plainfield Branch. The line was originally part of the 1875 Lehigh Valley RR main line, but it became a branch in 1880 when the LV RR built a new line from South Plainfield to Jersey City. Conrail took over the Lehigh Valley Railroad in 1976.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 6/6/91

SUMMARY The 5-span encased stringer bridge rests on unadorned concrete abutments and column bents. The concrete balustrades are typical of ca. 1930 bridges and are not distinctive. A sidewalk was cantilevered from one face of the bridge in 1956. The bridge is a representative example of a common pre-World War II bridge type, and it is not technologically or historically distinguished. It is correctly evaluated as not eligible.

INFOR MATION

PHOTO: 122:43A-44A (03/92) REVISED BY (DATE): QUAD: Perth Amboy

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1204153 **CO** MIDDLESEX **OWNER** NJDOT **MILEPOINT** 35.58

NAME & FEATURE INTERSECTED US 1 OVER PORT READING RAILROAD (CONRAIL) **FACILITY** US 1

TOWNSHIP WOODBRIDGE TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 116 ft **WIDTH** 65 ft

CONSTRUCTION DT 1928 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge is located in a late-20th century commercial area. It carries a heavily travelled 4-lane road with a mountable median and 2 sidewalks over a single track of the Port Reading Branch of Conrail. The line was built in 1892 by the Reading RR, connecting the Delaware & Bound Brook RR with New York Harbor. The Reading RR established Port Reading on the Arthur Kill as a coal terminal. The line served coal carriers until 1983, when the operation was discontinued.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 6/6/91

SUMMARY The 3-span encased stringer bridge is supported on a concrete substructure. One of the fascia columns has been strengthened using steel column sections bolted to the concrete. The bridge has a typical concrete balustrade with new beam guiderails along the curbline. The bridge is not technologically innovative or uncommon, being one of over 40 pre-WWII stringer bridges in the county. The bridge is not historically significant.

INFOR MATION

PHOTO: 116:38-39 (02/92) REVISED BY (DATE): QUAD: Perth Amboy

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1205150 **CO** MIDDLESEX **OWNER** NJDOT **MILEPOINT** 36.45

NAME & FEATURE INTERSECTED US 1&9 OVER NJ 35 **FACILITY** US 1&9

TOWNSHIP WOODBRIDGE TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 94 ft **WIDTH** 66 ft

CONSTRUCTION DT 1928 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER** RUDOLF & DELANO

SETTING / CONTEXT The bridge is located in the earliest documented cloverleaf interchange in New Jersey. It carries US 1 and US 9 (4 lanes of divided highway) over NJ 35 (4 lanes divided by raised grassy median strip) in a 20th century commercial area. The bridge is the center point of the interchange, with the four loops and four ramps surrounding it.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 6/6/91

SUMMARY The well-detailed 2-span stringer bridge on a concrete substructure is an integral part of the earliest documented cloverleaf interchange in the state. It is technologically significant as the prototype of a well-established solution to traffic engineering. New Jersey was a national leader in the development of grade crossing elimination's, and the Woodbridge cloverleaf survives as a well-preserved example of the innovative solutions the State Highway Department developed in the 1920s.

INFOR MATION

Bibliography:

Hill, C.S. "Intersection Design a Primary Highway Problem in New Jersey", Engineering News-Record, November 26, 1931.
NJDOT, Memorandum, To: Record, From: Suzanne Sczepkowski, May 8, 1991.

Physical Description: The two-span encased stringer bridge is supported on concrete abutments and a pier. The fascia of the bridge is adorned with moderne pilasters at the abutments and at the pier. The pilasters rise to meet the posts of the concrete balustrades at both sides of the structure. Modern light posts have replaced the original fixtures at the four corners of the bridge, and a jersey-type concrete barrier has been added at the centerline of the roadway.

Historical and Technological Significance: The bridge was determined eligible under Criteria A and C "as part of the cloverleaf and noted that individually it is undistinguished." The bridge is located in the Woodbridge Township intersection of US 1 & 9 and NJ 35. This intersection is the first cloverleaf interchange constructed in New Jersey. The cloverleaf design was one answer to the problem of grade intersections which created traffic problems as the automobile came into high usage. Engineering News Record reported that the "four-leaf-clover permits each main roadway to carry 100 per cent of its capacity through the intersection." This interchange was a pioneering engineering effort that is used as a model today, over 60 years after the original.

Boundary Description and Justification: Because the bridge is eligible only as part of the interchange, the intersection of the right-of-ways of the highways included in the cloverleaf should be the boundary of eligibility.

PHOTO: 116:34-35 (02/92) REVISED BY (DATE): QUAD: Perth Amboy

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1206153 **CO** MIDDLESEX **OWNER** NJDOT **MILEPOINT** 124.25

NAME & FEATURE INTERSECTED US 9 OVER OLD BRIDGE ROAD (CR 516) **FACILITY** US 9

TOWNSHIP OLD BRIDGE TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 83 ft **WIDTH** 152 ft

CONSTRUCTION DT 1941 **ALTERATION DT** 1974 **SOURCE** INSCRIPTION/NJDOT

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located in an area with sparse mixed use mid to late 20th century development. It carries a busy divided 7-lane road over a 4-lane county road. US 9 and the bridges along it were improved and widened when the road was dualized in 1974.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 2-span stringer bridge bears on a concrete substructure which is finished with the Moderne detailing common on state-designed bridges ca. 1940. The structure was widened in 1974 with steel stringers on a stylized concrete substructure. The original balustrade was replaced with plain concrete parapets and fencing. The integrity of the original design was lost during the widening. It is technologically and historically undistinguished, being one of over 40 pre-WWII stringers in the county.

INFOR MATION

PHOTO: 113:15A-17A (01/92) REVISED BY (DATE): QUAD: South Amboy

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1207150 **CO** MIDDLESEX **OWNER** NJDOT **MILEPOINT** 128.85

NAME & FEATURE INTERSECTED US 9 OVER BORDENTOWN AVE (CR 618) **FACILITY** US 9

TOWNSHIP OLD BRIDGE TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 83 ft **WIDTH** 84 ft

CONSTRUCTION DT 1942 **ALTERATION DT** 1982 **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located in a mid to late-20th century commercial area. It carries a heavily travelled 6-lane divided highway with sidewalks over a 4-lane county route. US 9 was widened in this area in 1982.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span stringer bridge has Moderne detailing on the concrete substructure that is more stylized than on other abutments ca. 1940. The detailing was not repeated when the structure was widened in 1982. The original railing has been replaced by a new concrete parapet and fencing. A Jersey-type concrete barrier divides the two-directional traffic. The bridge is not technologically or historically distinguished. It is a common bridge type and the original design integrity has been lost.

INFOR MATION

PHOTO: 113:26A-28A (01/92) REVISED BY (DATE): QUAD: South Amboy

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1207151 **CO** MIDDLESEX **OWNER** NJDOT **MILEPOINT** 129.7

NAME & FEATURE INTERSECTED MAIN STREET OVER CONRAIL (ABANDONED) **FACILITY** MAIN STREET

TOWNSHIP SOUTH AMBOY CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 33 ft **WIDTH** 50 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in a predominantly early-20th century residential area with no "district" potential. The bridge carries a wide 2-lane road with sidewalks over an abandoned trackless right-of-way of the Raritan River Railroad. The line was built in 1888 from South Amboy to Washington (4 mi.), and extended in 1890 to New Brunswick. In South Amboy it connected with the NY&LB RR and the PA RR. This Sayreville Branch was abandoned in 1978, and the rails were removed.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased stringer bridge sits on unadorned concrete abutments with wingwalls. The concrete balustrade is not extensively detailed, but is a common design for ca.1930 bridges. The bridge is not technologically or historically distinguished, being one of over 40 stringer bridges built in Middlesex county prior to World War II.

INFOR MATION

PHOTO: 113:32A-33A (01/92) REVISED BY (DATE): QUAD: South Amboy

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1208150 **CO** MIDDLESEX **OWNER** NJDOT **MILEPOINT** 129.86

NAME & FEATURE INTERSECTED US 9 & NJ 35 OVER US 9 (MAIN STREET) **FACILITY** US 9 & NJ 35

TOWNSHIP SOUTH AMBOY CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 79 ft **WIDTH** 54 ft

CONSTRUCTION DT 1936 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER** FRANKLIN CONTRACTING CO.

SETTING / CONTEXT The bridge is located on the edge of an early-20th century residential area in South Amboy. It carries a 4-lane divided highway over a wide 2-lane road. It was constructed as part of a mid-1930's grade separation project that includes several other bridges of this type and style carrying US 9 and NJ 35 over local streets and railroad features. The bridge is located at the junction of two highways. Northbound US 9 passes under the bridge before joining NJ 35 NB crossing it.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The well-detailed 2-span stringer bridge bears on a concrete substructure. The abutments and pier have fluted pilasters and a stylized entablature. The concrete balustrades are a standard design. The well-preserved bridge and access ramp on the west side is a representative example of the high quality, architectonic State Highway Department designs that characterized the department's work prior to WW II. This span embodies the details found in varying degrees on bridges all over the state.

INFOR MATION

PHOTO: 123:28-29 (01/92) REVISED BY (DATE): QUAD: South Amboy

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1208151 **CO** MIDDLESEX **OWNER** NJDOT **MILEPOINT** 129.93

NAME & FEATURE INTERSECTED US 9 & NJ 35 OVER WASHINGTON AVE (CR 535) **FACILITY** US 9 & NJ 35

TOWNSHIP SOUTH AMBOY CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 55 ft **WIDTH** 54 ft

CONSTRUCTION DT 1936 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is surrounded by a 1920s residential area, a 1980s commercial area, and a cemetery. It is one of several bridges along US 9 and NJ 35 which are very similar in type and style. The bridges were constructed as part of a grade separation project carrying the two routes over local streets and railroads. The bridge carries a 4-lane divided highway with no shoulders or sidewalks across a local 2-lane road.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The well-detailed stringer bridge sits on concrete abutments with fluted fascia pilasters and stylized entablatures. The handsome balustrade is reflective of the architectonic designs produced by the State Highway Department before World War II. Though the bridge is well-preserved, it is a representative example of a common bridge type and is not technologically or historically distinguished.

INFOR MATION

PHOTO: 114:6-8 (01/92) REVISED BY (DATE): QUAD: South Amboy

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1208152 **CO** MIDDLESEX **OWNER** NJDOT **MILEPOINT** 129.99

NAME & FEATURE INTERSECTED US 9 & NJ 35 OVER ABANDONED CONRAIL RIGHT OF WAY **FACILITY** US 9 & NJ 35

TOWNSHIP SOUTH AMBOY CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 135 ft **WIDTH** 54 ft

CONSTRUCTION DT 1937 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located in a wooded, undeveloped area, and carries US 9 and NJ 35 (4 lanes) along a limited access route leading to the Raritan River. The bridge crosses an abandoned railroad right-of-way owned by Conrail. The line was opened by the Raritan River RR in 1890 and in use by freight trains until 1972. In 1978 the tracks were removed. Conrail took over the Raritan River RR in 1980.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 3-span stringer bridge rests on concrete piers and abutments. The 8-column bents are set on crash walls, and have a pier cap across the top. The bridge has the typical concrete balustrades of pre-World War II structures. A Jersey-type barrier has been added to divide the highway. The bridge is a representative example of a common bridge type. There are over 40 stringer bridges in the county that date before World War II. It is not technologically or historically distinguished.

INFOR MATION

PHOTO: 114:10-11,15 (01/92) REVISED BY (DATE): QUAD: South Amboy

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1208153 **CO** MIDDLESEX **OWNER** NJDOT **MILEPOINT** 129.98

NAME & FEATURE INTERSECTED US 9 & NJ 35 OVER CONRAIL (AMBOY BRANCH) **FACILITY** US 9 & NJ 35

TOWNSHIP SOUTH AMBOY CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 186 ft **WIDTH** 54 ft

CONSTRUCTION DT 1937 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located in a wooded and late-20th century industrial setting. It carries US 9 and NJ 35 (4-lane divided highway) over active Conrail tracks. The line was opened in 1832 by the Camden and Amboy RR for freight and passenger business. Passenger service was soon rerouted to what is now known as the Northeast Corridor, but these tracks carried freight through 1965. The tracks were electrified in 1937, and the overhead lines remain.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Not Individually Eligible. Camden & Amboy Railroad Main Line Historic District. Contributing.

CONSULT DOCUMENTS SHPO Opinion 1998, Letter 03/12/01.

SUMMARY The 1937 3-span stringer bridge bears on an unadorned concrete substructure. The bridge has a typical balustrade over the end spans and a high paneled parapet (catinary barrier) over the main span, crossing the electrified tracks. The paneled parapet posts have decorative faience tiles, not an uncommon detail on 1930s State-designed bridges. The bridge, nearly identical to a 1934 example (1119150), is not technologically or historically distinguished, being one of over 40 pre-WW II stringer bridges remaining in the county. Rail lines in New Jersey were electrified starting in the early 1910s. The bridge is within the boundaries of the National Register eligible Camden & Amboy Railroad Historic District, but it has not yet been determined to be a contributing element.

INFOR MATION

PHOTO: 114:12-14 (01/92) REVISED BY (DATE): QUAD: South Amboy

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1208154 **CO** MIDDLESEX **OWNER** NJDOT **MILEPOINT** 130.22

NAME & FEATURE INTERSECTED US 9 & NJ 35 OVER ABANDONED CONRAIL RIGHT OF WAY **FACILITY** US 9 & NJ 35

TOWNSHIP SOUTH AMBOY CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 152 ft **WIDTH** 54 ft

CONSTRUCTION DT 1937 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located in an undistinguished wooded and late-20th century industrial setting. The bridge carries US 9 and NJ 35 (4-lane divided highway) across the old Raritan River Railroad. The line was built in 1888, and remained in use until 1972. Conrail assimilated the line in 1980, two years after the right-of-way had been abandoned and the rails removed.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 3-span stringer bridge sits on unadorned concrete piers and abutments. The column bents are set on crash walls, and have a cap across the top. The bridge is finished with a typical concrete balustrade at the fascias, and a Jersey-type barrier has been added to divide the highway. The bridge is not historically or technologically distinguished, as it is one of over 40 remaining stringer bridges in Middlesex county built prior to World War II.

INFOR MATION

PHOTO: 114:19-21 (01/92) REVISED BY (DATE): QUAD: South Amboy

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1208155 **CO** MIDDLESEX **OWNER** NJDOT **MILEPOINT** 130.35

NAME & FEATURE INTERSECTED US 9 & NJ 35 OVER RARITAN STREET **FACILITY** US 9 & NJ 35

TOWNSHIP SOUTH AMBOY CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 85 ft **WIDTH** 54 ft

CONSTRUCTION DT 1937 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located in an area of mixed-20th century residential structures surrounding the wooded interchange. It carries 4 lanes of divided highway over a 2-lane city street. The structure was built as part of a mid-1930's grade separation project carrying the highway over local streets and railroads.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge has a short slab span on each end of the single-span stringer. The concrete substructure is finished with Moderne detailing on the piers and abutments. The concrete balustrade is common for New Jersey bridges from this time. The bridge is not historically or technologically distinguished. It is representative of the handsome architectonic pre-World War II State Highway Department designs.

INFOR MATION

PHOTO: 114:16-18 (01/92) REVISED BY (DATE): QUAD: South Amboy

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1208157 **CO** MIDDLESEX **OWNER** NJDOT **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED ANDREJEWSKI DRIVE OVER US 9 **FACILITY** ANDREJEWSKI DRIVE

TOWNSHIP OLD BRIDGE TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 102 ft **WIDTH** 30 ft

CONSTRUCTION DT 1941 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located in a late-20th century commercial district. The bridge carries a curved 2-lane road with 2 sidewalks over a busy 6-lane divided highway. This grade separation bridge raises the local road over the highway. It was built a few years after the nearby bridges along US 9 and NJ 35 that carry the highway over the local features.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span stringer bridge with concrete balustrades bears on a concrete substructure that has shallow Moderne-style pilasters and entablatures. The posts at the abutments and the pier are scored and finished with stepped tops. The bridge is not technologically or historically distinguished, but is a well-detailed example of a very common bridge type. It is representative of the architectonic finish the State Highway Department favored before World War II.

INFOR MATION

PHOTO: 114:22-24 (01/92) REVISED BY (DATE): QUAD: South Amboy

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1209153 **CO** MIDDLESEX **OWNER** NJDOT **MILEPOINT** 131.2

NAME & FEATURE INTERSECTED US 9 OVER NJ 35 VICTORY CIRCLE **FACILITY** US 9

TOWNSHIP SAYREVILLE BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 55 ft **WIDTH** 52 ft

CONSTRUCTION DT 1940 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER** EISENBERG CONSTRUCTION CO

SETTING / CONTEXT The bridge carries four lanes of divided highway (US 9) and one sidewalk across two wide lanes at the south side of Victory Circle. NJ 35 separates from US 9 at the circle to cross the Raritan River. The bridge has been determined eligible for listing in the National Register because it is considered a contributing element to the Edison Bridge (US 9) over the Raritan River. The structure number posted on the bridge is 1208158.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Agreed Edison Bridge. Contributing.

CONSULT DOCUMENTS SHPO Finding 11/22/91, Letter 6/30/95.

SUMMARY The one span stringer bridge sits on concrete abutments with banded detailing. The posts at the corners of the abutments are scored vertically and stepped at the top, flanking the typical concrete balustrade. The well-detailed bridge is a representative example of a common bridge type in the county, as it is one of over 40 extant pre-World War II stringer bridges in Middlesex County. It is not technologically or historically distinguished.

INFOR MATION

Bibliography:
New Jersey State Highway Department Annual Bridge Reports, 1939, 1940.
Letter from Andras Fekete, NJ DOT BEA, to Ms. Nancy L. Zerbe, Deputy SHPO, ONJH, Dated November 22, 1991.

Physical Description: The one span encased stringer bridge is supported by concrete abutments. The substructure is banded, with vertically scored posts at the corners of the abutments rising into stepped posts of the standard design concrete balustrade.

Historical and Technological Significance: The bridge is not a significant structure as it is only a representative example of a very common bridge type. The detailing of the structure is similar to other 1920s and 1930s grade elimination bridges in Middlesex County. The bridge designers used a typical solution to a common problem for this structure.

The bridge was determined eligible by the SHPO because it was "an approach integral and not separate to the main bridge (Rt. 9 over the Raritan River - Str. No. 1209-155) which is eligible. Therefore, this structure would be a contributing element to the bridge." The two bridges at Victory Circle are approximately half a mile from the main bridge, and no more tied to the structure than any other grade elimination bridge on NJ 9 or NJ 35 which are several miles from the Edison Bridge. The contract for the construction of the Victory Circle bridges was separate from the contracts for the Edison Bridge, although all were completed in 1940.

PHOTO: 122:7A-8A (03/92) REVISED BY (DATE): QUAD: South Amboy

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1209154 **CO** MIDDLESEX **OWNER** NJDOT **MILEPOINT** 131.08

NAME & FEATURE INTERSECTED US 9 OVER NJ 35 VICTORY CIRCLE **FACILITY** US 9

TOWNSHIP SAYREVILLE BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 56 ft **WIDTH** 52.3 ft

CONSTRUCTION DT 1940 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER** EISENBERG CONSTRUCTION CO

SETTING / CONTEXT The bridge carries a 4-lane divided highway (US 9) and one sidewalk over two wide lanes at the north side of Victory Circle. The circle is located at the grade separation split of US 9 and NJ 35 at the approach to the Raritan River. The bridge was determined eligible for listing as a contributing element to the Edison Bridge carrying US 9 over the river. The structure number fixed to the bridge is 1208159.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Agreed Edison Bridge. Contributing.

CONSULT DOCUMENTS SHPO Finding 11/22/91, Letter 6/30/95.

SUMMARY The one-span stringer bridge bears on a concrete substructure that is formed with Moderne detailing of banded abutments and vertically scored posts at the corners of the abutments. The posts are stepped at the top, with a concrete balustrade that is typical of pre-World War II bridges. The well-detailed bridge is one of over 40 extant pre-World War II stringer bridges in Middlesex County. It is a typical solution to a common problem and it is not technologically or historically distinguished.

INFOR MATION

Bibliography:
New Jersey State Highway Department Annual Bridge Reports, 1939, 1940.
Letter from Andras Fekete, NJ DOT BEA, to Ms. Nancy L. Zerbe, Deputy SHPO, ONJH, Dated November 22, 1991.

Physical Description: The one span encased stringer bridge is supported by concrete abutments. The substructure is banded, with vertically scored posts at the corners of the abutments rising into stepped posts of the standard design concrete balustrade.

Historical and Technological Significance: The bridge is not a significant structure as it is only a representative example of a very common bridge type. The detailing of the structure is similar to other 1920s and 1930s grade elimination bridges in Middlesex County. The bridge designers used a typical solution to a common problem for this structure.

The bridge was determined eligible by the SHPO because it was "an approach integral and not separate to the main bridge (Rt. 9 over the Raritan River - Str. No. 1209-155) which is eligible. Therefore, this structure would be a contributing element to the bridge." The two bridges at Victory Circle are approximately half a mile from the main bridge, and no more tied to the structure than any other grade elimination bridge on NJ 9 or NJ 35 which are several miles from the Edison Bridge. The contract for the construction of the Victory Circle bridges was separate from the contracts for the Edison Bridge, although all were completed in 1940.

PHOTO: 122:5A-6A (03/92) REVISED BY (DATE): QUAD: South Amboy

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1209155 **CO** MIDDLESEX **OWNER** NJDOT **MILEPOINT** 131.8

NAME & FEATURE INTERSECTED US 9 OVER RARITAN RIVER (EDISON BRIDGE) **FACILITY** US 9

TOWNSHIP SAYREVILLE BOROUGH

TYPE DECK GIRDER **DESIGN** CONTINUOUS **MATERIAL** Steel

 # SPANS 29 **LENGTH** 4391 ft **WIDTH** 52 ft

CONSTRUCTION DT 1939 **ALTERATION DT** Demolished **SOURCE** PLANS

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER** ENGLISH & NESTO COMPANY

SETTING / CONTEXT The bridge carries 4 lanes of heavily travelled roadway across the Raritan River, a marshy area, and an industrial area on the north bank of the river. Victory Circle is just to the south of the bridge, at the intersection of US 9 and NJ 35. The Edison Bridge was determined eligible because the main spans are continuous over 3 spans, a feature which is unusual for bridges of this proportion. 2 bridges in Victory Circle were determined eligible as approaches to this structure.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Bridge was Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 11/22/91

SUMMARY The deck girder bridge is well-preserved, well-detailed, and is an early example of a long-span continuous girder bridge. The approach spans are simply supported 7' deep girders, while the 9 main spans are 3-span continuous, with girders as deep as 21'. The concrete pier columns and struts are nicely detailed from top to bottom. The posts at the abutment display a large tile of the state seal, with more tile on the approach railing. Similar tile work was seen on only one other span (1210155).

INFOR MATION

Bibliography:
Condit, Carl W. American Building Art: The Twentieth Century. 1961.
Fox, Robert. Interview with Mary McCahon, 4/7/92.
"Morris Goodkind, Bridge Builder, Dies", The Daily Home News, New Brunswick, N.J., Saturday, September 7, 1968.

Physical Description: The 29-span steel deck girder bridge is supported on reinforced concrete piers and abutments. The nine longest spans are over the river, and are composed of three pairs of three-span continuous girders. The massive girders are as deep as 21 feet at the mid-river piers. The approach spans are simply supported girders that are typically about 7 feet deep. All of the spans have floor beams and stringers below the concrete deck.

The pier columns and the struts are nicely detailed with scored bands and stylized paneling just below the bearings. The approach balustrades are elaborately detailed with decorative tiles. The posts at the abutments bear a circular tile at the seal of the State of New Jersey. A similar tile was seen on a few other bridges in the state (1210155, 1606158, 1607163). Metal railings line the roadway across the bridge. A concrete jersey-type barrier has been added along the centerline of the road.

Historical and Technological Significance: The bridge was determined eligible by the SHPO on 11/22/91 because of its size, its type, its age, and its association with Morris Goodkind. It was found eligible under Criteria C and B. It is well-preserved and well-detailed, and is an early example of a large-scale continuous deck-girder bridge.

The 29-span bridge is a significant and early example of its type. Although deck girder bridges were common in the early 20th century, the design of a three-span continuous system of this magnitude was not common. This 1939 structure took a small-scale bridge type to a large-scale proportion. The well-preserved structural components of the bridge function today as they did when it was designed.

Morris Goodkind (1888-1968), responsible for the design of this bridge, was a graduate of Columbia University. He joined the New Jersey Highway Department in 1922 and became the Chief Bridge Engineer in 1925, a post he held through 1955. His tenure with the State Highway Department coincided with the state's dramatic expansion of the state highway system that required many new bridges.

Goodkind emphasized the need for aesthetically pleasing as well as structurally sound structures. He brought in architect Arthur Lichtenburg to develop an architectural section in the bridge department. Lichtenburg was with the department until the late 1960s. The two men were responsible for the fine detailing that characterizes New Jersey's concrete spans. Many of the grade elimination bridges of the 1930s and 1940s were detailed with Moderne and Deco pilasters and entablature as well as faience tile decoration.

The Edison bridge is a fine example of the attention to aesthetic detail that these men stressed in bridge construction. The elaborate tile work as well as the detailed concrete of the substructure attest to the emphasis on aesthetics on State Highway Department-designed bridges.

Boundary Description and Justification: Because it is the bridge itself that is eligible, the boundary is limited to the superstructure and the substructure of the bridge itself. The existence of 2 single-span stringer bridges in Victory Circle at the south approach to the bridge is not relevant to the eligibility of the Edison Bridge.

PHOTO: 117:,122:,123: (03/92) REVISED BY (DATE): QUAD: Perth Amboy

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1210150 **CO** MIDDLESEX **OWNER** NJDOT **MILEPOINT** 135.1

NAME & FEATURE INTERSECTED US 9 OVER MAIN STREET **FACILITY** US 9

TOWNSHIP WOODBRIDGE TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 83 ft **WIDTH** 54 ft

CONSTRUCTION DT 1937 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located in a residential area which has been converted to commercial use. It carries a 4-lane divided highway with no shoulders or sidewalks across a 3-lane city street. The bridge was built as part of a grade separation project of the mid-1930's that resulted in bridges carrying US 9 over local streets and railroads.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The stringer main span and slab approach spans bridge sit on a concrete substructure. It is a representative example of the well-detailed overpasses produced by the State Highway Department in the pre-WW II era. The abutments are detailed with fluted pilasters at the corners, and the back walls have decorative panels. The balustrade is a standard design. The well-proportioned bridge is well preserved, but it is not technologically or historically distinguished.

INFOR MATION

PHOTO: 116:19-20 (02/92) REVISED BY (DATE): QUAD: Perth Amboy

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1210151 **CO** MIDDLESEX **OWNER** NJDOT **MILEPOINT** 135.21

NAME & FEATURE INTERSECTED US 9 OVER METUCHEN AVE **FACILITY** US 9

TOWNSHIP WOODBRIDGE TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 71 ft **WIDTH** 54 ft

CONSTRUCTION DT 1937 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries a busy 4-lane divided highway and two dirt sidewalks across a quiet 2-lane street. The area around the bridge consists of 19th and 20th century residential structures. It was built as part of a grade separation project of the mid-1930's that carried US 9 over local streets and railroads.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one span encased stringer bridge sits on concrete abutments that are formed with Moderne details. The abutments have been repaired, but the original detailing was reproduced. The balustrade is typical of late-1930 bridges, with a new beam guiderail along the curbline. The bridge is not technologically or historically distinguished, but is a representative example of the handsome, well-detailed grade crossing elimination spans the State Highway Department built in the 1930s.

INFOR MATION

PHOTO: 116:21-22 (02/92) REVISED BY (DATE): QUAD: Perth Amboy

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1210152 **CO** MIDDLESEX **OWNER** NJDOT **MILEPOINT** 135.7

NAME & FEATURE INTERSECTED US 9 NB OVER GREEN STREET CONNECTOR **FACILITY** US 9 NORTHBOUND

TOWNSHIP WOODBRIDGE TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 64 ft **WIDTH** 32 ft

CONSTRUCTION DT 1937 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located in a 20th century commercial and industrial area with no "district" potential. The bridge carries 3 lanes of one directional traffic over a single lane ramp. The bridge was built as part of a grade separation project in the mid-1930's. The elevation of the highway through the urban area necessitated bridges to carry US 9 over local streets and railroads.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single span encased stringer bridge bears on a concrete substructure. The abutments have fluted pilasters, stylized entablature, and horizontally scored wingwalls. The concrete balustrade is typical of pre-World War II State designs. Modern beam guiderails were added along the curbline. The structure is not historically or technologically distinguished. It is an unaltered representative example of the many handsome overpasses the state built in the 1930s.

INFOR MATION

PHOTO: 116:23-25 (02/92) REVISED BY (DATE): QUAD: Perth Amboy

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1210153 **CO** MIDDLESEX **OWNER** RAILROAD **MILEPOINT** 15.68

NAME & FEATURE INTERSECTED PORT READING BRANCH OVER US 9 **FACILITY** PORT READING BRANCH RAILROAD

TOWNSHIP WOODBRIDGE TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 116 ft **WIDTH** 31.8 ft

CONSTRUCTION DT 1938 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT READING RR OFFICE OF ENGINEER **BUILDER**

SETTING / CONTEXT The 3-span bridge crosses US 9, a 6-lane highway separated by a grassy median strip in an area dominated by post-1960 commercial structures. The bridge now carries only one track of the Port Reading Branch, but was built to carry two tracks. The line carried coal to the Arthur Kill at Port Reading from 1892 through 1983, when the coal operation was discontinued. The bridge was part of the mid-1930's grade separation project along US 9.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 3-span stringer bridge bears on concrete piers and abutments that are detailed with pilasters. The concrete parapet is detailed on the exterior face to echo the typical State-designed balustrades along US 9. The bridge is one of over 40 extant stringer bridges in the county pre-dating WWII. It is not technologically or historically distinguished.

INFOR MATION

PHOTO: 116:26-28 (02/92) REVISED BY (DATE): QUAD: Perth Amboy

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1210154 **CO** MIDDLESEX **OWNER** NJDOT **MILEPOINT** 135.9

NAME & FEATURE INTERSECTED US 9 SB OVER GREEN STREET CONNECTOR **FACILITY** US 9 SOUTHBOUND

TOWNSHIP WOODBRIDGE TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 60 ft **WIDTH** 32 ft

CONSTRUCTION DT 1937 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located in an area of 20th century commercial structures. The bridge carries 3 lanes of heavily travelled highway over a one lane ramp. The bridge was built as part of a grade separation project along US 9. The project resulted in many bridges being built to carry the highway over local features of the urban area.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one-span stringer bridge sits on concrete abutments finished with Moderne details. Fluted pilasters are present at the abutment corners, with shallow pilasters on the abutment faces. The concrete balustrade is a common State-designed railing. Beam guiderails have been added along the curb lines. The bridge is not technologically nor historically distinguished, but is an unaltered representative example of the many well-detailed overpasses the state designed in the 1930s.

INFOR MATION

PHOTO: 116:29-30 (02/92) REVISED BY (DATE): QUAD: Perth Amboy

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1210155 **CO** MIDDLESEX **OWNER** NJDOT **MILEPOINT** 136.21

NAME & FEATURE INTERSECTED US 9 SB OVER US 1 NB **FACILITY** US 9 SOUTHBOUND

TOWNSHIP WOODBRIDGE TOWNSHIP

TYPE THRU GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 98 ft **WIDTH** 31.9 ft

CONSTRUCTION DT 1938 **ALTERATION DT** **SOURCE** TILED INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is set in a 20th century commercial district, and carries a heavily travelled highway (3-lanes, one directional traffic) over another (3-lanes, one directional traffic) at the junction of the two routes. The bridge was built during New Jersey's emphasis on grade separation at highway intersections of the 1930s, resulting in a more efficient highway system.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 9/1/94, Letter 11/22/95.

SUMMARY The single-span encased thru-girder and floorbeam bridge sits on concrete abutments with a Moderne entablature and pilasters. The abutment posts display tile work of the State seal and tile borders similar to details on the Edison bridge (1209155). The approaches are flanked by concrete balustrades above scored wingwalls. Although handsomely detailed, the bridge is not technologically or historically distinguished. It is representative of the well-detailed State-designed overpasses of the 1930s.

INFOR MATION

PHOTO: 116:31-33 (02/92) REVISED BY (DATE): QUAD: Perth Amboy

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1212150 **CO** MIDDLESEX **OWNER** NJDOT **MILEPOINT** 34.8

NAME & FEATURE INTERSECTED NJ 18 OVER MAIN ST, SOUTH RIVER & CONRAIL **FACILITY** NJ 18

TOWNSHIP EAST BRUNSWICK TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 8 **LENGTH** 419 ft **WIDTH** 50 ft

CONSTRUCTION DT 1933 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located at the edge of the village of East Brunswick, in a mixed commercial and residential area. It carries a 4-lane divided highway (NJ 18) over a busy 2-lane road, 1 electrified track, and the South River.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 8-span encased stringer bridge sits on concrete abutments and column bents. The bents are reinforced with steel sections banded to the columns and across the concrete cap. A 6' high parapet marks the railroad span while the other spans are enclosed by a concrete balustrade. Some balustrade posts are set with concrete obelisk light standards. A Jersey-type barrier has been added. The structural integrity of the common bridge-type has been compromised. It is not technologically distinguished.

INFOR MATION

PHOTO: 123:34-35,37 (03/92) REVISED BY (DATE): QUAD: South Amboy

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1212153 **CO** MIDDLESEX **OWNER** NJDOT **MILEPOINT** 37.48

NAME & FEATURE INTERSECTED NJ 18 NB OVER CONRAIL **FACILITY** NJ 18 NORTHBOUND

TOWNSHIP EAST BRUNSWICK TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 112 ft **WIDTH** 50 ft

CONSTRUCTION DT 1931 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located in a wooded area. It carries 4 lanes of one-directional highway traffic and two sidewalks across one railroad track. The line was built in 1890 as an extension to New Brunswick of the Raritan River RR that ran from South Amboy to Washington (4 mi.). The line was used by the PA RR and the CNJ for access to New Brunswick from South Amboy. In 1980 the Raritan River RR lost its independence. Conrail took it over, and renamed it the Sayreville Secondary.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 3-span stringer bridge sits on concrete column bents and abutments. The abutments are buttressed under earth fill. The column bents are set on plinths, with a pier cap across the top of the bent. The concrete balustrade is commonly designed and detailed, with new beam guiderails at the approaches, but not crossing the bridge. The bridge is technologically and historically undistinguished. It is one of over 40 encased stringer bridges extant in Middlesex County built prior to World War II.

INFOR MATION

PHOTO: 125:25A-26A (03/92) REVISED BY (DATE): QUAD: New Brunswick

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1213150 **CO** MIDDLESEX **OWNER** NJDOT **MILEPOINT** 40.22

NAME & FEATURE INTERSECTED NJ 18 NB OVER WESTONS MILL POND (LAWRENCE BROOK) **FACILITY** NJ 18 NORTHBOUND

TOWNSHIP EAST BRUNSWICK TOWNSHIP

TYPE OPEN SPANDREL RIBBED ARCH **DESIGN** PARABOLIC **MATERIAL** Reinforced Concrete

 # SPANS 3 **LENGTH** 228 ft **WIDTH** 50 ft

CONSTRUCTION DT 1931 **ALTERATION DT** 1992 **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in a wooded area with late-20th century office buildings nearby. The brook is dammed on both sides of the bridge to create a pond. It carries northbound traffic across the pond. The bridge was being redecked in 1992.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 11/22/95

SUMMARY The well-proportioned 3-span open spandrel ribbed arch bridge with spandrel columns was altered in 1992 when the original balustrades were replaced with parapets, but it remains a significant example of an uncommon type. It is one of approximately 8such bridges designed and built by the state between 1929 and 1939. The bridge is technologically and historically significant.

INFOR MATION

Bibliography:
Condit, Carl W. American Building Art. 1961.
Hess, Jeffrey A. and Frame, Robert M. Wisconsin Stone Arch and Concrete Arch Bridges. 1986.
Fox, Robert. Personal Interview with Mary McCahon.

Physical Description: The 3-span open spandrel arch bridge has a total length of 228 feet between abutment faces. The center arch has a clear span of 76'-6". The 5-ribbed arches are parabolic, with slender spandrel columns supporting the floor beams and deck. In 1992 the reinforced concrete deck was replaced in-kind. It is directly tied to the floor beams by steel reinforcing. The original balustrade design is echoed on the fascia of the new concrete Jersey-type barriers. Large concrete pylons remain at the four corners of the bridge, along with the original approach balustrades.

Historical and Technological Significance: The three-span open spandrel reinforced concrete arch bridge over Weston's Mill Pond is a representative example of the past and present emphasis on sound bridge engineering coupled with aesthetics by the New Jersey State Highway Department Bridge Division. It was designed in 1931 using state-of-the-art bridge technology to create a structure that enhanced the beauty of the area. In 1991, the deck and original parapet were replaced with a similar deck and a Jersey-type barrier.

Morris Goodkind oversaw the design of this bridge as Chief Bridge Engineer of the New Jersey State Highway Department. Several bridges of this type were constructed in New Jersey between 1929 and World War II, and some of them are more complete examples of the important bridge type (1203150, 1606158, 1607168, 1810170). The designs were greatly influenced by the design of the College Bridge (1203150), the most important State Highway Department-designed open spandrel arch bridge, carrying US 1 over the Raritan River.

The first reinforced concrete bridges were designed and patented around the turn of the century. Concrete arch bridges were reinforced with steel to reduce cracking in the concrete and to eliminate the massiveness of the structures. One technique of material reduction was opening the spandrel vaults in lieu of filling them with earth or concrete. Since the vaults could be empty, spandrel walls did not need to be solid, but could be opened as long as the load of the deck was brought down to the arch with spandrel piers. As the technology progressed, solid barrel arch design was often replaced with ribbed arches, further reducing the volume of material. Open spandrel arch bridges were built as early as the first decade of the 20th century. They are representative of the highest level of refinement in the design of reinforced concrete arch bridges.

PHOTO: 118:41A-43A (02/92) REVISED BY (DATE): QUAD: New Brunswick

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1216158 **CO** MIDDLESEX **OWNER** NJDOT **MILEPOINT** 11.55

NAME & FEATURE INTERSECTED NJ 27 OVER SIX MILE RUN **FACILITY** NJ 27

TOWNSHIP OLD BRIDGE TOWNSHIP

TYPE ARCH **DESIGN** BARREL **MATERIAL** Concrete

 # SPANS 1 **LENGTH** 22 ft **WIDTH** 38 ft

CONSTRUCTION DT 1904 **ALTERATION DT** **SOURCE** PHOTODOCUMENTATION

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane state highway and shoulders over a small stream in an area dominated by mid-20th century development. A utility pipe crosses the same feature about 50' upstream from the bridge. To the west of the bridge is the well-preserved 18th- and 19th-century agricultural district listed in both the New Jersey and National Register of Historic Places as the Six Mile Run Historic District. The bridge is outside of the National Register listed district, but inside and contributing to the New Jersey Register listed, Six Mile Run Historic District.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. NJ Register listed Six Mile Run Historic District. Contributing.

CONSULT DOCUMENTS SHPO Finding 02/02/93, Letter 03/12/01.

SUMMARY The short concrete barrel arch bridge with random-coursed ashlar spandrel walls was built in 1904 on a new alignment of the road that historically has divided Somerset and Middlesex counties. It is topped with concrete cap stones and pipe railing, some sections of which retain their original braced posts. The arch intrados has been coated with gunite. The bridge is a relatively early example of its type, but it is not is individually eligible for listing in the National Register. It is a contributing resource of the NJ Register of Historic Places listed Six Mile Run Historic District.

INFOR MATION

PHOTO: 108:29-33,37 (10/91) REVISED BY (DATE): QUAD: Monmouth Junction

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1216161 **CO** MIDDLESEX **OWNER** RAILROAD **MILEPOINT** 31.35

NAME & FEATURE INTERSECTED AMTRAK NORTHEAST CORRIDOR OVER NJ 27 **FACILITY** AMTRAK NORTHEAST CORRIDOR RAIL LINE

TOWNSHIP NEW BRUNSWICK CITY

TYPE THRU GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 4 **LENGTH** 180 ft **WIDTH** 52 ft

CONSTRUCTION DT 1903 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT PENNSYLVANIA RR ENGINEERS OFF **BUILDER**

SETTING / CONTEXT The bridge carries 4 electrified tracks over a city street in an urban area composed of 19th and 20th century structures. The bridge is one of three closely spaced bridges along the ashlar-lined earth-filled elevated right-of-way that carries the NE Corridor through New Brunswick. It is part of the Pennsylvania RR's 1890-1910 main line reconstruction and appears to be a potential historic district.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Agreed Potential Historic District. Contributing.

CONSULT DOCUMENTS SHPO Letter 11/22/95

SUMMARY The skewed 4-span thru girder bridge bears on concrete columns and rusticated ashlar abutments. The closely-spaced floorbeams are encased above the bottom flanges. The girders are exposed below the floor and above the slab, which is covered with ballast as deep as the girders. The bridge, an example of the most common railroad bridge type in the state, is not technologically innovative or individually significant. It is part of the large urban grade-crossing elimination project of the Pennsylvania RR. The bridge is a contributing resource to a potential historic district.

INFOR MATION

PHOTO: 118:11-12,119: (02/92) REVISED BY (DATE): QUAD: New Brunswick

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1217150 **CO** MIDDLESEX **OWNER** NJDOT **MILEPOINT** 16.7

NAME & FEATURE INTERSECTED NJ 27 (ALBANY STREET) OVER RARITAN RIVER **FACILITY** NJ 27 (ALBANY STREET)

TOWNSHIP NORTH BRUNSWICK TOWNSHIP

TYPE BRICK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Brick

 # SPANS 10 **LENGTH** 595 ft **WIDTH** 41 ft

CONSTRUCTION DT 1890ca **ALTERATION DT** 1924 **SOURCE**

DESIGNER/PATENT UNKNOWN / NJDOT **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries 4 lanes of traffic and 2 sidewalks over the Raritan river in downtown New Brunswick. The former Delaware 7 Raritan Canal flows under the west approach. The setting is not distinguished. Apartments are located on the east side of the river, and urban-renewal areas and access roads to highways characterize the west or New Brunswick side.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Individually Eligible. Listed. D&R Canal. 05/11/1973. Contributing.

CONSULT DOCUMENTS SHPO Letter 03/12/01

SUMMARY Built ca. 1890 as a 32'-wide, 7-span brick arch with well detailed coursed ashlar spandrel walls and gauged ring stones, the bridge has been altered several times. In 1924, to alleviate vehicular congestion at the crossing, the State widened the bridge with an arched concrete addition to the upstream side. The deck girder approach spans were also widened in kind. The need for widening demonstrates the structure's historical associations with the economic vibrancy of New Brunswick that was, and is, an important regional commercial center. The 1929 widening, despite its use of a different masonry material, is compatible with the arch design and construction of the original structure. This arched concrete addition has gained significance over time and does not diminish the integrity of the structure. The bridge was widened again in 1954, and in 1985 the deck and railings were replaced. The brick arches have been gunited. Despite these changes, the bridge retains its original appearance on the upstream elevation below the bridge deck. This structure is individually eligible for listing in the National Register of Historic Places under Criterion C, as an example of a large multi-span arched viaduct, and under Criterion A, as a contributing element of the Delaware and Raritan Canal Historic District.

INFOR MATION

PHOTO: 106:32-39 (10/91) REVISED BY (DATE): QUAD: New Brunswick

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1218151 **CO** MIDDLESEX **OWNER** RAILROAD **MILEPOINT** 0.12

NAME & FEATURE INTERSECTED BONHAMTOWN BRANCH OVER NJ 27 **FACILITY** BONHAMTOWN BRANCH RR

TOWNSHIP METUCHEN BOROUGH

TYPE THRU GIRDER **DESIGN** PARTIALLY ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 67 ft **WIDTH** 13.4 ft

CONSTRUCTION DT 1923 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge is located in an undistinguished mid-20th century residential and commercial area. One railroad track is carried over a 2-lane state route. Five hundred feet to the north, the track joins Amtrak's northbound Northeast Corridor. n Branch was built as a spur of the Lehigh Valley RR. Conrail obtained possession of the rail line in 1976.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed thru-girder bridge rests on scored concrete abutments with wingwalls. The built-up riveted steel girders support encased floorbeams and the concrete deck. The bridge is a representative example of a common pre-World War II bridge type designed for railroad use. It is not historically or technologically distinguished.

INFOR MATION

PHOTO: 122:30A-31A (03/92) REVISED BY (DATE): QUAD: Perth Amboy

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1218152 **CO** MIDDLESEX **OWNER** UNKNOWN **MILEPOINT** 21.6

NAME & FEATURE INTERSECTED LAKE AVENUE (NJ 27) OVER SOUTH PLAINFIELD BRANCH **FACILITY** LAKE AVENUE (NJ 27)

TOWNSHIP METUCHEN BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 84 ft **WIDTH** 36.5 ft

CONSTRUCTION DT 1924 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge carries a 2-lane city street and 2 sidewalks across a one-track, depressed, inactive railroad. The neighborhood is a mix of commercial and residential buildings from the late 19th through the 20th century. This section of the neighborhood does not appear to have historic district potential because of modern intrusions. The Lehigh Valley RR built the line in 1875 as its main line to the Perth Amboy ports, but it became a branch in 1880. Conrail obtained it in 1976.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 3-span bridge is composed of one stringer span and two end slab spans. The bridge sits on concrete abutments and pier bents. The pier columns are set on concrete plinths, and have arched struts. The cantilevered sidewalks are flanked by metal railings. A beam guiderail has been added along the curbline. The bridge is a representative example of the more than 40 remaining stringer bridges in the county built before World War II. It is not technologically or historically distinguished.

INFOR MATION

PHOTO: 121:2 (03/92) REVISED BY (DATE): QUAD: Perth Amboy

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1218153 **CO** MIDDLESEX **OWNER** RAILROAD **MILEPOINT** 26.05

NAME & FEATURE INTERSECTED AMTRAK NORTHEAST CORRIDOR OVER NJ 27 **FACILITY** AMTRAK NORTHEAST CORRIDOR RAIL LINE

TOWNSHIP METUCHEN BOROUGH

TYPE THRU GIRDER **DESIGN** PARTIALLY ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 48 ft **WIDTH** 11.6 ft

CONSTRUCTION DT 1914 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT PENNSYLVANIA RR OFFICE OF ENG **BUILDER**

SETTING / CONTEXT The bridge carries 4 electrified tracks of Amtrak's Northeast Corridor and one Conrail spur (the Bonhamtown Branch) across a 2-lane city street used as a state route. The tracks separate a residential area from a commercial area of 20th century structures. The Northeast Corridor was consolidated by the PA RR in 1871 from many other lines. Amtrak took over the NE Corridor in 1971. The Conrail spur (obtained in 1976) was originally part of the Lehigh Valley main line (1875).

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 6-girder bridge rests on ashlar abutments with concrete bridge seats and skirts. The thru-girders are bridged by floorbeams and riveted, built-up pans are used to support a solid deck with ballast. The webs of the interior girders are encased completely in concrete. A concrete sidewalk under the bridge is built into the skirting has a braced pipe railing, a standard PA RR design. The bridge is not technologically or historically distinguished.

INFOR MATION

PHOTO: 121:43-44,1 (03/92) REVISED BY (DATE): QUAD: Perth Amboy

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1218154 **CO** MIDDLESEX **OWNER** UNKNOWN **MILEPOINT** 23.0

NAME & FEATURE INTERSECTED MIDDLESEX AVENUE (NJ 27) OVER CONRAIL **FACILITY** MIDDLESEX AVENUE (NJ 27)

TOWNSHIP METUCHEN BOROUGH

TYPE DECK GIRDER **DESIGN** OPEN WEB **MATERIAL** Steel

 # SPANS 3 **LENGTH** 167 ft **WIDTH** 30 ft

CONSTRUCTION DT 1909 **ALTERATION DT** 1922 **SOURCE** PLANS

DESIGNER/PATENT AMERICAN BRIDGE CO. **BUILDER** AMERICAN BRIDGE COMPANY

SETTING / CONTEXT The bridge is located in a late-20th century residential and small commercial area. It carries a 2-lane state route and two sidewalks over one track of depressed, inactive rail line, ConRail's Port Reading Branch. The line was in service primarily as a coal hauler for the Reading RR from 1892 until 1983, when the coal operation was discontinued. Conrail obtained the Reading RR in 1976. The main line is still in use, but this branch probably went out of service in 1983.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 3-span lattice web deck girder bridge rests on steel bents and concrete abutments. The uncommon superstructure was built in 1909, using only the fascia girders and bents. The center lattice web girder and its supporting columns were added in 1922 to increase the live load capacity as automobiles came into prominence. The 1909 railing has cast iron posts and latticed panels topped with filagree bands. The bridge is technologically important as one of the few examples of the type in the state.

INFOR MATION

Bibliography:
Waddell, J.A.L. Bridge Engineering. 1925.
NJDOT Plan File.

Physical Description: The skewed lattice-web deck girder bridge was built in 1909, using two girders on riveted steel bents. In 1922 a third girder was added at the centerline of the bridge. New steel columns were erected off-line from the bents, and braced into them. The girder webs are composed of diagonally riveted angle sections slanted in opposite directions on opposite faces of the girder. Rolled floor beams and encased steel stringers support the concrete deck. Timber plank sidewalks are cantilevered from the fascia girders. The 1909 railing has cast iron posts, and lattice panels with filagree top sections under the round tub top rail. Some sections of the railing are misaligned or missing.

Historical and Technological Significance: The Middlesex Avenue lattice-web deck girder bridge is technologically significant as a good example of an early bridge type that has become rare in New Jersey (Criterion C). It is the only documented lattice- or open-web girder in Middlesex County, and one of less than a half dozen highway examples known in the entire state. Two others exist in Hudson County (0900011 & 0950163), but each of them has a different style of web lattice. By the 1910s, plate girders were becoming more widely used than open-webbed girders. The plate girder was stronger, easier to fabricate, and more readily available. The lattice-webbed girder is an example of "first-generation" technology used around the turn of the 20th century.

The American Bridge Company, builder of many bridges throughout the state, is the fabricator of this structure. It was built for the Port Reading Railroad. Their plans from 1909 show the span with only two girders, and only two columns per bent. A plan sheet from the Port Reading RR's office dated 1922 details a bridge strengthening and deck replacing scheme. The work to be done included an additional girder at the centerline of the bridge, with new columns connected to the bent supporting the girder.

The addition in 1922 of the center girder strengthened the bridge, allowing for an increased load capacity. The timber deck that was placed in 1922 was crowned for drainage, as the original deck had not been. The placement of the current deck is not documented. The bridge has retained the integrity of its original design, including the major bridge strengthening that occurred in 1922.

Boundary Description and Justification: The significance of the bridge is limited to the structure itself and not to the surroundings. The boundary of eligibility is the substructure and superstructure of the bridge, including the portions of the railing built during the original construction.

PHOTO: 122:35A-40A (03/92) REVISED BY (DATE): QUAD: Perth Amboy

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1218158 **CO** MIDDLESEX **OWNER** NJDOT **MILEPOINT** 25.85

NAME & FEATURE INTERSECTED NJ 27 OVER SOUTH BRANCH RAHWAY RIVER **FACILITY** NJ 27

TOWNSHIP WOODBRIDGE TOWNSHIP

TYPE DECK ARCH, STRINGER **DESIGN** BARREL, ENCASED **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 25 ft **WIDTH** 42 ft

CONSTRUCTION DT 1919 **ALTERATION DT** 1926 **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries a 3-lane state highway over a small stream through a mid- to late-20th century residential area. The highway parallels Amtrak's Northeast Corridor tracks, which are carried over the same stream by a stone-faced arch 20' to the east.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The original structure is a reinforced concrete deck arch that was built in 1919. In 1926, it was widened by adding stringers on the upstream side of the arch. Both sides of the bridge have a concrete balustrade, but with different construction date inscriptions. The ashlar abutment that supports the stringer addition is shared with the railroad bridge 20' upstream. The bridge is a representative example of common pre-World War II bridge types and is not technologically or historically notable.

INFOR MATION

PHOTO: 117:35-38 (02/92) REVISED BY (DATE): QUAD: Perth Amboy

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1218411 **CO** MIDDLESEX **OWNER** UNKNOWN **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED NEW DOVER ROAD OVER NJ 27 & AMTRAK & MIDDLE AVENUE **FACILITY** NEW DOVER ROAD

TOWNSHIP WOODBRIDGE TOWNSHIP

TYPE THRU GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 14 **LENGTH** 639 ft **WIDTH** 30 ft

CONSTRUCTION DT 1937 **ALTERATION DT** 1991 **SOURCE** NJDOT

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The viaduct is located near a private golf course and a residential neighborhood developed in the 1920s. It carries a 2-lane road with 1 sidewalk over 4 electrified railroad tracks (Amtrak), a state highway (2 lanes) and a local road (2 lanes). The tracks are part of the Northeast Corridor, used mainly for passenger service by Amtrak and New Jersey Transit. The line was consolidated from several smaller lines in 1871 by the PA RR, and taken over in 1976 by Amtrak.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The thru-girder with floorbeams and encased stringer bridge is supported on a concrete substructure. The pier columns are braced by struts. The encased stringer approach spans are haunched at the fascia for appearance. A sidewalk is cantilevered from one face. In 1991 the original railings were replaced with Jersey-type barriers and a pedestrian fence was added when the deck was replaced. The bridge is not technologically or historically distinguished.

INFOR MATION

PHOTO: 116:44-45 (02/92) REVISED BY (DATE): QUAD: Perth Amboy

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 121B007 **CO** MIDDLESEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BLAIR ROAD OVER WOODBRIDGE CREEK **FACILITY** BLAIR ROAD

TOWNSHIP CARTERET BOROUGH

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 26 ft **WIDTH** 24.8 ft

CONSTRUCTION DT 1930 **ALTERATION DT** Unknown **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge is located in a marshy area near a large mid- to late-20th century industrial complex. The bridge carries a two lane road over small stream adjacent to ConRail's Port Reading Branch. The rail line was built by the Reading RR in 1892 for freight trains to carrying coal to Port Reading on the New York harbor. The line was in use though 1983, when the coal operation was discontinued. Conrail had obtained the bankrupt Reading RR in 1976.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The original superstructure and deck were replaced with weathering steel stringers and a new concrete deck. The skewed stringers sit on ashlar abutments. A few utilities run along the east side of the bridge, and new beam guiderails line the roadway across the bridge. The date of rehabilitation is not known, but the structure is not technologically or historically distinguished.

INFOR MATION

PHOTO: 117:39-40 (02/92) REVISED BY (DATE): QUAD: Perth Amboy

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 121B084 **CO** MIDDLESEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED GILLS LANE OVER SOUTH BRANCH RAHWAY RIVER **FACILITY** GILLS LANE

TOWNSHIP WOODBRIDGE TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 44 ft **WIDTH** 24 ft

CONSTRUCTION DT 1927 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT OFFICE OF COUNTY ENGINEER **BUILDER**

SETTING / CONTEXT The bridge is located in a late 20th century residential area of single family and multi-unit housing. The bridge carries a busy 2-lane road and one sidewalk across a small stream. The bridge is scheduled for replacement in 1992.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span encased stringer bridge sits on concrete abutments and a cutwater pier. A sidewalk is separately supported by castelated thru-girders with hexagons cut in the web. The pipe railing for the sidewalk is fastened to the fascia stringer. Concrete balustrades are present on each side of the roadway with approach guiderails fastened to the end posts. The stringer bridge is undistinguished in its setting and lacks technological and historical importance.

INFOR MATION

PHOTO: 116:40-42 (02/92) REVISED BY (DATE): QUAD: Perth Amboy

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 121B145 **CO** MIDDLESEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED OAKWOOD AVENUE OVER RAHWAY RIVER **FACILITY** OAKWOOD AVENUE

TOWNSHIP EDISON TOWNSHIP

TYPE STRINGER **DESIGN** CONTINUOUS **MATERIAL** Steel

 # SPANS 3 **LENGTH** 22 ft **WIDTH** 30.8 ft

CONSTRUCTION DT 1934 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge is located in Roosevelt County Park, near the campus of Roosevelt Hospital. It carries a 2-lane road and a sidewalk over a small stream.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The three-span continuous stringer bridge sits on concrete abutments and bents. The bents have eight columns each. The abutments have bridge seats similar in size to the caps on the piers. The sidewalks on each side of the road are timber planks, with a wooden curb below a steel post-and-beam guiderail. The bridge is not technologically or historically distinguished.

INFOR MATION

PHOTO: 122:41A-42A (03/92) REVISED BY (DATE): QUAD: Perth Amboy

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1221151 **CO** MIDDLESEX **OWNER** NJDOT **MILEPOINT** 26.7

NAME & FEATURE INTERSECTED NJ 34 SB OVER US 9 NB **FACILITY** NJ 34 SOUTHBOUND

TOWNSHIP OLD BRIDGE TOWNSHIP

TYPE THRU GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 94 ft **WIDTH** 24 ft

CONSTRUCTION DT 1941 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located in a wooded area with light commercial development from mid to late 20th century. The bridge carries one wide lane of traffic and one full sidewalk over two lanes at a grade separation intersection of a state and a federal highway. The bridge was built as part of a movement making highway intersections more efficient by eliminating grade crossings.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 03/12/01

SUMMARY The one-span thru-girder bridge sits on a concrete substructure. The abutments exhibit stylized Moderne pilasters and entablature. The girders and floor beams are completely encased in concrete. The bridge has decorative faience tile work, a common detail of State-designed bridges. The encasement on the girder web stiffeners is detailed with chevrons. The 1941 bridge is late but is a good example of the architectonic designs done by the state before WWII. It is individually eligible for listing in the National Register under Criterion C.

INFOR MATION

PHOTO: 113:21A-25A (01/92) REVISED BY (DATE): QUAD: South Amboy

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1222150 **CO** MIDDLESEX **OWNER** NJDOT **MILEPOINT** 47.37

NAME & FEATURE INTERSECTED NJ 35 OVER CHEESEQUAKE CREEK **FACILITY** NJ 35

TOWNSHIP OLD BRIDGE TOWNSHIP

TYPE SINGLE LEAF BASCULE **DESIGN** **MATERIAL** Steel

 # SPANS 9 **LENGTH** 712 ft **WIDTH** 68 ft

CONSTRUCTION DT 1942 **ALTERATION DT** 1956, 1986 **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is set in the salt marshes along the New Jersey Coast. It carries four lanes of traffic with a mountable median, two shoulders and two sidewalks across a wide creek with a marina directly adjacent to the bridge.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single leaf bascule bridge now functions with new and rehabilitated equipment. The bridge was rehabilitated in 1986. A second floor was added to the operator's house, with a new control panel installed. New brakes and motors were also installed at that time. A steel deck girder span mirrors the 17'-6 bascule span. Seven encased stringer spans make up the approaches to the bascule span and the multi-girder span. The bridge has been altered, and it is not a significant example of its type.

INFOR MATION

PHOTO: 114:31-35 (01/92) REVISED BY (DATE): QUAD: South Amboy

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1222151 **CO** MIDDLESEX **OWNER** NJDOT **MILEPOINT** 47.52

NAME & FEATURE INTERSECTED NJ 35 NB OVER NY & LB RR (NORTH JERSEY COAST LINE) **FACILITY** NJ 35 NORTHBOUND

TOWNSHIP OLD BRIDGE TOWNSHIP

TYPE THRU TRUSS **DESIGN** PRATT **MATERIAL** Steel

 # SPANS 1 **LENGTH** 155 ft **WIDTH** 30 ft

CONSTRUCTION DT 1924 **ALTERATION DT** 1986ca **SOURCE** PLANS

DESIGNER/PATENT CNJ RR OFFICE OF ENGINEER **BUILDER**

SETTING / CONTEXT The bridge is located in the salt marshes of New Jersey's coast line near Cheesequake Creek. It carries two lanes of traffic and a sidewalk over railroad tracks. It originally carried two directions of traffic before 1945 when structure 1222152 was built adjacent to this one to carry southbound vehicles. The electrified NJT commuter tracks also carry Conrail trains. The bridge is located above the site of Morgan Station, which was removed when the adjacent bridge was built.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed Pratt thru-truss bridge on concrete abutments has bolted repairs at several verticals near the bottom gusset plates. The vertical and diagonal members are riveted built-up H-sections, while the chords are box sections. The struts at the top chord are latticed between angle sections. The new deck has aluminum Jersey-type barriers at both curb lines. The span is a technologically undistinguished example of what by 1924 was a common type used by the CNJ. An earlier example is 1850167.

INFOR MATION

PHOTO: 114:36-39 (01/92) REVISED BY (DATE): QUAD: South Amboy

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1222153 **CO** MIDDLESEX **OWNER** NJDOT **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PINE AVE (CR 688) OVER NJ 35 NB **FACILITY** PINE AVENUE (CR 688)

TOWNSHIP OLD BRIDGE TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 49 ft **WIDTH** 29 ft

CONSTRUCTION DT 1936 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located in a mid-20th century commercial and residential area. The bridge carries the curved roadway and two sidewalks over two lanes of a heavily travelled state highway. The bridge carries traffic leading to southbound NJ 35 from a local street. It was built during New Jersey's emphasis on grade separation intersections for improvement of highway efficiency.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one-span stringer bridge is finished with Moderne fluted pilasters at the concrete abutment corners and filled corner panels on the abutment faces. The concrete balustrades are commonly styled for State-designed bridges, with guiderails only at the approaches. The bridge is representative of the well-detailed designs of the State in the 1930s, but is not technologically or historically distinguished, being one of over 40 extant stringer bridges in Middlesex County built prior to WW II.

INFOR MATION

PHOTO: 114:28-30 (01/92) REVISED BY (DATE): QUAD: South Amboy

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1222154 **CO** MIDDLESEX **OWNER** NJDOT **MILEPOINT** 49.36

NAME & FEATURE INTERSECTED NJ 35 OVER BORDENTOWN AVE **FACILITY** NJ 35

TOWNSHIP SOUTH AMBOY CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 84 ft **WIDTH** 54 ft

CONSTRUCTION DT 1936 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located in a early-20th century residential and commercial neighborhood. It carries a busy 4-lane divided highway across a wide 2-lane city street. It is a typical example of a grade separation bridge from the 1930s when the state was emphasizing the elimination of grade crossings to increase highway efficiency.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span encased stringer bridge sits on a concrete substructure. The fascias of pier and abutments are finished with Moderne fluted pilasters. The concrete balustrade has a detailed cornice. A concrete Jersey-type barrier is the only alteration. The bridge is representative of the well-detailed State designs of the 1930s, but is not historically or technologically distinguished, being one of over 40 extant stringer bridges in the county built before World War II.

INFOR MATION

PHOTO: 114:26-27 (01/92) REVISED BY (DATE): QUAD: South Amboy

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1223150 **CO** MIDDLESEX **OWNER** NJDOT **MILEPOINT** 51.8

NAME & FEATURE INTERSECTED NJ 35 OVER RARITAN RIVER (VICTORY BRIDGE) **FACILITY** NJ 35

TOWNSHIP SAYREVILLE BOROUGH

TYPE SWING SPAN **DESIGN** CENTER BEARING **MATERIAL** Steel

 # SPANS 53 **LENGTH** 3091 ft **WIDTH** 38 ft

CONSTRUCTION DT 1926 **ALTERATION DT** 1972 **SOURCE** PLAQUE

DESIGNER/PATENT CLARENCE W. HUDSON, SUP. ENG. **BUILDER** STILLMAN DELHANTY FERRIS

SETTING / CONTEXT The bridge is located in a mid- to late-20th century industrial area along the Raritan River. An extensive dedication ceremony was held for the opening of the Victory Memorial Bridge. It was dedicated to the veterans of war from the State of New Jersey.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 12/19/94

SUMMARY The subdivided Warren thru-truss swing-span bridge still functions as it was originally intended. The original (or in-kind) gears and electric motors rotate the center-bearing structure. The approach spans are deck girders (9 spans) and stringers (44 spans). Concrete balustrades enclose the stringer spans, while the steel deck-girder and truss spans have a metal railing. The tender's house sits above the roadway at the center pier. The bridge is a large, well-preserved example of its type.

INFORMATION

Bibliography:
NJ DOT Bridge File: 1223150.
"Veterans Souvenir Program of the Dedication of The Victory Bridge as a State Memorial", Victory Memorial Bridge Celebration Committee, June 24, 1926.

Physical Description: The 53-span bridge is composed of a thru truss center-bearing swing span main span, 16 steel deck girder spans and 36 concrete stringer spans. The main span is a cantilevered subdivided Warren thru truss that is 360' from end to end. The riveted truss members are built-up of plates, angles, and channels joined by lattice bars. The center-bearing span pivots on an ashlar pier that has a concrete cap. The operator's house is located directly above the pier, over the roadway, in the truss bracing. The original crash gates are still operated manually when the bridge is opened.

The deck girder approach spans have floor beams and stringers supporting the deck. These 16 spans complete the river crossing on ashlar and concrete piers. The remaining 36 spans are stringers that are continuous over three spans. These spans form the approaches over land on concrete column bents. At the ends of the bridge are classically styled towers with luminaries. The lighting fixtures were replaced across the bridge in 1972, but the original brackets remain at these towers. New guiderails were placed along the curblines the same year. The sidewalks are enclosed by concrete balustrades on the stringer approach spans and by metal railings on the deck girder and truss spans.

The swing span operating mechanism survives in a complete state of preservation. The rack and pinion drive is activated by a series of reduction gears located below the span that are powered by the original direct-current electric motors housed in the operator's house. The power is transmitted vertically by a long line shaft from the elevated operator's house to the gear sets under the bridge. The control panels are original, but hydraulic wedges are now used in place of mechanical ones, and the brakes have also been replaced.

Historical and Technological Significance: The 360' center-bearing swing span bridge is significant as the largest and latest example of a highway bridge of its type in the State of New Jersey (Criterion C). The bridge is in a nearly complete state of preservation, with much of the original equipment still functional. The Victory Memorial Bridge, named to honor those who served in World War I, is a late example of the swing span type. The use of the Raritan River as a shipping lane necessitated either a moveable bridge or a high one. Documentation detailing the decision to use a time-tested technology like a swing span rather than a bascule or vertical lift span at the crossing has not been preserved. The width of the river at the point of the bridge allowed a swing span to be used without disturbing dock areas at the banks of the river. The channel width also allowed room for the large pivot pier needed at the center of a swing span. The swinging truss is a very powerful image for traffic both on the river and the highway. The bridge was designed by Clarence W. Hudson, a consulting engineer. The state of preservation of the bridge also makes it significant. The original operator's house remains in use over the roadway. In it are the electric motors which drove the bridge when it was first built, and from them come the gearing, which is arranged as it was originally. The structural components of the bridge are also well-preserved, with little evidence of rehabilitation. The truss has been well-maintained, as has been the superstructure of the approach spans. The most notable rehabilitation changes are those made for safety reasons, the new lighting and guiderails which were installed in 1972. The timber fenders require a consistent maintenance schedule that has resulted in in-kind replacement of deteriorated members. The overall condition of the structure has been very well preserved.

Boundary Description and Justification: The bridge is evaluated as distinguished individually, so the structure itself is the boundary of significance.

PHOTO: 117:3-9,11-12 (02/92) REVISED BY (DATE): QUAD: Perth Amboy

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1227151 **CO** MIDDLESEX **OWNER** NJDOT **MILEPOINT** 71.6

NAME & FEATURE INTERSECTED US 130 OVER BRAINERD LAKE **FACILITY** US 130

TOWNSHIP CRANBURY TOWNSHIP

TYPE RIGID FRAME **DESIGN** **MATERIAL** Concrete

 # SPANS 1 **LENGTH** 46 ft **WIDTH** 90 ft

CONSTRUCTION DT 1937 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries a 4-lane divided highway and two sidewalks over a narrow point in a lake created by damming a stream. Brainerd Lake is a central point of the town of Cranbury, and its banks are lined with a park and homes. The bridge is not related to the small town structures. US 130 runs as the eastern boundary of the town, with limited access from the streets of Cranbury. The bridge is not contributing to the historical setting of the downtown area.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 11/22/95

SUMMARY The rigid frame bridge is bounded by concrete wingwalls and Moderne detailing. The frame is arched slightly across the span in characteristic fashion. The pilasters at the corners of the frame project from the face of the substructure and frame common State-designed concrete balustrades. The bridge is not technologically or historically distinguished. Rigid frame bridges were built by New Jersey as early as 1930. In 1938 the type was utilized for the Lincoln Tunnel approach road bridges.

INFOR MATION

PHOTO: 126:40A-41A (03/92) REVISED BY (DATE): QUAD: Hightstown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1227155 **CO** MIDDLESEX **OWNER** NJDOT **MILEPOINT** 75.53

NAME & FEATURE INTERSECTED US 130 OVER JAMESBURG BRANCH RR (CONRAIL) **FACILITY** US 130

TOWNSHIP SOUTH BRUNSWICK TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 165 ft **WIDTH** 66 ft

CONSTRUCTION DT 1941 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located in a mid- to late-20th century industrial area, and carries a 4-lane divided highway and 2 shoulders with narrow sidewalks over a single electrified track. The rail line is the ConRail's Jamesburg Branch. The line was built in 1864 from Monmouth Junction to Jamesburg by the Pennsylvania RR. It connected the NE Corridor to the United Companies (ex-Camden & Amboy) line, and was electrified around 1937 to allow electric coal trains to reach South Amboy.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 3-span stringer bridge sits on concrete piers and abutments. The column bents are set on crash walls. The two end spans have common State-designed balustrades flanking a high concrete parapet on the middle span. The parapet has panels with filled corners between stepped posts. The bridge is not technologically or historically distinguished.

INFOR MATION

PHOTO: 124:27-28 (02/92) REVISED BY (DATE): QUAD: Jamesburg

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1227156 **CO** MIDDLESEX **OWNER** NJDOT **MILEPOINT** 76.08

NAME & FEATURE INTERSECTED US 130 OVER CR 522 (JAMESBURG ROAD) **FACILITY** US 130

TOWNSHIP SOUTH BRUNSWICK TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 58 ft **WIDTH** 68 ft

CONSTRUCTION DT 1941 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located in a mixed commercial and industrial mid to late 20th century area. It carries 4 lanes of a divided highway with mountable median, shoulders and narrow sidewalks over a 2-lane county route.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single span stringer bridge is set on vertically scored concrete abutments. The abutments have Moderne shallow pilasters on their faces, but not at the fascia corners. The concrete balustrade is of common design, with beam guiderails attached at the approaches. The bridge is not distinguished historically or technologically, being one of over 40 extant stringer bridges in Middlesex County built prior to World War II.

INFOR MATION

PHOTO: 124:29-30 (02/92) REVISED BY (DATE): QUAD: Hightstown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1227157 **CO** MIDDLESEX **OWNER** NJDOT **MILEPOINT** 77.56

NAME & FEATURE INTERSECTED US 130 OVER BRANCH LAWRENCE BROOK **FACILITY** US 130

TOWNSHIP SOUTH BRUNSWICK TOWNSHIP

TYPE RIGID FRAME **DESIGN** **MATERIAL** Concrete

 # SPANS 1 **LENGTH** 27 ft **WIDTH** 78 ft

CONSTRUCTION DT 1941 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is hardly noticeable in its wooded setting. It carries 4-lane US 130 with grassy median and "sidewalks" and paved shoulders over a small stream in a sparsely developed area.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The small rigid frame bridge has concrete wingwalls. The top component is straight across with haunches at the side walls. The bridge is very wide in comparison to its length, and is skewed across the roadway. A galvanized beam guiderail is in place along the shoulders. The bridge is not technologically or historically distinguished.

INFOR MATION

PHOTO: 124:31-32 (02/92) REVISED BY (DATE): QUAD: Monmouth Junction

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1227158 **CO** MIDDLESEX **OWNER** NJDOT **MILEPOINT** 78.36

NAME & FEATURE INTERSECTED US 130 OVER LAWRENCE BROOK RESERVOIR **FACILITY** US 130

TOWNSHIP SOUTH BRUNSWICK TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 46 ft **WIDTH** 100 ft

CONSTRUCTION DT 1941 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries US 130, a divided highway with 4 lanes, wide shoulders, grassy "sidewalks" and median strip, over a reservoir formed by damming Lawrence Brook. The reservoir is also known as Davidson's Mill Pond. The bridge is located within county park limits that surround the reservoir.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span encased steel stringer bridge bears on unadorned concrete abutments with wingwalls. The concrete balustrade is a common design with inscriptions of date and original highway route number on the posts. The concrete surface breaks the grassy median strip at the center of the roadway. The bridge is a representative example of a common bridge type in New Jersey, and it is not technologically or historically distinguished.

INFOR MATION

PHOTO: 124:33-35 (02/92) REVISED BY (DATE): QUAD: Monmouth Junction

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1227159 **CO** MIDDLESEX **OWNER** NJDOT **MILEPOINT** 79.16

NAME & FEATURE INTERSECTED US 130 OVER OAKEYS BROOK **FACILITY** US 130

TOWNSHIP SOUTH BRUNSWICK TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Concrete

 # SPANS 1 **LENGTH** 29 ft **WIDTH** 94 ft

CONSTRUCTION DT 1934 **ALTERATION DT** 1948 **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is set in a wooded area, and carries 4 heavily travelled lanes across a small stream. The highway has paved shoulders, a grassy median, and a narrow grassy area between the curb and the edge of the bridge.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span slab bridge on concrete abutments is on a large skew. Concrete wingwalls flank the bridge. The face of the bridge rises curb-height above the bridge, so new beam guiderails line the roadway. The bridge was widened with an in-kind structure in 1948, more than doubling the width of the structure. The bridge is not distinguished technologically or historically.

INFOR MATION

PHOTO: 124:36-38 (02/92) REVISED BY (DATE): QUAD: Monmouth Junction

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 122B065 **CO** MIDDLESEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED HAMILTON BOULEVARD OVER BOUND BROOK **FACILITY** HAMILTON BOULEVARD

TOWNSHIP SOUTH PLAINFIELD BOROUGH

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 2 **LENGTH** 45 ft **WIDTH** 25.5 ft

CONSTRUCTION DT 1917 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT OFFICE OF THE COUNTY ENGINEER **BUILDER**

SETTING / CONTEXT The bridge is located in a mixed-20th century commercial and residential area. Hamilton Boulevard is closed off to vehicular traffic with guide rails. 500' downstream a newer bridge carries traffic over the small stream and the railroad tracks of the Lehigh Valley Railroad line. The bridge will be removed in 1992 due to its state of disrepair. It will not be replaced, according to the county engineer.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span reinforced concrete slab bridge sits on concrete abutments and pier. The original concrete paneled parapet remains with 1917 inscribed at the bridge center. There is a pipe railing on the west approach. The bridge is in a state of deterioration, with slab, pier and abutment reinforcement exposed from severe spalling. The bridge is not significant historically or technologically.

INFOR MATION

PHOTO: 121:33-34 (02/92) REVISED BY (DATE): QUAD: Plainfield

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 122B081 **CO** MIDDLESEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CLINTON AVENUE OVER BOUND BROOK **FACILITY** CLINTON AVENUE

TOWNSHIP SOUTH PLAINFIELD BOROUGH

TYPE SLAB **DESIGN** CONTINUOUS **MATERIAL** Reinforced Concrete

 # SPANS 2 **LENGTH** 45 ft **WIDTH** 30.2 ft

CONSTRUCTION DT 1945 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge is located between an industrial and a residential area of 19th and 20th century construction, with no "district" potential. The bridge carries 2 lanes of traffic and a utility pipe across a small stream.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The reinforced concrete continuous slab bridge bears on concrete abutments and a cutwater pier. Concrete parapets with posts line the bridge. A 12" diameter utility main is supported on the wingwalls and the pier along the fascia. Approach guiderails are present on only one side of the street. The bridge is not technologically or historically distinguished.

INFOR MATION

PHOTO: 121:31-32 (02/92) REVISED BY (DATE): QUAD: Plainfield

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 122B093 **CO** MIDDLESEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED NEW BRUNSWICK AVENUE OVER BOUND BROOK **FACILITY** NEW BRUNSWICK AVENUE

TOWNSHIP PISCATAWAY TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 49 ft **WIDTH** 24.3 ft

CONSTRUCTION DT 1939 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT OFFICE OF THE COUNTY ENGINEER **BUILDER**

SETTING / CONTEXT The bridge is located near the Harris Structural Steel Co. plant and several unrelated commercial and residential structures. The bridge carries a 2-lane collector road over a small stream. A sidewalk crosses the bridge on each side.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span encased stringer bridge rests on a concrete substructure. The concrete balustrade is plain. There is a new beam guiderail along the east curbline. This bridge is not historically or technologically distinguished, being one of over 40 extant stringer bridges in Middlesex County built before World War II.

INFOR MATION

PHOTO: 121:29-30 (02/92) REVISED BY (DATE): QUAD: Plainfield

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 122B129 **CO** MIDDLESEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED SOUTH RANDOLPHVILLE ROAD OVER AMBROSE BROOK **FACILITY** SOUTH RANDOLPHVILLE ROAD

TOWNSHIP PISCATAWAY TOWNSHIP

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Steel

 # SPANS 2 **LENGTH** 35 ft **WIDTH** 26.7 ft

CONSTRUCTION DT 1938 **ALTERATION DT** 2000 **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in a single-family detached residential area of mixed-20th century construction but predominately modern construction. Two lanes of traffic cross the bridge over a small stream.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Listed. Listed. South Randolphville Road Bridge. 09/17/1999.

CONSULT DOCUMENTS SHPO Letter 03/12/01

SUMMARY The two-span earth-filled arch bridge has a corrugated steel liner and stone spandrel walls. The balustrades are masonry, matching the spandrels, and topped by a clay-colored concrete cap across the balusters and on the posts. The bridge is more elaborately detailed than most other county bridges of the era. This structure is individually eligible for listing in the National Register of Historic Places under Criterion C. The anachronistic appearance of this steel arch bridge is achieved by the use of several design features which are totally unrelated to its structural functioning: stone veneers with an exaggerated keystone, projecting pilasters, a projecting belt course, and ornamental stone parapet walls with a decorative clay colored concrete cap. The variety of finishes which could be applied to this construction type, paired with its inherent affordability, were hallmarks of the strategies used to market this type, as borne out by literature of the period.

INFOR MATION

PHOTO: 120:30-31 (02/92) REVISED BY (DATE): QUAD: Plainfield

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 122B133 **CO** MIDDLESEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BEHMER ROAD OVER AMBROSE BROOK **FACILITY** BEHMER ROAD

TOWNSHIP PISCATAWAY TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 23 ft **WIDTH** 27.3 ft

CONSTRUCTION DT 1937 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT OFFICE OF THE COUNTY ENGINEER **BUILDER**

SETTING / CONTEXT The bridge is located on a winding 2-lane road, and crosses a small stream. The surroundings are wooded with scattered farmhouses and meadows.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased stringer bridge sits on concrete abutments. The upstream half of the bridge is stringers, while the downstream half is a slab. The parapets have an inscribed diamond in the center post on both faces, and a drainage slot at the base of these posts at deck level. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 120:27-28 (02/92) REVISED BY (DATE): QUAD: Plainfield

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 122B137 **CO** MIDDLESEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED NEW MARKET ROAD OVER BOUND BROOK **FACILITY** NEW MARKET ROAD

TOWNSHIP PISCATAWAY TOWNSHIP

TYPE THRU GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 53 ft **WIDTH** 28.3 ft

CONSTRUCTION DT 1920 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT OFFICE OF THE COUNTY ENGINEER **BUILDER**

SETTING / CONTEXT The bridge is located 150' downstream from a dam across Bound Brook that has created New Market Lake. Mixed 20th century commercial structures dominate the area. Southeast of the bridge, a late 19th century industrial building sits close to the waterline, but it is not physically or historically related to the bridge. The skewed bridge carries 2 lanes and 2 sidewalks across the stream. It is scheduled for replacement in 1993.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The steel thru-girder bridge sits on concrete abutments that are in poor condition. The riveted girders support the deck by encased floorbeams with exposed bottom flanges. Cantilever brackets built up of rolled angles support the concrete sidewalks and metal railings. The bridge is a representative example of a common bridge type, and is not technologically or historically distinguished.

INFOR MATION

PHOTO: 120:35-36 (02/92) REVISED BY (DATE): QUAD: Plainfield

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 122B155 **CO** MIDDLESEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED LINCOLN AVENUE OVER BOUND BROOK **FACILITY** LINCOLN AVENUE

TOWNSHIP MIDDLESEX BOROUGH

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Steel

 # SPANS 2 **LENGTH** 45 ft **WIDTH** 48 ft

CONSTRUCTION DT 1937 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT GEORGE R. MERRILL, CO.ENGINEER **BUILDER**

SETTING / CONTEXT The bridge carries a wide 2-lane street with 2 sidewalks across a stream. It is located in a linear greenway that follows the brook through a late-20th century neighborhood.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span earth-filled elliptical arch has corrugated metal liners. The reinforced concrete spandrel walls include common balustrades across the stream, with paneled posts and solid parapets at the approaches. The bridge is a representative example of the architectonic bridges built by the county in the 1920s and 1930s, but it is not technologically or historically distinguished.

INFOR MATION

PHOTO: 120:23-24 (02/92) REVISED BY (DATE): QUAD: Plainfield

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 122B157 **CO** MIDDLESEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED RARITAN AVENUE OVER AMBROSE BROOK **FACILITY** RARITAN AVENUE

TOWNSHIP MIDDLESEX BOROUGH

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 78 ft **WIDTH** 43.6 ft

CONSTRUCTION DT 1913 **ALTERATION DT** 1960 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT ALVIN B. FOX **BUILDER** FERRO CONCRETE CO.

SETTING / CONTEXT The bridge is set in a residential area of early-20th century homes with late-20th century homes mixed in. The residential area surrounds a park which follows Ambrose Brook. The bridge carries three lanes of traffic and two sidewalks across the stream.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The reinforced concrete deck arch bridge was built by the Ferro-Concrete Company, who built many arch bridges using patented Luten reinforcement systems. This bridge was designed by the county engineer using a simple reinforcement pattern, not a Luten patented system. The bridge was widened in 1960, though it is not obvious due to duplication of the original parapet. The bridge is the oldest reinforced concrete arch in the county, but is otherwise undistinguished.

INFORMATION

Bibliography:
Condit, Carl W. American Building Art. 1961.
Hess, Jeffrey A. and Frame, Robert M. Wisconsin Stone Arch and Concrete Arch Bridges. 1986.
United States Patent Office, Several patents granted to Daniel B. Luten, Patent #649,643, #852,970, #852,971, #923,058, #933,771, #s 1,060,917-1,060,922, #s 1,186,108-1,186,111.

Physical Description: The 50' one-span reinforced concrete arch bridge was built in 1913 and repaired and slightly widened (1'-6") in 1960. The widened portion of the bridge and the new parapet was built to replicate the appearance of the original elliptical arch. The steel bar reinforcement of the arch follows the intrados and extrados of the arch. Transverse reinforcement is and shear stirrups were also used in the arch, showing the use of state-of-the-art design. The spandrel walls and parapets also were reinforced with steel bars. The concrete parapets are paneled on both faces. The original luminaries that were fixed to the parapets have been removed, with new lighting fixtures placed away from the structure.

Historical and Technological Significance: The reinforced concrete arch bridge was built in 1913 by the Ferro Concrete Company of Harrisburg, PA. The firm was licensed to build arches using patented systems designed by Daniel Luten, who received patents for several types of reinforced concrete structures. This bridge and its reinforcing system, however, was designed by Alvin B. Fox, the county engineer in Union County. The design did not include the technologies that had been patented by Luten.

Luten's early patents for reinforced concrete arch bridges included the use of tying reinforcement between the skewbacks. Later patents dealt with the construction of curving wingwalls, spandrel walls, ribbed reinforcement and pavement improvements. The purpose of his inventions were "to provide an improved structure of the class referred to which shall combine a maximum of strength and efficiency with increased economy of construction".

The movement towards the lessening of dead loads on reinforced concrete arches was making possible the opening of spandrel walls and the use of ribbed arches rather than barrel designs. This was especially important on larger bridges where great quantities of material were saved building open spandrel arch bridges.

The bridge over Ambrose Brook is not significant because does not have a patented design. It was not constructed following a proprietary design, as was a common practice of the early-20th century, including several structures constructed by the Ferro Concrete Company. It has also been significantly altered by a large addition.

PHOTO: 120:14-16 (02/92) REVISED BY (DATE): QUAD: Bound Brook

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 122B160 **CO** MIDDLESEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BAEKELAND AVENUE OVER AMBROSE BROOK **FACILITY** BAEKELAND AVENUE

TOWNSHIP PISCATAWAY TOWNSHIP

TYPE BOX BEAM **DESIGN** **MATERIAL** Prestressed Concrete

 # SPANS 2 **LENGTH** 69 ft **WIDTH** 29.6 ft

CONSTRUCTION DT 1940 **ALTERATION DT** 1982 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT OFFICE OF COUNTY ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane road over a small stream. The surrounding area has scattered industrial buildings of mid- and late-20th century construction as well as undeveloped areas.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span bridge was rebuilt in 1982 with prestressed concrete box beams. The concrete abutments and pier remain from the previous structure, but the superstructure and deck have been replaced. A new beam guiderail lines the road. The superstructure is not old enough to be evaluated as a historically distinguished structure.

INFOR MATION

PHOTO: 120:25-26 (02/92) REVISED BY (DATE): QUAD: Bound Brook

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 122B175 **CO** MIDDLESEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PROSPECT AVENUE OVER BOUND BROOK **FACILITY** PROSPECT AVENUE

TOWNSHIP PISCATAWAY TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 3 **LENGTH** 45 ft **WIDTH** 23.7 ft

CONSTRUCTION DT 1940 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge is located in a mixed residential and industrial setting of mid to late 20th century structures. The bridge carries two lanes of traffic across a small stream.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The concrete slab bridge sits on concrete piers and abutments. One abutment is stone on a concrete footing, and has a concrete seat. The slab is not visible from the underside, as the timber formwork remains in place. The concrete slab deck does not extend to the fascia, but timber planking widens the deck approximately 2' on each side, with double beam guiderails crossing the bridge attached to a timber fascia stringer. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 121:26-27 (02/92) REVISED BY (DATE): QUAD: Plainfield

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 122B231 **CO** MIDDLESEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED SHEPARD AVENUE OVER GREEN BROOK **FACILITY** SHEPARD AVENUE

TOWNSHIP MIDDLESEX BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 112 ft **WIDTH** 24 ft

CONSTRUCTION DT 1929 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT W. FRANKLIN BUCHANON, CO. ENG. **BUILDER** SNYDER ENGINEERING CO.

SETTING / CONTEXT The bridge is located in a wooded area with residences of mixed-20th century construction nearby. The bridge carries two lanes and one sidewalk over a stream. The waterway divides Middlesex and Somerset counties.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span stringer bridge with a typical concrete balustrade sits on concrete abutments and a pier. The concrete is spalling around the built-up stringers, with heavy leakage and efflorescence throughout the bridge. The structure is a common bridge type for a 1920s county-designed stream crossing. It is not technologically or historically distinguished. The bridge is one of over 40 pre-World War II stringer bridges in Middlesex County.

INFOR MATION

PHOTO: 120:17-19 (02/92) REVISED BY (DATE): QUAD: Bound Brook

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 122B235 **CO** MIDDLESEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MAIN STREET OVER GREEN BROOK **FACILITY** MAIN STREET

TOWNSHIP MIDDLESEX BOROUGH

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 2 **LENGTH** 125 ft **WIDTH** 40 ft

CONSTRUCTION DT 1931 **ALTERATION DT** **SOURCE** PLAQUES

DESIGNER/PATENT MIDDLESEX AND SOMERSET CO. **BUILDER** ARTHUR E. SMITH, CONTRACT

SETTING / CONTEXT The bridge carries two lanes of traffic and two sidewalks across a wide stream. To the south of the bridge are several rail lines with bridges carrying them across the same stream. An abandoned building in a contractor's yard is the structure nearest the bridge. Other development is mid- to late-20th century. The bridge spans from Somerset County into Middlesex County.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span concrete elliptical deck arch bridge is the largest and best-detailed of several joint-county structures. The posts at the cutwater pier and abutments are paneled, and a denticulated cornice runs the length of the bridge. The concrete balustrade has pylons at the corners of the bridge with copper luminaries. The bridge is significant because of its state of preservation and its representation of quality joint-county bridges built on the county line prior to World War II.

INFOR MATION

Bibliography:
Middlesex County Engineer, Bridge File 2-B-235.

Physical Description: The handsome two-span concrete deck arch bridge is a well-detailed example of its type. The reinforced concrete arches are defined by paneled concrete posts at the pier and abutments that rise into classically styled pylons at the four corners of the bridge. Each is set with a handsome copper luminare that still functions. A concrete balustrade encloses the sidewalks. A denticulated cornice runs the length of the bridge below the balustrade. The entire structure is well-detailed and well preserved.

Historical and Technological Significance: The 1931 reinforced concrete arch bridge that carries Main Street over Green Brook is the most distinctive of several joint-county bridges that cross the brook (Criterion C). It is not a large bridge, but it is very ambitious in details and its proportioning and it ranks as one of the most handsome small concrete bridges in the area. It is one of the most intact examples of a common highway bridge type. The designer took full advantage of the moldable qualities of concrete, not only on normal components of bridge construction, but also using additional details, such as the pylons. It also retains its original luminaires, which add to its historic significance. The once-common lamp has become increasingly rare.

The technology of the bridge is not innovative. Reinforced concrete arch bridge were very popular in the first 30 years of the 20th century. This structure was not a pioneering feat, but made use of current proven technology. The bridge is significant because of its outstanding characterization of the joint-county bridges built during the 1920s and 1930s, using current technology of the era. It was designed by the engineering departments of Middlesex and Somerset Counties.

Boundary Description and Justification: The bridge is evaluated as individually distinguished. The boundary of significance is therefore the structure itself - including the substructure and the superstructure.

PHOTO: 120:11-13 (02/92) REVISED BY (DATE): QUAD: Bound Brook

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 123B019 **CO** MIDDLESEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WATER WORKS ROAD OVER DEEP RUN **FACILITY** WATER WORKS ROAD

TOWNSHIP OLD BRIDGE TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 35 ft **WIDTH** 24 ft

CONSTRUCTION DT 1927 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT OFFICE OF COUNTY ENGINEER **BUILDER**

SETTING / CONTEXT The bridge is located in a wooded area. It carries an unimproved road over a small stream.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased stringer bridge bears on concrete abutments and has a concrete deck. The balustrade has been filled with masonry blocks and covered on the inside face with gunite. The bridge is not technologically or historically distinguished, being one of over 40 extant pre-World War II stringer bridges in the county.

INFOR MATION

PHOTO: 123:30-31 (03/92) REVISED BY (DATE): QUAD: South Amboy

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 123B040 **CO** MIDDLESEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MATAWAN-OLD BRIDGE ROAD OVER LEFFERTS LAKE **FACILITY** MATAWAN OLD BRIDGE ROAD

TOWNSHIP OLD BRIDGE TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 4 **LENGTH** 38 ft **WIDTH** 27.8 ft

CONSTRUCTION DT 1929 **ALTERATION DT** 1990 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT OFFICE OF COUNTY ENGINEER **BUILDER**

SETTING / CONTEXT The bridge is located in a mid- to late-20th century residential area, and spans a small lake created by the damming of a stream. The bridge carries a two lane collector road and a narrow sidewalk across the lake.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The four span stringer bridge sits on abutments of field stone capped with a concrete seat. The piers are of new timber construction. A steel grid deck on weathering steel stringers spans the three piers. This superstructure was placed in 1990, replacing a similar structural system. New galvanized railings are bolted to the fascia stringers. The bridge is not old enough to be evaluated as technologically or historically distinguished.

INFOR MATION

PHOTO: 113:19-20 (01/92) REVISED BY (DATE): QUAD: Keyport

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US
November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 123B049 **CO** MIDDLESEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MATAWAN-OLD BRIDGE ROAD OVER DEEP RUN **FACILITY** MATAWAN OLD BRIDGE ROAD

TOWNSHIP OLD BRIDGE TOWNSHIP

TYPE STRINGER **DESIGN** CONTINUOUS **MATERIAL** Steel

 # SPANS 2 **LENGTH** 46 ft **WIDTH** 29.4 ft

CONSTRUCTION DT 1929 **ALTERATION DT** 1986 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT OFFICE OF COUNTY ENGINEER **BUILDER**

SETTING / CONTEXT The bridge is located in a wooded area with scattered small, commercial structures. The bridge carries a busy 2-lane road and a sidewalk across a small stream.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 2-span continuous stringer bridge sits on timber pile bents and concrete abutment seats. The weathering steel double beam guiderail is bolted to a concrete sidewalk that rests on the steel grid deck on one side, and is bolted to the fascia stringer on the other. The structure was rehabilitated in 1986. It is technologically undistinguished, and is not old enough to be evaluated as a historically distinguished structure.

INFOR MATION

PHOTO: 123:32-33 (03/92) REVISED BY (DATE): QUAD: South Amboy

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 123B050 **CO** MIDDLESEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MATAWAN ROAD OVER SOUTH RIVER **FACILITY** MATAWAN ROAD

TOWNSHIP OLD BRIDGE TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 4 **LENGTH** 88 ft **WIDTH** 27 ft

CONSTRUCTION DT 1928 **ALTERATION DT** Demolished **SOURCE** PLAQUE

DESIGNER/PATENT JOHN J. REISER, CO ENGINEER **BUILDER**

SETTING / CONTEXT The bridge is located in an undistinguished mixed residential and small commercial area. The bridge carries 2 lanes of traffic and one sidewalk over a river.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Bridge was Not Individually Eligible. Listed. Old Bridge Historic District. 06/29/1977. Noncontributed.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The four-span stringer bridge is supported by timber pile bents. The abutments are timber sheet piling fronted by bents. The 1928 structure was completely rebuilt in 1971. The bridge is not old enough to be evaluated as a historically distinguished structure.

INFOR MATION

PHOTO: 125:27A-30A (03/92 JPH (5/96)) REVISED BY (DATE): QUAD: South Amboy

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 123B078 **CO** MIDDLESEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BORDENTOWN ROAD OVER SOUTH RIVER **FACILITY** BORDENTOWN ROAD

TOWNSHIP OLD BRIDGE TOWNSHIP

TYPE THRU GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 125 ft **WIDTH** 30 ft

CONSTRUCTION DT 1927 **ALTERATION DT** Demolished **SOURCE** PLAQUE

DESIGNER/PATENT W. FRANKLIN BUCHANON, CO. ENG. **BUILDER** G. WICKBERG & SONS, CONTR

SETTING / CONTEXT The bridge carries a busy 2-lane collector road with one sidewalk across a river. Downstream from the bridge is a mixed-20th century residential area, and upstream is a wide floodplain. A bridge carrying ConRail's Amboy Secondary crosses the floodplain 100' upstream.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Bridge was Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 2-span thru-girder bridge with floorbeams sits on concrete abutments and a cutwater pier. The superstructure is completely encased, including the cantilevered sidewalk brackets and stringers. The concrete balustrade along the sidewalk is a common design with little detail. The bridge is not historically and technologically distinguished, as it is a common bridge type. It is one of over 15 thru-girder bridges in the county.

INFOR MATION

PHOTO: 125:31A-33A (03/92) REVISED BY (DATE): QUAD: South Amboy

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 123B133 **CO** MIDDLESEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MAIN STREET OVER MILL POND **FACILITY** MAIN STREET

TOWNSHIP MILLTOWN BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 5 **LENGTH** 164 ft **WIDTH** 32 ft

CONSTRUCTION DT 1929 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT W. FRANKLIN BUCHANON, CO. ENG. **BUILDER** HENRY E. TERRILL, CONTR.

SETTING / CONTEXT The bridge is located in downtown Milltown, where 20th century structures are dominant. A small dam is located 20' downstream, creating the pond in a park-like setting. The bridge carries a 2-lane street and two sidewalks across the pond. The bridge is scheduled for replacement in 1992. Adjacent to the bridge was the Meyer Rubber Co./Michelin Tire Co. rubber processing plant. It was used for this purpose until 1930, but is now divided into several different plants.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 5-span stringer bridge sits on concrete piers that rise less than 2 feet above the water. The fascia stringers are paneled. The balustrades are a common county design, with square balusters. Aluminum light standards (not original) are mounted on the posts at a few piers. An iron pipe railing is present at one approach, although it is not original. The bridge is not technologically or historically distinguished, being one of over 40 of this type in Middlesex County.

INFOR MATION

PHOTO: 125:13A-16A (03/92) REVISED BY (DATE): QUAD: New Brunswick

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 123B145 **CO** MIDDLESEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WASHINGTON PLACE OVER FARRINGTON LAKE **FACILITY** WASHINGTON PLACE

TOWNSHIP NORTH BRUNSWICK TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 40 ft **WIDTH** 18.3 ft

CONSTRUCTION DT 1925 **ALTERATION DT** 1970ca **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge is set in a mixed-20th century residential area with a rustic restaurant directly adjacent to the lake and the bridge. The bridge carries 2 lanes of traffic across a narrow point in the lake. It is scheduled for replacement in 1993.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span steel stringer bridge has four stringers supporting a concrete deck. The concrete abutments and wingwalls support the stringers not more than a few feet above the water level. A beam and post guiderail is bolted to the deck on each side of the roadway. The bridge is not technologically innovative nor historically distinguished. The deck and superstructure appear to have been replaced ca. 1970, but the date of alteration is not documented.

INFOR MATION

PHOTO: 124:44,1 (02/92) REVISED BY (DATE): QUAD: New Brunswick

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 123B171 **CO** MIDDLESEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED EASTON AVENUE OVER MILE RUN BROOK **FACILITY** EASTON AVENUE

TOWNSHIP NEW BRUNSWICK CITY

TYPE STONE ARCH **DESIGN** BARREL **MATERIAL** Stone

 # SPANS 1 **LENGTH** 22 ft **WIDTH** 30.5 ft

CONSTRUCTION DT 1823 **ALTERATION DT** **SOURCE** SOMERSET CO. RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in a mixed residential and commercial neighborhood, and carries a 2-lane roadway over a small stream at the county border. An abandoned brick building which housed a pumping station is located 10' downstream from the bridge, with a new facility is located downstream of the old one. Easton Ave. is the right-of-way of the 1806 New Jersey Turnpike Company road from Easton to New Brunswick. The road was completed in 1809, but was never a commercial success.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The handsome and well-preserved skewed stone barrel-arch bridge is 35' wide with not visible signs of having been widened. The intrados is neatly coursed ashlar stone, and the opening is finished with ringstone. The beveled cap stones are original. The date stone is deteriorated, but the date is recorded in Somerset County Engineer records. The stone arch is one of the most complete early-19th century examples of its type in the area. It was built on an early turnpike road.

INFOR MATION

Bibliography:
Condit, Carl W. American Building Art, The Nineteenth Century. 1960.
Doughty, Joshua, Jr. "Early Roads in Somerset County", Somerset County Historical Quarterly, Vol. I, 1912.

Physical Description: The barrel-shaped 22'-long stone arch bridge is constructed entirely of coursed ashlar. There are no signs that the bridge has been widened. The coursed ashlar intrados are in good condition. The arches are finished with gauged ringstones, and the stone parapets have bevel-topped capstones. A limestone panel in the parapet that bore an inscription from the time of construction is weathered, obscuring the date of construction. The rest of the bridge is very well-preserved.

Historical and Technological Significance: The Easton Avenue bridge, built in 1823, is a good example of a stone arch bridge from the early turnpikes in New Jersey. The bridge is very wide in comparison to other stone arch bridges, and rises higher than many above the stream bed that is crossed. The state of preservation of the bridge is exceptional, considering the structure was completed in 1823. The spandrels as well as the structural stones are well-preserved.

The bridge is one of the oldest in area. Like most of the other late-18th and early 19th-century stone arch bridges in the state, this example was built by a turnpike company. The New Jersey Turnpike Company was chartered in 1806 to run from Easton, PA to New Brunswick. The road was completed in 1809, but it was never a financial success, and the roadway in each county was donated to that county in 1869.

PHOTO: 118:8A-10A (02/92) REVISED BY (DATE): QUAD: Plainfield

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1241150 **CO** MIDDLESEX **OWNER** NJDOT **MILEPOINT** 0.35

NAME & FEATURE INTERSECTED NJ 184 OVER US 9 **FACILITY** NJ 184

TOWNSHIP WOODBRIDGE TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 103 ft **WIDTH** 40 ft

CONSTRUCTION DT 1938 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located in an area with late-20th century commercial structures surrounding the interchange. It carries a four-lane highway with two sidewalks across a six-lane divided highway.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 2-span encased stringer bridge bears on a concrete substructure with Moderne fluted pilasters and stylized entablature on the abutments and the pier. The concrete baluster is the common type, with approach guiderails fastened to the end posts. The stringer bridge is a representative example of the well-detailed State Highway Department designs for overpasses from the years before World War II. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 116:16-18 (02/92) REVISED BY (DATE): QUAD: Perth Amboy

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1249160 **CO** MIDDLESEX **OWNER** RAILROAD **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PRINCETON-PLAINSBORO ROAD OVER AMTRAK NORTHEAST CORRIDOR **FACILITY** PRINCETON PLAINSBORO ROAD

TOWNSHIP PLAINSBORO TOWNSHIP

TYPE THRU GIRDER **DESIGN** PARTIALLY ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 75 ft **WIDTH** 22.2 ft

CONSTRUCTION DT 1915 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in a sparsely developed area of 19th century farms. It carries a busy 2-lane road and a sidewalk across 4 electrified tracks of Amtrak's Northeast Corridor, also used by New Jersey Transit. The Northeast Corridor was consolidated in New Jersey in 1871 by the Pennsylvania RR. They combined many smaller routes to form the passenger corridor and shifted most freight to other lines. Amtrak took over in 1976 after the PA RR went bankrupt.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single span steel thru-girder bridge sits on rusticated ashlar abutments with concrete caps. The riveted girders are encased below deck level, along with the floorbeams and sidewalk brackets. The sidewalk slab is deteriorating, and has been covered with a timber plank walk for 15'. Corrugated aluminum barriers are in place at both bridge faces over the electrified tracks. The bridge is not technologically or historically distinguished.

INFOR MATION

PHOTO: 123:39-42 (03/92) REVISED BY (DATE): QUAD: Hightstown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1249167 **CO** MIDDLESEX **OWNER** RAILROAD **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BRIDGE STREET OVER AMTRAK NORTHEAST CORRIDOR **FACILITY** BRIDGE STREET

TOWNSHIP METUCHEN BOROUGH

TYPE THRU GIRDER **DESIGN** CONTINUOUS **MATERIAL** Steel

 # SPANS 3 **LENGTH** 137 ft **WIDTH** 22 ft

CONSTRUCTION DT 1932 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT PA RR OFFICE OF ENGINEER **BUILDER** McCLINTIC-MARSHALL CORP.

SETTING / CONTEXT The bridge carries a busy 2-lane road and one sidewalk across 4 electrified tracks of Amtrak's Northeast Corridor and one spur of non-electrified Conrail tracks. The bridge was built as part of the Pennsylvania RR's electrification project. From 1930-34 the Northeast Corridor was electrified, requiring the raising and reconstruction of many bridges along the route. Amtrak took over operation of the NE Corridor trains in 1971, and took actual possession of the line in 1976.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 3-span continuous thru-girder bridge with floorbeams sits on steel columns set in concrete crash walls and scored concrete abutments. The sidewalk is cantilevered from the girder, and a high concrete parapet crosses the bridge. A PA RR-design railing is present at the corners of the bridge. At the girder splices, some rivets have been replaced with bolts. Being one of over 15 thru-girder bridges in the county, the structure is not technologically or historically distinguished.

INFOR MATION

PHOTO: 121:40-42 (03/92) REVISED BY (DATE): QUAD: Plainfield

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 124B031 **CO** MIDDLESEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED DAVIDSON'S MILL ROAD OVER LAWRENCE BROOK (FARRINGTON) **FACILITY** DAVIDSON'S MILL ROAD

TOWNSHIP SOUTH BRUNSWICK TOWNSHIP

TYPE SLAB **DESIGN** CONTINUOUS **MATERIAL** Concrete

 # SPANS 2 **LENGTH** 48 ft **WIDTH** 30 ft

CONSTRUCTION DT 1931 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT W. FRANKLIN BUCHANON, CO. ENG. **BUILDER** WALLACE J. WILCK,CNTRCTR.

SETTING / CONTEXT The bridge is set in a wooded area, and carries a local 2-lane road with narrow shoulders across a small stream. Further upstream the brook is dammed to create a recreational lake (Davidson's Mill Pond).

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span slab bridge sits on concrete abutments. A new guiderail is attached to the common county designed balustrade, and utility ducts sit on brackets on the outside of the railing. The bridge is not historically or technologically distinguished. It is one of over 5 slab bridges in Middlesex County.

INFOR MATION

PHOTO: 124:40-41 (02/92) REVISED BY (DATE): QUAD: New Brunswick

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 124B034 **CO** MIDDLESEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED DAVIDSON'S MILL ROAD OVER OAKEYS BROOK **FACILITY** DAVIDSON'S MILL ROAD

TOWNSHIP SOUTH BRUNSWICK TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Concrete

 # SPANS 1 **LENGTH** 23 ft **WIDTH** 30.2 ft

CONSTRUCTION DT 1931 **ALTERATION DT** 1968 **SOURCE** INSCRIPTION

DESIGNER/PATENT OFFICE OF THE COUNTY ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in a wooded residential area, and carries a two-lane road with narrow shoulders over a small stream. A large storm drain outlets through a downstream wingwall.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The original structure was a slab bridge with a common county-designed balustrade on concrete abutments. That structure has been replaced with a new slab bridge on new reinforced concrete abutments. A new guiderail lines the road, its posts set in the concrete of the new curb and slab. The bridge is not old enough to be evaluated as a historically distinguished structure.

INFOR MATION

PHOTO: 124:42-43 (02/92) REVISED BY (DATE): QUAD: New Brunswick

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 124B037 **CO** MIDDLESEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED RIVA AVENUE OVER LAWRENCE BROOK **FACILITY** RIVA AVENUE

TOWNSHIP SOUTH BRUNSWICK TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Concrete

 # SPANS 2 **LENGTH** 39 ft **WIDTH** 17.2 ft

CONSTRUCTION DT 1910 **ALTERATION DT** 1987 **SOURCE** NJDOT

DESIGNER/PATENT OFFICE OF THE COUNTY ENGINEER **BUILDER**

SETTING / CONTEXT The bridge is set in a scenic area of a park, with a masonry dam located 30' upstream causing the formation of Davidson's Mill Pond. The bridge carries two lanes of a narrow winding road across a small stream.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 1987 rehabilitation of this bridge included a new concrete pier and a deck slab as well as repointing of the stone abutments. The bridge has not retained the integrity of the original stringer design. The new bridge is not old enough to be evaluated as a historic structure.

INFOR MATION

PHOTO: 124:39 (02/92) REVISED BY (DATE): QUAD: New Brunswick

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 124B079 **CO** MIDDLESEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED SCHALKS ROAD OVER DEVILS BROOK **FACILITY** SCHALKS ROAD

TOWNSHIP PLAINSBORO TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 22 ft **WIDTH** 24 ft

CONSTRUCTION DT 1915 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge is located in an undeveloped wooded area, and carries a 2-lane access road across a small stream.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single span slab bridge sits on concrete abutments. The concrete parapets are paneled on both faces, with an inscribed date at the center of one of them. The bridge has new beam guiderails across the front of the parapets. It is very similar in style to structure 122B065. This span is one of 5 pre-World War II slab bridges remaining in the county and is not technologically or historically distinguished.

INFOR MATION

PHOTO: 123:8-9 (03/92) REVISED BY (DATE): QUAD: Hightstown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 124B090 **CO** MIDDLESEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MAPLE AVENUE OVER CRANBURY BROOK **FACILITY** MAPLE AVENUE

TOWNSHIP PLAINSBORO TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 22 ft **WIDTH** 30 ft

CONSTRUCTION DT 1910 **ALTERATION DT** 1964, 1985 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT OFFICE OF COUNTY ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in a wooded area with scattered mixed-20th century residences. The bridge carries a two-lane collector road and two sidewalks across a small stream. The stream is dammed at the upstream face of the bridge to create a lake and a park area.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one span stringer bridge sits on concrete abutments dating to 1910. A modern concrete and aluminum railing crosses the bridge that also has beam guiderails at the curb lines. On the upstream side of the bridge is a dam fitted with manually operated flood gates. The bridge was significantly altered in 1964 (widened) and 1985 (superstructure replaced). The bridge is not evaluated as a historic structure because of the age and the common type of superstructure.

INFOR MATION

PHOTO: 123:43-44,1-2 (03/92) REVISED BY (DATE): QUAD: Hightstown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 124B106 **CO** MIDDLESEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED HIGHTSTOWN (GEORGES) ROAD (CR 539) OVER MILLSTONE RIVER **FACILITY** HIGHTSTOWN (GEORGES) ROAD (CR 539)

TOWNSHIP CRANBURY TOWNSHIP

TYPE THRU GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 72 ft **WIDTH** 30 ft

CONSTRUCTION DT 1920 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located in a wooded floodplain of the Millstone River. It carries a two-lane county route with narrow shoulders across a stream. At the time of inspection, the water level was approximately 3" below the bottom flange of the girder. The abutments and bearings were fully submerged. The bridge is scheduled for replacement in 1992.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one-span riveted thru-girder bridge sits on concrete abutments. The steel girder serves as the parapet. Concrete endposts at the four corners of the bridge bear typical inscriptions of "STATE HIGHWAY ROUTE 1" and "NEW JERSEY STATE 1920". The bridge is not technologically or historically distinguished, being one of over 15 remaining thru-girder bridges in Middlesex County built prior to World War II.

INFOR MATION

PHOTO: 126:33A-35A (03/92) REVISED BY (DATE): QUAD: Hightstown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 124C105 **CO** MIDDLESEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MAIN STREET OVER CRANBURY BROOK **FACILITY** MAIN STREET

TOWNSHIP CRANBURY TOWNSHIP

TYPE DECK ARCH **DESIGN** BARREL **MATERIAL** Brick

 # SPANS 1 **LENGTH** 23 ft **WIDTH** 34.6 ft

CONSTRUCTION DT 1896 **ALTERATION DT** 1987, 1992 **SOURCE** LOCAL RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge, located in the Cranbury Historic District, carries a 2-lane street and sidewalks across a brook that has been dammed at the upstream face of the bridge to create Brainerd Lake. The period of significance for the historic district is late-18th century to early-20th century. The bridge was built during this period. While most of the structures along Main Street have been evaluated for their historical significance, the bridge was not.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Listed. Cranbury Historic District. 09/18/1980. Contributing.

CONSULT DOCUMENTS SHPO Letter 03/12/01

SUMMARY The 23'-long brick arch bridge with rubble-coursed spandrel walls and wingwalls has gauged ringstones. The spandrel walls have utility pipe cuts, and the intrados has been covered with concrete. A low concrete buttressing system is being built along the upstream face of the retaining wall. At the upstream face of the bridge is the dam with manually operated gates. The bridge has been extensively reworked over time. The bridge is not individually eligible for listing in the National Register, but, since it was constructed within the period of significance of the Cranbury Historic District, it is thus a contributing resource under Criterion C.

INFOR MATION

Bibliography:
Cranbury Press. February 28, 1896.

Physical Description: The bridge is a 23' long elliptical brick arch bridge with rubble-coursed masonry spandrel walls and gauged ringstones. The metal pipe railings on the span and approaches appear to date to the early 20th century. The arch span is part of a mill pond dam, and the upstream arch is framed by a rounded spillway fitted with a manually operated sluice gate. The upstream approaches are ashlar-lined to create the dam, and they have been reinforced with concrete buttresses. The lower water level on the downstream face of the bridge allows a full view of the arch. The intrados of the arch is coated with gunite, an alteration completed in 1987.

Historical and Technological Significance: The brick arch bridge is a contributing element to the Cranbury Historic District, listed in the National Register of Historic Places in 1980 under Criterion A. Although it was not rated in the nomination, the bridge does contribute to the historic character of the district. According to a local newspaper entry the bridge was built in 1896, which is during the period of significance of the district that extends from the 18th century through the early 20th century.

The brick arch bridge was built in 1896 to replace a wooden bridge that had been destroyed. The bridge carries the major thoroughfare in Cranbury, and when a replacement was needed the freeholders decided that a masonry arch was the best choice for long durability and quick construction. The retaining walls were built in 1904. The is the only brick arch bridge in Middlesex County, but the bridge type, dating primarily from the second half of the 19th century, is not uncommon in the state.

Boundary Description and Justification: The bridge is within the limits of the historic district. The elements of the structure that do contribute are the span itself, the retaining (wing) walls and the railing of the structure.

PHOTO: 126:36A-39A (03/92 JPH (5/96)) REVISED BY (DATE): QUAD: Hightstown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1250160 **CO** MIDDLESEX **OWNER** UNKNOWN **MILEPOINT** 18.36

NAME & FEATURE INTERSECTED STATE STREET OVER CHEMICAL COAST BRANCH RR **FACILITY** STATE STREET

TOWNSHIP WOODBRIDGE TOWNSHIP

TYPE THRU GIRDER **DESIGN** PARTIALLY ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 203 ft **WIDTH** 42 ft

CONSTRUCTION DT 1941 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge is located in a major industrial area that was a resort around the turn of the century. Late-19th century homes still line State Street, a 2-lane road with 2 sidewalks. The bridge crosses two tracks of ConRail's Chemical Coast Branch, which serves local industries. The line was built in 1873 by the Central RR of NJ as the Perth Amboy & Elizabeth RR. It connects with the New York & Long Branch in Perth Amboy and the CNJ's Mainline in Elizabethport to the north.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed 3-span thru-girder and floorbeam bridge sits on scored concrete abutments and concrete column piers. Blast plates are located over the tracks. The sidewalks are cantilevered from the girders with brackets, and a metal fence lines the walks. Guiderails have been placed along the curb lines at the inside face of the girders. The bridge is not distinguished technologically or historically. It is one of over 15 extant pre-World War II thru-girders in the county.

INFOR MATION

PHOTO: 117:41-43 (02/92) REVISED BY (DATE): QUAD: Perth Amboy

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1251160 **CO** MIDDLESEX **OWNER** UNKNOWN **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED OLD BRIDGE TURNPIKE OVER SAYREVILLE SECONDARY RR **FACILITY** OLD BRIDGE TURNPIKE

TOWNSHIP SOUTH RIVER BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 75 ft **WIDTH** 30 ft

CONSTRUCTION DT 1920 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in a mid to late 20th century residential and commercial area, and carries a 2-lane road with 2 sidewalks over a single track of ConRail's Sayreville Secondary. The line was built in 1890 by the Raritan River Railroad as an extension of its line from South Amboy to Washington (4 mi.) built in 1888. The R.R. RR built a few branches during these years, but they do not remain in service. Conrail obtained the line in 1980 and still uses it for freight.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 3-span stringer bridge sits on a concrete substructure of abutments and piers with arched struts. The exposed bottom flanges reveal that each longitudinal member is composed of paired I-beam stringers. This is the only bridge surveyed in Middlesex County that has a coupled stringer arrangement, but the basic bridge type is common. Chain-link fencing lines the sidewalks at both faces of the bridge. The bridge is not technologically or historically distinguished.

INFOR MATION

PHOTO: 125:22A-24A (03/92) REVISED BY (DATE): QUAD: New Brunswick

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1251161 **CO** MIDDLESEX **OWNER** UNKNOWN **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MAIN STREET OVER SAYREVILLE SECONDARY **FACILITY** MAIN STREET

TOWNSHIP SOUTH RIVER BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 77 ft **WIDTH** 34.5 ft

CONSTRUCTION DT 1912 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge is located in an area of late-19th to early-20th century housing and converted commercial buildings. It carries 2 traffic lanes and 2 sidewalks across a single track of ConRail's Sayreville Secondary. The line was built in 1890 by the Raritan River RR from New Brunswick to South Amboy, where it connected with the Pennsylvania RR and the New York and Long Branch RR. A few branches were built, but only the main line has remained in use by Conrail since 1980.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 3-span stringer bridge sits on concrete abutments and steel pier bents. The rolled H-section bents sit on concrete plinths and have riveted cross bracing of angle sections. The stringers are encased above the bottom flanges. Chain-link fencing provides the only railing across the bridge. The bridge is not technologically or historically distinguished and is one of over 40 remaining pre-World War II stringer bridges in Middlesex County.

INFOR MATION

PHOTO: 125:18A-21A (03/92) REVISED BY (DATE): QUAD: New Brunswick

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1251163 **CO** MIDDLESEX **OWNER** UNKNOWN **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WASHINGTON ROAD OVER ABANDONED SAYREVILLE SECONDARY **FACILITY** WASHINGTON ROAD

TOWNSHIP SOUTH AMBOY CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 92 ft **WIDTH** 33.1 ft

CONSTRUCTION DT 1914 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge is located in a 1920s residential area. It carries a two lane local road and two sidewalks across an abandoned railroad right-of-way owned by Conrail. The rail line was built in 1888 from South Amboy to Washington (4 miles) by the Raritan River RR. The line was abandoned in 1980 when Conrail took possession of the Raritan River Railroad.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 3-span encased stringer bridge is supported on steel column bents with bolted cross bracing. The concrete abutments are original to the bridge, but the bents may have been repaired or replaced. The bottom flanges of the stringers are exposed. Steel plates on top of the deck cover full-depth holes. A pipe railing is present along one sidewalk with fencing on the other side. The bridge is not technologically or historically distinguished.

INFOR MATION

PHOTO: 113:29-31 (01/92) REVISED BY (DATE): QUAD: South Amboy

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1252162 **CO** MIDDLESEX **OWNER** UNKNOWN **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED GROVE STREET OVER PORT READING SECONDARY RAILROAD **FACILITY** GROVE STREET

TOWNSHIP METUCHEN BOROUGH

TYPE STRINGER **DESIGN** **MATERIAL** Timber

 # SPANS 5 **LENGTH** 117 ft **WIDTH** 30 ft

CONSTRUCTION DT 1900 **ALTERATION DT** 1981 **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge is located in an area of mid to late 20th century residential structures and the local high school. The bridge carries 2 lanes of traffic and one sidewalk across an inactive railroad track. The rail line was built by the Reading Railroad in 1892 from Manville to Port Reading, a new terminal on the Arthur Kill used for transfer of anthracite coal from trains to ships. The line was in use until 1983, when the coal operation was discontinued.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 5-span timber stringer bridge sits on timber pile bents and stone and concrete stub abutments. The bents have metal straps holding vertical and horizontal members together. The bridge appears to have been raised and widened, evidenced by the abutments' change in materials. What appears to be the original stone abutments are now plinths for timber columns supporting a raised structure. The deck was replaced and widened in 1981. The bridge is not technologically or historically distinguished.

INFOR MATION

PHOTO: 122:32A-34A (03/92) REVISED BY (DATE): QUAD: Perth Amboy

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1253160 **CO** MIDDLESEX **OWNER** UNKNOWN **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MOUNTAIN AVENUE OVER LEHIGH VALLEY RAILROAD **FACILITY** MOUNTAIN AVENUE

TOWNSHIP MIDDLESEX BOROUGH

TYPE THRU GIRDER **DESIGN** CONTINUOUS **MATERIAL** Steel

 # SPANS 4 **LENGTH** 84 ft **WIDTH** 23.8 ft

CONSTRUCTION DT 1904 **ALTERATION DT** 1930, 1956 **SOURCE** PLANS

DESIGNER/PATENT LEHIGH VALLEY RR OFF. OF ENGNR **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is set in an industrial area of mixed-20th century construction. It carries a 2-lane road and a sidewalk over a railroad track of the Lehigh Valley RR. The line was built in the 1870s to carry coal from Pennsylvania to New York Harbor in Perth Amboy. The line was expanded from 2 to 4 tracks by the 1910s, and reduced to 2 tracks during the 1950s or '60s. Conrail took over the line in 1976, and made it their main line from Allentown, PA to New York.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The riveted built-up thru-girder bridge sits on timber bents and stone abutments with intensive concrete repairs. The approach spans are timber stringers. The timber sidewalk was added in 1930, and is framed out of the girder. In 1956 the roadway was widened by shifting one of the girders 8'. Concrete was added to the abutments at this time, and the floorbeams and stringers were replaced. The bridge has lost its original design integrity and is technologically and historically undistinguished.

INFOR MATION

PHOTO: 120:20-22 (02/92) REVISED BY (DATE): QUAD: Plainfield

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1253161 **CO** MIDDLESEX **OWNER** UNKNOWN **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WASHINGTON AVENUE OVER LEHIGH VALLEY RR & POND **FACILITY** WASHINGTON AVENUE

TOWNSHIP PISCATAWAY TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 7 **LENGTH** 376 ft **WIDTH** 34 ft

CONSTRUCTION DT 1936 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge is located by New Market Lake, a man-made feature caused by damming Bound Brook. The bridge carries a 2-lane arterial road and 2 sidewalks over the lake and Conrail tracks. The railroad was built in the 1870s by the Lehigh Valley RR. Double tracks were expanded to four-tracks in the early 1900s and reduced to two tracks during the 1950s or 1960s. Conrail took over the line in 1976.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 12/07/89

SUMMARY The 7-span encased stringer bridge sits on 3-column concrete hammerhead piers and abutments. The substructure is unadorned, but the concrete parapets are paneled on both faces. The stringers are simply supported. The bridge is technologically and historically undistinguished. It is one of over 40 remaining stringer bridges in Middlesex County that were built prior to World War II.

INFOR MATION

PHOTO: 120:32-34 (02/92) REVISED BY (DATE): QUAD: Plainfield

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1253163 **CO** MIDDLESEX **OWNER** NJDOT **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PARK AVENUE OVER LEHIGH VALLEY RR **FACILITY** PARK AVENUE

TOWNSHIP SOUTH PLAINFIELD BOROUGH

TYPE THRU GIRDER **DESIGN** PARTIALLY ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 125 ft **WIDTH** 30 ft

CONSTRUCTION DT 1933 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT LEHIGH VALLEY RR BRIDGE ENGNR. **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located near a late-20th century shopping center and industrial area. The bridge carries 2 traffic lanes and 2 sidewalks across one active track of the Lehigh Valley RR's Jersey City extension. The line was built in 1888 with a double track. Four-tracking was carried out by the 1910s and returned to double-tracking during the 1950s and 1960s. Conrail took over the line in 1976, and made it the main line from Allentown, PA to New York in the 1980s.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The riveted thru-girder main span bridge sits on concrete 3-column hammerhead bents. The approach spans are concrete T-beams bearing on concrete abutments. The girder and floorbeams are encased below the deck. The cantilevered sidewalk is finished with a paneled fascia stringer and a metal railing. The unaltered bridge is representative of its type and is not technologically or historically distinguished. It is one of over 15 thru-girder bridges in the county built before WW II.

INFOR MATION

PHOTO: 121:35-36 (02/92) REVISED BY (DATE): QUAD: Plainfield

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1253164 **CO** MIDDLESEX **OWNER** UNKNOWN **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED OAK TREE ROAD OVER LEHIGH VALLEY RAILROAD **FACILITY** OAK TREE ROAD

TOWNSHIP EDISON TOWNSHIP

TYPE THRU GIRDER **DESIGN** PARTIALLY ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 155 ft **WIDTH** 30 ft

CONSTRUCTION DT 1931 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT LEHIGH VALLEY RR BRIDGE ENGNR. **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in a mixed industrial and residential area of late-19th through late-20th century construction. The bridge carries a 2-lane road, 1 shoulder and 1 sidewalk road over 1 active track of Conrail. The line was built in 1888 by the Lehigh Valley RR as its Jersey City extension from South Plainfield. It was 4-tracked and returned to double-tracking by the Lehigh Valley RR before Conrail took over in 1976. Structure #1253163 is nearly identical to this bridge.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 3-span bridge is composed of one thru-girder main span and concrete T-beam approach spans which sit on concrete 3-column hammerhead bents and abutments. The riveted, built-up girders and the floorbeams are encased below the deck. A steel railing encloses the cantilevered sidewalk and the approaches on the other side. The bridge is a representative example of its type. It is not technologically or historically distinguished, being one of over 15 pre-WWII thru-girder bridges in the county.

INFOR MATION

PHOTO: 121:37-39 (02/92) REVISED BY (DATE): QUAD: Plainfield

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1254160 **CO** MIDDLESEX **OWNER** RAILROAD **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED GRAHAM STREET OVER PERTH AMBOY-SOUTH PLAINFIELD BRANCH **FACILITY** GRAHAM STREET

TOWNSHIP METUCHEN BOROUGH

TYPE MULTI GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 3 **LENGTH** 109 ft **WIDTH** 31.6 ft

CONSTRUCTION DT 1906 **ALTERATION DT** 1980s **SOURCE** PLANS

DESIGNER/PATENT LEHIGH VALLEY RR OFF. OF ENGNR **BUILDER** GROTON BRIDGE COMPANY

SETTING / CONTEXT The bridge is located in a potential historic district of late-19th and early-20th century residences (south of the bridge). The bridge once carried 2 lanes across a depressed railroad, but is now closed to all traffic including pedestrians. The line was built in the 1870s as the Lehigh Valley RR's main line to New York Harbor, but became a branch in the 1880s.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Potential Historic District, May contribute.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The built-up deck girder bridge composed of 3 girders is simply supported on built-up steel bents and concrete stub abutments. The cantilevered sidewalks are enclosed with lattice railings. Although unaltered, it is deteriorated. Many of the members exhibit 100% section loss, and sections of the railing have fallen off and/or disappeared. The span lacks integrity, and thus does not contribute to the district.

INFOR MATION

PHOTO: 122:23A-26A (03/92) REVISED BY (DATE): QUAD: Perth Amboy

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1254161 **CO** MIDDLESEX **OWNER** UNKNOWN **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MAIN STREET OVER PERTH AMBOY-SOUTH PLAINFIELD BRANCH **FACILITY** MAIN STREET

TOWNSHIP METUCHEN BOROUGH

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 3 **LENGTH** 102 ft **WIDTH** 41.2 ft

CONSTRUCTION DT 1929 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge is located at the edge of a potential historic district of ca. 1900 residences, with some commercial buildings to the north. The bridge carries a 2-lane road and a sidewalk over an inactive, depressed railroad. The line was the Perth Amboy-South Plainfield Branch of the Lehigh Valley RR. It was built in the 1870s to be a main freight line to the New York harbor but became a branch when an extension was built from South Plainfield to Jersey City around 1890.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Potential Historic District, May contribute.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 3-span stringer bridge sits on steel bents and concrete stub abutments. The bents are composed of rolled I-section columns and built up bracing. The timber deck has an asphalt wearing surface. The cantilevered sidewalk is exposed timber planking. The bridge is not a contributing element to the neighborhood, and is not technologically distinguished.

INFOR MATION

PHOTO: 122:27A-28A (03/92) REVISED BY (DATE): QUAD: Perth Amboy

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1254162 **CO** MIDDLESEX **OWNER** UNKNOWN **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PIERSON AVE OVER PERTH AMBOY-SOUTH PLAINFIELD BRANCH **FACILITY** PIERSON AVENUE

TOWNSHIP EDISON TOWNSHIP

TYPE THRU GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 3 **LENGTH** 97 ft **WIDTH** 15.3 ft

CONSTRUCTION DT 1905 **ALTERATION DT** Unknown **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge spans the abandoned Perth Amboy-South Plainfield rail line. It carries a narrow two-lane road from a mid to late 20th century industrial area to a mid-20th century residential area. The rail line was built in the 1870s as the Lehigh Valley Railroad's main line to New York harbor. It became a branch when they extended the line from South Plainfield to Jersey City in the 1880s. Conrail took possession of the Lehigh Valley RR in 1976.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 3-span steel girder bridge with a "broken-back" profile sits on timber pile bents and abutments. The steel floorbeams are suspended from the girders, supporting timber stringers and a timber plank deck wide enough for only one vehicle. The added pipe railing is welded to the top flange of the girders, with chain-link fencing against the rail. The bridge is relatively early, but it is not technologically or historically distinguished.

INFOR MATION

PHOTO: 122:1A-4A (03/92) REVISED BY (DATE): QUAD: Perth Amboy

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1255161 **CO** MIDDLESEX **OWNER** RAILROAD **MILEPOINT** 12.74

NAME & FEATURE INTERSECTED BORDENTOWN SOUTH AMBOY TPK OVER AMBOY SECONDARY RR **FACILITY** BORDENTOWN SOUTH AMBOY TURNPIKE

TOWNSHIP MONROE TOWNSHIP

TYPE THRU GIRDER **DESIGN** PARTIALLY ENCASED **MATERIAL** Steel

 # SPANS 4 **LENGTH** 173 ft **WIDTH** 18 ft

CONSTRUCTION DT 1938 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge is located in a mixed use 20th century area. Currently closed to traffic, it once carried a narrow 2-lane road over electrified tracks. The Camden and Amboy Railroad developed the right-of-way in the 1830s. The roadbed in the boroughs of Helmetta and Jamestown was found eligible in a 6/26/75 SHPO Finding, but this section in Monroe Township was not.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Camden & Amboy Railroad Main Line Historic District, May contribute.

CONSULT DOCUMENTS SHPO Letter 6/30/95, Opinion 1998.

SUMMARY The skewed four-span continuous girder bridge sits on concrete piers and abutments. The floorbeams are encased in concrete poured from the bottom flange of the girders to deck level. A pipe railing is on the end girders, and a corrugated metal barrier over the electrified tracks. The bridge is not technologically or historically distinguished.

INFOR MATION

PHOTO: 127:40A-42A (03/92) REVISED BY (DATE): QUAD: Jamesburg

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 125B028 **CO** MIDDLESEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED ENGLISHTOWN ROAD OVER MATCHAPONIX BROOK **FACILITY** ENGLISHTOWN ROAD

TOWNSHIP OLD BRIDGE TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 58 ft **WIDTH** 30 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT W. FRANKLIN BUCHANON, CO. ENG. **BUILDER** WALLACE J. WILCK, CONTR.

SETTING / CONTEXT The bridge carries a busy 2-lane road with one narrow shoulder over a stream and through an undistinguished residential and small commercial area. The plaque identifies the bridge as the "Mount Mills Bridge".

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased stringer bridge rests on scored concrete abutments. The concrete balustrade is a common county design, ca. 1930. Beam guiderails are present at the approaches, but do not cross the bridge. The bridge is technologically and historically undistinguished. It is a representative example of a common bridge type.

INFOR MATION

PHOTO: 126:14A-15A (03/92) REVISED BY (DATE): QUAD: Freehold

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 125B037 **CO** MIDDLESEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MUNDY AVE OVER MATCHAPONIX BROOK **FACILITY** MUNDY AVENUE

TOWNSHIP SPOTSWOOD BOROUGH

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Steel

 # SPANS 2 **LENGTH** 58 ft **WIDTH** 32 ft

CONSTRUCTION DT 1936 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in an area of mixed-20th century houses and woods. The bridge carries a 2-lane residential street with no sidewalks over a stream.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span deck arch has corrugated metal intrados in both arches. A metal pipe railing with attached chain-link fence is set in both faces of the bridge. The railing is replaced by a beam guiderail where the concrete has spalled away at the top of the spandrel wall. The bridge is inconspicuous in its surroundings, and is not technologically or historically distinguished.

INFOR MATION

PHOTO: 125:34A-35A (03/92) REVISED BY (DATE): QUAD: South Amboy

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 125B045 **CO** MIDDLESEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED OLD TEXAS ROAD OVER MATCHAPONIX BROOK **FACILITY** OLD TEXAS ROAD

TOWNSHIP MONROE TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 4 **LENGTH** 90 ft **WIDTH** 24.2 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge is located in a wooded setting with modern residential structures a few hundred feet away. The roadway carried is a 2-lane collector without shoulders or sidewalks. The bridge crosses a small stream.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 7/5/91

SUMMARY The 4-span steel stringer bridge has a timber substructure. The abutments and piers are pile bents with plank cross bracing. The abutment faces are timber sheet piling. The simply supported stringers are rolled steel sections, supporting a concrete deck with steel beam and wood guiderails. The bridge is not technologically or historically distinguished.

INFOR MATION

PHOTO: 113:11A-14A (01/92) REVISED BY (DATE): QUAD: Freehold

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 125B055 **CO** MIDDLESEX **OWNER** COUNTY **MILEPOINT** 0.0
NAME & FEATURE INTERSECTED RUE ROAD OVER MATCHAPONIX BROOK **FACILITY** RUE ROAD
TOWNSHIP MONROE TOWNSHIP
TYPE PONY TRUSS **DESIGN** WARREN **MATERIAL** Steel
 # SPANS 2 **LENGTH** 89 ft **WIDTH** 14.8 ft

CONSTRUCTION DT 1910 **ALTERATION DT** Demolished **SOURCE** NJDOT
DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries one lane of a two-lane road over a small stream. The surrounding area is scattered with residences of early- to mid-20th century construction.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No
CONSULT STATUS Bridge was Individually Eligible.
CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The riveted Warren pony truss bridge sits on caisson-like concrete-filled piers with metal sheet-pile back walls. It is additionally supported midspan by a timber bent. Because the trusses work in conjunction with a stringer approach span, it is possible that they were moved to this crossing at an unknown date. The bridge is technologically significant in that the trusses are well preserved and that it is the only remaining pony truss bridge in the county.

INFORMATION

Bibliography:
Condit, Carl W. American Building Art, The Twentieth Century, 1961.
Waddell, J.A.L. Bridge Engineering, 1925.
Middlesex County Engineer, Bridge File 5-B-055.

Physical Description: The 2-span bridge is composed of one stringer span and one riveted Warren pony truss span. The truss is supported on caisson-like concrete piers in steel casing. An additional timber bent supports the truss below a mid-span floor beam. The stringer span is supported on a floor beam that rests on the piers at the west end of the truss span and by a steel bent built of rolled sections at the west abutment. Metal sheet-piling retains the fill behind the structural members at each abutment. The virtually unaltered truss members are built-up using angle sections and lacing or batten plates. The top chord has a solid cover plate. Rolled floor beams and stringers support the timber deck.

Historical and Technological Significance: The 1910 Rue Road bridge is the only remaining truss bridge in Middlesex County, and as such is technologically significant as the sole representative of an important and once-common bridge type (Criterion C). The riveted Warren pony truss is the most common bridge type for early-20th century short-span crossings. Rue Road is a well-preserved example of the influential Warren pony truss. Also of technological significance are the caisson-like piers that support the truss. They are not a common detail with only about half a dozen examples identified on highway bridges throughout the state (2 in Morris County; 1401021, 1400976). They appear to have been an expedient solution to erecting a pier without erecting a coffer dam.

Because of the stringer approach span, the truss bridge seems too short for the crossing. It is possible that the truss was originally at a different location. A common practice of the early-20th century was the county use of bridges which the state was replacing in favor of larger structures. Documented cases of the practice exist in Mercer County where the ca. 1895 truss bridge at Groveville-Allentown Road (1100028) was moved from Pennington and the Iron Bridge Road span (1106704), a pony truss with a stringer approach span (a similar arrangement to the Rue Road bridge) was also relocated. There is no information in the county engineer's records to document the history of the span.

Boundary Description and Justification: The bridge is evaluated as individually distinguished. The boundary of significance is therefore the structure itself - substructure as well as superstructure.

PHOTO: 127:25-29A,126: (03/92) REVISED BY (DATE): QUAD: Freehold

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 125B096 **CO** MIDDLESEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED HOFFMAN STATION ROAD OVER MANALAPAN BROOK **FACILITY** HOFFMAN STATION ROAD

TOWNSHIP MONROE TOWNSHIP

TYPE THRU GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 53 ft **WIDTH** 24 ft

CONSTRUCTION DT 1927 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge is located in a sparsely developed area with 20th century residences. The bridge carries a 2-lane road with no shoulders across Manalapan Brook, a small stream. A 36" diameter storm drain outlets at the NE wingwall.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The thru-girder bridge with spalling encasement sits on concrete abutments with wingwalls. The bridge floorbeams are completely encased in concrete. The bridge is one of over 15 pre-World War II thru girders in Middlesex County. The bridge is a representative example of a common bridge type. It is not technologically or historically distinguished.

INFOR MATION

PHOTO: 126:8A-9A (03/92) REVISED BY (DATE): QUAD: Jamesburg

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 125B111 **CO** MIDDLESEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED FORGE STREET OVER MANALAPAN BROOK **FACILITY** FORGE STREET

TOWNSHIP JAMESBURG BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 27 ft **WIDTH** 24 ft

CONSTRUCTION DT 1928 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT W. FRANKLIN BUCHANON, CO. ENG. **BUILDER** FORDS CONSTRUCTION CO.

SETTING / CONTEXT The bridge is located in an area of mixed-20th century residences. The 2-lane residential street without sidewalks is carried across a small stream.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 12/07/89

SUMMARY The encased stringer bridge sits on scoured concrete abutments with wingwalls. Several utility mains cross the stream at the bridge, including one through the abutments. The concrete balustrade is not extensively detailed. The bridge is not technologically or historically distinguished as it is one of over 40 pre-World War II stringer bridges in Middlesex County.

INFOR MATION

PHOTO: 127:30A-31A (03/92) REVISED BY (DATE): QUAD: Jamesburg

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 125B112 **CO** MIDDLESEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED LAKE STREET OVER MANALAPAN BROOK **FACILITY** LAKE STREET

TOWNSHIP JAMESBURG BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 27 ft **WIDTH** 24 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT W. FRANKLIN BUCHANON, CO. ENG. **BUILDER** JOSEPH ELL, CONTRACTOR

SETTING / CONTEXT The bridge is located in a residential area between late-20th century apartment complexes and earlier-20th century single family homes. The 2-lane residential street crosses a small stream at the bridge. A blockage of the waterway has been created at the bridge by debris snagged on a utility main which passes through the abutments.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single span encased stringer bridge sits on scoured concrete abutments. The painted concrete balustrade has plaques on two corner posts, and is flanked by parapets at the approaches. The bridge is a common bridge type. It is not technologically or historically distinguished. The bridge is one of over 40 pre-World War II stringer bridges in Middlesex County.

INFOR MATION

PHOTO: 127:32A-33A (03/92) REVISED BY (DATE): QUAD: Jamesburg

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 125B114 **CO** MIDDLESEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BUCKELEW AVENUE OVER MANALAPAN BROOK **FACILITY** BUCKELEW AVENUE

TOWNSHIP JAMESBURG BOROUGH

TYPE DECK GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 60 ft **WIDTH** 30 ft

CONSTRUCTION DT 1926 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT W. FRANKLIN BUCHANON, CO. ENG. **BUILDER** BRANN & STUART CO., CONTR

SETTING / CONTEXT The bridge is located at the edge of downtown Jamesburg, and is titled on the plaques "Jamesburg Bridge". It carries the main street, 2-lane Buckelew Ave., and 2 sidewalks across Manalapan Brook. 100' upstream from the bridge, the brook is dammed to create the recreational Lake Manalapan. Nearby structures have not retained the integrity of their original designs.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The deck girder bridge sits on concrete abutments. The superstructure is encased, including floorbeams and sidewalk brackets at both fascias. The concrete balustrade is similar to others in the county, with parapets at the approaches. One bearing seat is failing, and the girder is currently supported by a timber brace. Several utilities cross the stream between the girders. The bridge is not technologically or historically distinguished.

INFOR MATION

PHOTO: 127:34A-39A (03/92) REVISED BY (DATE): QUAD: Jamesburg

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 125B122 **CO** MIDDLESEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED FEDERAL ROAD OVER CEDAR BROOK **FACILITY** FEDERAL ROAD

TOWNSHIP MONROE TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 24 ft **WIDTH** 28.9 ft

CONSTRUCTION DT 1920 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The 2-lane bridge with narrow shoulders carries a rural road over a small stream. The immediate area is wooded, with scattered early to mid-20th century residences and farms in the extended area.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The small steel stringer bridge bears on concrete abutments which rise just a few feet above the ground. The rolled stringers support the deck with a timber curb and a galvanized double-beam guiderail. The bridge is undistinguished in its setting, technology and history. It is one of over 40 pre-World War II stringer bridges in Middlesex County.

INFOR MATION

PHOTO: 126:44A,1A (03/92) REVISED BY (DATE): QUAD: Jamesburg

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 125B131 **CO** MIDDLESEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PERRINEVILLE ROAD OVER MILLSTONE BROOK **FACILITY** PERRINEVILLE ROAD

TOWNSHIP MONROE TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Concrete

 # SPANS 1 **LENGTH** 21 ft **WIDTH** 25.7 ft

CONSTRUCTION DT 1934 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge is located in a wooded area, with a small, deserted masonry building adjacent to the structure. The bridge carries a 2-lane collector road across a small stream, on a curve.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The concrete bridge consists of a slab on concrete abutments. The slab is not monolithic with the substructure. The pipe railing is set in the concrete, with a galvanized post and beam guiderail crossing the structure, bolted to the deck. The bridge is undistinguished in its setting, technology and history. It is a common bridge type. Five slab bridges built before World War II remain in the county.

INFOR MATION

PHOTO: 126:2A-3A (03/92) REVISED BY (DATE): QUAD: Jamesburg

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 125B152 **CO** MIDDLESEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED APPLEGARTH ROAD OVER MILLSTONE RIVER **FACILITY** APPLEGARTH ROAD

TOWNSHIP MONROE TOWNSHIP

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Steel

 # SPANS 2 **LENGTH** 48 ft **WIDTH** 28.5 ft

CONSTRUCTION DT 1934 **ALTERATION DT** **SOURCE** INSCRIPTION/NJDOT

DESIGNER/PATENT COUNTY ENGINEER'S OFFICE **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane collector road with no shoulders or sidewalks across a stream. Surrounding structures include a late-20th century single family residence and the local fire station.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 2-span deck arch bridge has corrugated metal intrados and rubble stone spandrel walls with gauged ringstones. The stone parapets are crumbling above one arch and all along the top of the wall. On the inside face of the parapets a new beam guiderail crosses the bridge. The bridge number is inscribed at the center of the bridge on one parapet. The bridge is not innovative for its age, and is not historically distinguished.

INFOR MATION

PHOTO: 126:5A-7A (03/92) REVISED BY (DATE): QUAD: Jamesburg

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 125B167 **CO** MIDDLESEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PUBLIC ROAD OVER CRANBURY BROOK **FACILITY** PUBLIC ROAD

TOWNSHIP MONROE TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Wood

 # SPANS 2 **LENGTH** 27 ft **WIDTH** 18.9 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in a wooded area, carrying an unimproved road across a small stream.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The simple span timber stringer bridge sits on timber pile bents and abutments with timber plank sheeting. The deck is timber planking, with a wooden railing at one face and a beam guiderail at the other. The bridge is undistinguished in its setting, technology and history.

INFOR MATION

PHOTO: 126:42A-43A (03/92) REVISED BY (DATE): QUAD: Jamesburg

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1260164 **CO** MIDDLESEX **OWNER** STATE AGENCY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CUTTERS DOCK ROAD OVER NORTH JERSEY COAST LINE RR **FACILITY** CUTTERS DOCK ROAD

TOWNSHIP WOODBRIDGE TOWNSHIP

TYPE STRINGER **DESIGN** CONTINUOUS **MATERIAL** Steel

 # SPANS 3 **LENGTH** 89 ft **WIDTH** 20 ft

CONSTRUCTION DT 1927 **ALTERATION DT** 1935, 1968 **SOURCE** NJDOT

DESIGNER/PATENT PA RR OFFICE OF ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in a ca.1900 residential and industrial area. The 2-lane approach roadway narrows to 1 lane to cross the bridge over two electrified tracks of the North Jersey Coast Line. This commuter route was originally built by the Pennsylvania RR in the 1860s from the Northeast Corridor in Rahway south to Perth Amboy. It was called the Perth Amboy & Woodbridge RR, and was double-tracked in 1887. In 1937 the line was electrified. NJDOT now owns the line.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The stringer bridge was raised in 1935 with the electrification of the line. Disused ashlar piers are present between the abutments and the bents. In 1968 the steel pier bents composed of rolled sections and bolted bracing were placed on existing concrete plinths. The bridge was changed from 5 to 3 spans by spanning over the ashlar piers. The deck and curbing were also replaced at this time. An old pipe railing is present at the west approach. The bridge is historically undistinguished.

INFOR MATION

PHOTO: 117:44,1-2 (02/92) REVISED BY (DATE): QUAD: Perth Amboy

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1262152 **CO** MIDDLESEX **OWNER** PRIVATE **MILEPOINT** 0.94

NAME & FEATURE INTERSECTED JCP&L COMPANY OVER NJ TRANSIT & MAIN ST **FACILITY** JCP&L COMPANY ACCESS ROAD

TOWNSHIP SOUTH AMBOY CITY

TYPE BOX BEAM **DESIGN** **MATERIAL** Concrete

 # SPANS 3 **LENGTH** 212 ft **WIDTH** 16.7 ft

CONSTRUCTION DT 1929 **ALTERATION DT** 1985ca **SOURCE** STYLE

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge is located in an industrial area. It carries an access road to a 1930s power plant over two lanes of traffic (with mountable median strip) and electrified train tracks of an NJT commuter line. The line was built as the New York & Long Branch RR, a company that owned and maintained the tracks. Both the PA RR and the CRR of NJ used the line. Conrail took over the line in 1976. NJ Transit took it over and electrified it in 1982.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 3-span bridge has been reconstructed in its entirety, except for the abutment stems. The bridge is not old enough to be evaluated as a historic structure.

INFOR MATION

PHOTO: 114:25 (01/92) REVISED BY (DATE): QUAD: South Amboy

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 13000A4 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED HILLSDALE ROAD OVER BIG BROOK **FACILITY** HILLSDALE ROAD

TOWNSHIP COLTS NECK TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 3 **LENGTH** 42 ft **WIDTH** 21.1 ft

CONSTRUCTION DT 1945 **ALTERATION DT** 1981 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT OTIS R. SEAMAN, CO. ENG. **BUILDER**

SETTING / CONTEXT The two-lane bridge spans a creek in a rural setting. Adjacent to the bridge are open fields and woods. The area is lightly developed with some modern residences.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 3-span bridge was originally built in 1945 with a timber slab superstructure on timber pile bents with timber sheet pile bulkheads. In 1981 the bridge's superstructure was replaced with a continuous concrete slab on timber pile bents with concrete cap beams and beam guide rails. Little or no original bridge fabric remains. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 420:19A-20A (09/92) REVISED BY (DATE): QUAD: Marlboro

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 13000A7 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BUCKS MILL ROAD OVER YELLOW BROOK **FACILITY** BUCKS MILL ROAD

TOWNSHIP COLTS NECK TOWNSHIP

TYPE SLAB **DESIGN** LAMINATED **MATERIAL** Wood

 # SPANS 2 **LENGTH** 29 ft **WIDTH** 21 ft

CONSTRUCTION DT 1943 **ALTERATION DT** 1948 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT OTIS R. SEAMAN, CO. ENG. **BUILDER** FRIEBOTT BROTHERS

SETTING / CONTEXT The two-lane bridge spans the Bucks Mill Pond spillway. The bridge's single sidewalk is carried separately from the bridge on timber stringers. To the north is a large waterwheel, tailrace, and stone foundation, the only remnants of Bucks Mill, a 19th-century gristmill that caught fire and was destroyed (post-1954). The surrounding neighborhood is now residential with modern subdevelopments and a scattering of older farmhouses.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 2-span nail-laminated timber slab bridge has concrete abutments and timber pile bent pier with cross bracing. Timber rails have been replaced by beam guide rails. According to county records in 1948 the adjacent timber dam bulkhead was rebuilt, and in 1961 the concrete spillway floor repoured. The bridge is one of at least six surviving 1940s timber slab bridges in Monmouth County. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 418:19A-24A (08/92) REVISED BY (DATE): QUAD: Marlboro

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 13000N5 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED OLD CORLIES AVENUE (CR 17) OVER JUMPING BROOK **FACILITY** OLD CORLIES AVENUE (CR 17)

TOWNSHIP NEPTUNE TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 22 **LENGTH** 202 ft **WIDTH** 18.9 ft

CONSTRUCTION DT 1925 **ALTERATION DT** 1940, 1954 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The 2-lane bridge spans Jumping Brook on the northern border of Shark River County Park. To the south of the bridge is woodland, and to the east the Shark River County Golf Course. West of the bridge is a modern office building, and a residential subdevelopment (c.1960-80).

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 1925 steel stringer bridge with steel bents and lattice railings has been rebuilt twice. In 1940 concrete footings, longitudinal bracing between the piers, and 9 I-beam stringers in addition to the original 6 stringers were added. In 1954 beam guide rails and a French drain were added, and a secondary system of steel piers changed the bridge from 11 spans to 22 spans. The highly altered bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 180:28-34 (08/92) REVISED BY (DATE): QUAD: Asbury Park

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 13000R2 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED FRONT STREET OVER LUPPATATONG CREEK **FACILITY** FRONT STREET

TOWNSHIP KEYPORT BOROUGH

TYPE THRU GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 3 **LENGTH** 74 ft **WIDTH** 30.5 ft

CONSTRUCTION DT 1924 **ALTERATION DT** 1944 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The 2-lane bridge with 2 sidewalks spans Luppatatong Creek at the head of Keyport Harbor. Next to the bridge are seafood restaurants and a marina. The bridge is west of downtown Keyport. The surrounding area has numerous modern intrusions.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The steel thru girder bridge with floorbeams has cantilevered wood deck sidewalks with lattice railing upstream and beam guide rail downstream, approaches with paneled concrete parapets, and cellular concrete abutments. In 1944 two timber pile bents were added to support the bridge. Utility pipes have been added, and the girder webs are rusted through in spots. Thru girder bridges are a common bridge type in New Jersey, and the bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 415:40-42 (07/92) REVISED BY (DATE): QUAD: Keyport

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 13000R3 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BROADWAY AVENUE OVER CHINGARORA CREEK **FACILITY** BROADWAY AVENUE

TOWNSHIP KEYPORT BOROUGH

TYPE STRINGER **DESIGN** JACK ARCH (CONCRETE) **MATERIAL** Steel

 # SPANS 1 **LENGTH** 35 ft **WIDTH** 30 ft

CONSTRUCTION DT 1930 **ALTERATION DT** 1965 **SOURCE** PLAQUE

DESIGNER/PATENT GEORGE K. ALLEN, JR., CO. ENG. **BUILDER** THOMAS PROCTOR COMPANY

SETTING / CONTEXT The 2-lane bridge with single sidewalk spans a tidal creek that forms the border between Keyport Borough and Union Beach Borough near the Raritan Bay. The neighborhood is working-class residential with a mixture of late-19th and early-20th century houses with numerous modern intrusions. Downstream about 1/5 of a mile is a factory complex. Upstream is a 1920 thru girder bridge (13000R4).

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 1930 single-span steel stringer bridge has concrete jack arches, encased paneled fascia stringers, concrete balustrades, and concrete abutments. In 1965 a bulkhead and concrete toe walls were built around the abutments. A utility pipe has been added to the downstream side. Steel stringers with concrete jack arches are not uncommon in New Jersey. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 175:1A,43A-44A (07/92) REVISED BY (DATE): QUAD: Keyport

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 13000R4 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED STONE ROAD OVER CHINGARORA CREEK **FACILITY** STONE ROAD

TOWNSHIP KEYPORT BOROUGH

TYPE THRU GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 45 ft **WIDTH** 28 ft

CONSTRUCTION DT 1921 **ALTERATION DT** 1964 **SOURCE** PLAQUE

DESIGNER/PATENT GEORGE K. ALLEN, JR., CO. ENG. **BUILDER** ALLEN TRIMPY

SETTING / CONTEXT The two-lane bridge with two sidewalks spans a tidal creek that forms the border between Keyport Borough and Union Beach Borough. The neighborhood is working-class residential with a mixture of late-19th and early-20th century houses with numerous modern intrusions. Immediately west of the bridge is a three-way intersection. The bridge is just upstream from Broadway Avenue over Chingarora Creek (13000R3), a 1930 steel stringer bridge.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 1921 single-span steel thru girder with floorbeams bridge has cantilevered sidewalks with pipe railings and concrete abutments with stepped-out concrete piers for the girder bearings. In 1964 the bridge was reconstructed with new floorbeams, exterior steel stringers, and steel grid deck which replaced a laminated wood deck. Concrete and sheet pile toe walls were added to the abutments. The bridge is a common type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 175:2A,4A-6A, 431:9 (07/92) REVISED BY (DATE): QUAD: Keyport

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 13000R7 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED UNION AVENUE (CR 39) OVER FLAT CREEK **FACILITY** UNION AVENUE (CR 39)

TOWNSHIP UNION BEACH BOROUGH

TYPE STRINGER **DESIGN** JACK ARCH (CONCRETE) **MATERIAL** Steel

 # SPANS 1 **LENGTH** 29 ft **WIDTH** 30 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT GEORGE K. ALLEN, JR., CO. ENG. **BUILDER** S. S. THOMPSON

SETTING / CONTEXT The two-lane bridge with two sidewalks spans Flat Creek near its confluence with Raritan Bay. The former seashore resort community contains many early-20th century cottages, but most are heavily altered or converted to businesses. To the west is a small marina, and to the north a business section with small stores and restaurants.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 1930 single span encased steel stringer bridge has concrete jack arches, paneled fascia stringers, concrete balustrades, and concrete abutments with wingwalls. Utility pipes have been added to both sides of the bridge. Steel stringers with concrete jack arches are not uncommon in New Jersey. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 425:14A-15A (09/92) REVISED BY (DATE): QUAD: Keyport

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 13000U7 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED EMLEYS MILL ROAD OVER LAHAWAY CREEK **FACILITY** EMLEYS MILL ROAD

TOWNSHIP UPPER FREEHOLD TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Wood

 # SPANS 3 **LENGTH** 38 ft **WIDTH** 15 ft

CONSTRUCTION DT 20th Century **ALTERATION DT** 1992 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The two-lane bridge spans Lahaway Creek in a rural setting of wooded lots and scattered 19th- and 20th-century housing. The bridge is currently closed for reconstruction. Nineteenth-century maps indicate the bridge is built downstream of a former mill pond and spillway. No above ground evidence of the mill is visible.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 3-span timber stringer bridge has a southern masonry abutment and pier with I-beam cap, a northern timber pile bent pier with I-beam cap, and a northern concrete abutment with masonry back wall. The bridge's masonry substructure probably dates to the 19th century, but has been rebuilt several times. In 1992 the bridge's old steel stringer superstructure was replaced with new timber stringers, timber deck, and beam guide rails. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 416:23-25 (08/92) REVISED BY (DATE): QUAD: Roosevelt

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 13000W1 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 34.8

NAME & FEATURE INTERSECTED ALLAIRE ROAD (CR 524) OVER MILL RUN **FACILITY** ALLAIRE ROAD (CR 524)

TOWNSHIP WALL TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 28 ft **WIDTH** 28.8 ft

CONSTRUCTION DT 1926 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT GEORGE K. ALLEN, JR., CO. ENG. **BUILDER** S. THOMPSON & COMPANY

SETTING / CONTEXT The two-lane bridge with single sidewalk is opposite the entrance to the Brisbaine Child Treatment Center campus. Allaire Road is the northern border of Allaire State Park, and south of the bridge is a wooded area. Just upstream from the bridge is a pond held by a concrete dam.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 1926 single-span encased steel stringer bridge has paneled fascia, concrete balustrades, and concrete abutments with wingwalls. The bridge is a common type and design, and it is not historically or technologically distinguished.

INFOR MATION

PHOTO: 430:11-13 (06/92) REVISED BY (DATE): QUAD: Farmingdale

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 13000W7 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED GREEN AVENUE OVER DEBBIES CREEK **FACILITY** GREEN AVENUE

TOWNSHIP BRIELLE BOROUGH

TYPE STRINGER **DESIGN** **MATERIAL** Wood

 # SPANS 7 **LENGTH** 120 ft **WIDTH** 21.7 ft

CONSTRUCTION DT 1943 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT **BUILDER** A. P. THOMPSON

SETTING / CONTEXT The two lane bridge with single sidewalk spans Debbies Creek, a tidal tributary of Glimmer Glass. The bridge is located in a salt marsh surrounded by undistinguished 20th-century year-round houses and seasonal cottages.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 7-span timber stringer bridge has timber pile bents with cross bracing, sheet timber pile head walls, beam guide rails on the roadway, and wood railing on the sidewalk. The bridge was constructed in 1943 and has had numerous in-kind repairs. It is a representative example of a common bridge type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 161:1,44 (06/92) REVISED BY (DATE): QUAD: Point Pleasant

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 13000W9 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BRIELLE ROAD OVER GLIMMER GLASS **FACILITY** BRIELLE ROAD

TOWNSHIP MANASQUAN BOROUGH

TYPE CABLE LIFT BASCULE **DESIGN** ROLLING COUNTERWEIGHT **MATERIAL** Steel

 # SPANS 17 **LENGTH** 279 ft **WIDTH** 20 ft

CONSTRUCTION DT 1898ca **ALTERATION DT** 1957 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The 2-lane bridge with single sidewalk spans Glimmer Glass, a navigable tidal inlet of the Manasquan River. The bridge is located in a salt marsh surrounded by what historically was a seasonal community of small cottages. Many of the cottages have been enlarged and/or converted to year round houses. Large, modern houses have also been added, often replacing the original cottages. The area does not have historic district potential.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The rolling counterweight single-leaf bascule bridge with a deck girder movable leaf is the only example of the late-19th century bridge type in the state and possibly the whole country. The undocumented bridge represents a little-used technology that was developed prior to 1895. It was used in New Jersey by railroads and over canals. Although the Glimmer Glass bridge has been modernized, it still operates in the original manner and is thus historically and technologically significant.

INFOR MATION

Bibliography:

"Counterweighted Lift Bridge on the Erie Railroad," Scientific American, Vol. 75, (Nov. 28, 1896), pp. 389-390.
Fraser, Donald J. "Movable Span Bridges in New South Wales Prior to 1915." Multi-disciplinary Engineering Transactions. 1985.
Hool, George and Kinne, W.S. Movable and Long-Span Steel Bridges. New York: McGraw Hill Book Company, 1943."The Michigan Avenue Bascule Bridge Buffalo," The Engineering Record, Vol.66 (Aug. 21, 1897), pp. 246-247.
Perkons, George (Mechanical Engineer with A.G. Lichtenstein & Associates). Personal interview with Mary E. McCahon, 1/19/1993.
Waddell, J.A.L. Bridge Engineering. New York: John Wiley and Sons, 1925.

Physical Description: The 17-span bridge is composed of 16 timber stringer spans supported on braced timber pile bents and a 31'-long cable lift bascule rolling counterweight movable span. The single-leaf movable span is a deck girder with an open steel grid deck installed in 1962. A cable attached to each side of the toe end of the movable leaf passes over a single-track sheave atop the braced timber tower columns with braced curved tracks on the side opposite the movable leaf. The opposite end of the cable is attached to a connecting hanger that joins the shafts of the rolling counterweights positioned in series on the track. The two topmost metal counterweights have a solid center guide while the last one has disk guides. The track has built up wood end stops. The tower columns are braced with wood struts on the sides and wire rope stays on the back. The toe lock is manual. The bridge is controlled from an operators house on the upstream side. An electric motor mounted atop the upstream tower column brace engages the drive shaft to turn the sheaves which cause the counterweights to start moving down the track. The motor reverses the action to close the bridge. The operators house, like many elements of the bridge, has been upgraded over the years, but its function and profile are original.

Historical and Technological Significance: The ca. 1898 cable lift bascule with rolling counterweights bridge is technologically and historically significant as the only example of its type in New Jersey (criterion C). It may also be the only example in the eastern half of the United States (Perkons). When the design was developed and by whom was not identified, but the 1896 Scientific American article describing the Erie Railroad's recently completed example on its main line over Berry's Creek near Rutherford, New Jersey (non-extant) states that " although the principle upon which the bridge is constructed is not entirely new, the Berry Creek bridge is the first application of this system of counter weighting for a structure of this magnitude." The principle is to use a curved track and rolling counterweights where the work expended in raising the leaf is equal to the energy released by the falling counterweight. The toe end of the movable span is linked by cables to cylindrical rolling counterweights. The connecting cable passes over a tower column with a curved track. Moving the counterweights along the curved track thus raises or lowers the bridge.

It is known that in addition to erecting the rolling counterweight span at Berry Creek in 1896, the Erie Railroad used the technology to carry its Greenwood Lake branch over the Morris Canal, and that the Central Railroad of New Jersey built a similar bridge over the Morris Canal guard lock at Dover (Morris County). The canal bridges are recorded in the abundant photo documentation of the canal. Perhaps the best-known of the cable-lift rolling counterweight bridges was the 1897 Michigan Avenue bridge over the Buffalo River at Buffalo. A double-leaf span, it was designed and fabricated by the Wisconsin Bridge and Iron Company of Milwaukee. The steam-powered bridge was a more complicated design than the Glimmer Glass example, but the operating principle was the same. Another example was built in 1898 by the Canton Bridge Company (fabricator) and Dean & Westbrook (contractor) over Coney Island Creek between Brooklyn and Queens.

The bridge type was also built in Australia and is known there as the "American" bridge. It was apparently introduced in that country prior to 1903, and the use of the design is noted as marking the shift from using English to American movable bridge technology. At least three examples survive, and one was built as late as 1922 (Fraser).

No original records or plans for the Glimmer Glass span have been retained in the county engineer's files. It is dated ca. 1898 based on its design. The bridge has been rebuilt several times. The wood tower column and track were redone in 1957 and 1971, and the steel grid deck on the ca. 1950 deck girder movable span was installed in 1962. The significance of the structure is derived from the fact that it maintains integrity of original design.

Boundary Description and Justification: The bridge is evaluated as individually distinguished, and the significant boundary is limited to the bridge itself. The area surrounding the bridge does not possess the integrity needed to be evaluated as a potential historic district.

PHOTO: 160:33A-38A (06/92) REVISED BY (DATE): QUAD: Point Pleasant

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1300A18 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED COUNTY ROAD WEST (CR 537) OVER MINE BROOK **FACILITY** COUNTY ROAD WEST (CR 537)

TOWNSHIP COLTS NECK TOWNSHIP

TYPE ARCH **DESIGN** BARREL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 27 ft **WIDTH** 30.4 ft

CONSTRUCTION DT 1915ca **ALTERATION DT** 1951 **SOURCE** STYLE

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The two-lane bridge spans Mine Brook in Colts Neck Village. The bridge is located just west of the busy intersection of NJ 34 and CR 537. Although Colts Neck has some nice examples of 18th- and 19th-century architecture, the area has numerous modern intrusions including a hotel, restaurant, and gas station at the intersection next to the bridge.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY Records of the skewed, single-span, reinforced-concrete barrel arch's date of construction were not located at the county engineer's office, but stylistically it dates from circa 1915. In 1951 the bridge had new concrete toe walls constructed. Beam guide rails have replaced earlier lattice railings. The bridge is a representative example of a common bridge type. Earlier and more historically and technologically distinguished examples of concrete arch construction are found in New Jersey.

INFOR MATION

PHOTO: 418:25A-27A (08/92) REVISED BY (DATE): QUAD: Marlboro

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1300A23 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CREAMERY ROAD OVER YELLOW BROOK **FACILITY** CREAMERY ROAD

TOWNSHIP COLTS NECK TOWNSHIP

TYPE PONY TRUSS **DESIGN** WARREN **MATERIAL** Steel

 # SPANS 4 **LENGTH** 80 ft **WIDTH** 15.4 ft

CONSTRUCTION DT 1910ca **ALTERATION DT** 1944 **SOURCE** STYLE

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The single-lane bridge spans Yellow Brook in a lightly developed residential area interspersed with farmland and nurseries. Next to the bridge is a small, wooded municipal park.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The riveted 4-panel Warren pony truss bridge has been significantly altered and no longer functions as a truss bridge. In 1944 the bridge was underpinned with stringers on braced timber piles placed at the floorbeams. Sections of the trusses are holed through or missing. Original plans for the bridge do not exist with the county engineer, but the truss style dates from circa 1910. The altered and deteriorated bridge is not historically nor technologically noteworthy.

INFOR MATION

Bibliography:
Monmouth County Engineer. Bridge Plans for Bridge No. A-23. 1944.

Physical Description: The bridge is a 4-panel rivet-connected Warren pony truss. The upper chords and inclined end posts are channels with cover plates and lacing. The lower chords and diagonals are angles with battens. The flooring system consists of rolled I beam floor beams, timber stringers, and a plank deck. The truss bearings rest on concrete-filled riveted cylindrical steel caisson-like columns with stone back walls and timber sheet pile bulkheads. The cassison-like columns have lost section. The bridge has been underpinned at each floor beam and abutment with braced timber piles. The original railings have been removed, and beam guide rails have been added. Portions of the lower chord are missing. The bridge no longer functions as a truss but as a 4-span timber stringer bridge.

Historical and Technological Significance: The undocumented ca. 1910 Warren pony truss bridge has lost its integrity of design as a result of modifications and deterioration to both the superstructure and the substructure. A search of the county engineer's records offered no information on the bridge's builder or date of construction. Stylistically the span dates from ca. 1910. Plans indicate that major repairs occurred in 1944 when the truss was underpinned, a truss leg was repaired and welded, a new deck constructed, and the abutments repointed. The Warren pony truss was a popular highway bridge type in the first decades of the 20th century. A more complete example is the multi-span Locust Road over Claypit Creek (130MT21, Middletown Township).

PHOTO: 418:32a-35a (08/92) REVISED BY (DATE): QUAD: Marlboro

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1300A51 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED HOCKHOCKSON ROAD OVER HOCKHOCKSON BROOK **FACILITY** HOCKHOCKSON ROAD

TOWNSHIP COLTS NECK TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 24 ft **WIDTH** 19.2 ft

CONSTRUCTION DT 1940 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The two-lane bridge spans a small brook in a wooded area next to a horse farm with some older 19th-century buildings. The surrounding area is lightly developed with farmland giving way to subdevelopments of large houses on generous-size lots.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span steel stringer bridge has a timber deck and concrete abutments with wingwalls. Beam guide rails with timber outriggers have replaced the original timber railings. Steel stringers are the most common type of pre-1946 bridge in New Jersey, and the bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 421:27; 430:28 (09/92) REVISED BY (DATE): QUAD: Long Branch

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1300E14 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED OCEANPORT AVENUE OVER PEMBERTON CREEK **FACILITY** OCEANPORT AVENUE

TOWNSHIP OCEANPORT BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 26 ft **WIDTH** 27 ft

CONSTRUCTION DT 1923 **ALTERATION DT** 1951 **SOURCE** PLANS

DESIGNER/PATENT GEORGE K. ALLEN, JR., CO. ENG. **BUILDER** UNKNOWN

SETTING / CONTEXT The 2-lane bridge spans a tidal tributary of Oceanport Creek. To the upstream side of the bridge is a timber stringer sidewalk on timber piles with wood railing. To the east of the bridge are townhouses and a restaurant (c.1970-80). To the west are office buildings and a municipal rescue station (c.1970-80). Downstream from the bridge is a large water main resting on timber piles.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY In 1923 the bridge was built as a 20'-wide encased steel stringer with pipe railings and a single concrete sidewalk. The bridge's concrete abutments were battered to meet a previous bridge's brick and masonry abutments. In 1951 the bridge was widened to 27', the existing I-beams reset, and a new beam added. The original sidewalk was removed and the timber stringer sidewalk added. Steel stringers are a common bridge type, and the bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 422:1-2,44 (09/92) REVISED BY (DATE): QUAD: Long Branch

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1300E24 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 64.09

NAME & FEATURE INTERSECTED TINTON AVENUE OVER NJ TRANSIT SOUTHERN DIVISION **FACILITY** TINTON AVENUE (CR 537)

TOWNSHIP EATONTOWN BOROUGH

TYPE THRU GIRDER **DESIGN** PARTIALLY ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 61 ft **WIDTH** 30 ft

CONSTRUCTION DT 1928 **ALTERATION DT** Unknown **SOURCE** PLAQUE

DESIGNER/PATENT CENTRAL RAILROAD OF NEW JERSEY **BUILDER** BETHLEHEM STEEL COMPANY

SETTING / CONTEXT The two-lane bridge with single sidewalk spans a single track of New Jersey Transit's Southern Division, the former Central Railroad of New Jersey. The right-of-way was originally developed in the late-1850s by the Delaware and Raritan Bay Railroad, and later merged with the New Jersey Southern Railway (c.1870), a company owned by the CRR of NJ. The current surroundings are suburban with an apartment complex to the east, and the Fort Monmouth Country Club to the west.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 1-span steel thru girder with floor beams bridge has a cantilevered sidewalk with a metal railing. The concrete abutments have been widened, and some of the stringers are skewed to accommodate realignment and widening of the bridge and roadway or relocation of the superstructure to this site. No records were located at the county or state offices. It is a common overpass bridge type, and it is not historically or technologically distinguished.

INFOR MATION

PHOTO: 421:29-33 (09/92) REVISED BY (DATE): QUAD: Long Branch

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1300F30 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED ELTON-ADELPHIA ROAD (CR 524) OVER APPLEGATES CREEK **FACILITY** ELTON-ADELPHIA ROAD (CR 524)

TOWNSHIP FREEHOLD TOWNSHIP

TYPE ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 45 ft **WIDTH** 27.8 ft

CONSTRUCTION DT 1909 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** NELSON-MERYDITH

SETTING / CONTEXT The 2-lane bridge spans a small creek in a suburban area south of Freehold Borough near the intersection of US 9 and CR 524. Adjacent to the bridge is a field belonging to the Rutgers University Soils and Crops Research Center. To the west is a shopping center and suburban development (post-1960).

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span reinforced-concrete arch has paneled parapets. Beam guide rails and utility pipes have been added. The intrados is spalling exposing the reinforcing. Spalling is evident all over the structure. The 1909 bridge is an early example of its type in the county, but it is technologically representative of numerous concrete arches built in the state in the first decades of the 20th century. The deterioration mars its integrity and limits the significance of the span.

INFOR MATION

PHOTO: 418:13a-14a (08/92) REVISED BY (DATE): QUAD: Adelphia

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1300F45 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED GEORGIA ROAD OVER MANASQUAN RIVER **FACILITY** GEORGIA ROAD

TOWNSHIP FREEHOLD TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Wood

 # SPANS 1 **LENGTH** 24 ft **WIDTH** 23.2 ft

CONSTRUCTION DT 1942 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT OTIS R. SEAMAN, CO. ENG. **BUILDER** A. P. THOMPSON

SETTING / CONTEXT The two-lane bridge spans a tree-lined creek southwest of Liberty Oak Township Park, a municipal recreation area with ball fields, playgrounds, and tennis courts. The neighborhood is predominantly residential with modern subdivisions. A few older homes line Georgia Road.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span timber stringer has timber pile bulkheads. The original wood railings have been replaced with beam guide rails. The bridge was constructed in 1942, but due to deterioration and in-kind replacement little original bridge fabric remains. The bridge is a common type in New Jersey, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 418:17a-18a (08/92) REVISED BY (DATE): QUAD: Adelphia

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1300F51 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED JACKSON MILLS ROAD OVER MANASQUAN RIVER **FACILITY** JACKSON MILLS ROAD

TOWNSHIP FREEHOLD TOWNSHIP

TYPE STRINGER **DESIGN** JACK ARCH (CONCRETE) **MATERIAL** Steel

 # SPANS 1 **LENGTH** 34 ft **WIDTH** 26 ft

CONSTRUCTION DT 1929 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT GEORGE K. ALLEN, JR., CO. ENG. **BUILDER** S. S. THOMPSON

SETTING / CONTEXT The two-lane bridge spans the Manasquan River in a lightly-developed area with a mixture of modern subdevelopment, older 19th-century farmhouses, horse farms, and nurseries. Wooded lots and fields are immediately adjacent to the bridge.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 1929 single-span steel stringer bridge has a concrete jack arch deck, balustrades, and abutments with wingwalls. Beam guide rails have been added. There is spalling evident. The bridge is a common type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 418:15a-16a (08/92) REVISED BY (DATE): QUAD: Adelphia

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1300F55 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED POND ROAD OVER LAKE TOPANEMUS SPILLWAY **FACILITY** POND ROAD

TOWNSHIP FREEHOLD TOWNSHIP

TYPE T BEAM **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 3 **LENGTH** 34 ft **WIDTH** 27.4 ft

CONSTRUCTION DT 1915ca **ALTERATION DT** 1920 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The two-lane bridge spans the spillway at Lake Topenamus Pond, a municipal park with beach. A six-bay concrete spillway gate frame extends between the bridge's upstream abutments. The surrounding area is suburban residential with modern subdevelopments. In the late 19th century the pond was the site of a grist mill.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 3-span bridge is reinforced concrete T-beams supported on a concrete substructure. Original plans for the bridge were not located at the county offices, but in 1920 the bridge was widened in kind from 13' to 25'. The widening is confirmed by shadow lines in the concrete abutments and piers. Beam guide rails and utility pipes have been added. The undocumented bridge is an altered example of a common bridge type. It is not technologically nor historically distinguished.

INFOR MATION

PHOTO: 419:9-12 (09/92) REVISED BY (DATE): QUAD: Freehold

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1300HL5 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 28.9

NAME & FEATURE INTERSECTED ADELPHIA-FARMINGDALE ROAD OVER YELLOW BROOK **FACILITY** ADELPHIA-FARMINGDALE ROAD (CR 524)

TOWNSHIP HOWELL TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 31 ft **WIDTH** 30.3 ft

CONSTRUCTION DT 1930ca **ALTERATION DT** Unknown **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The two-lane bridge spans a creek at the intersection of CR 524 and Squankum Road. The surrounding area is lightly-developed residential with some farm fields and nurseries. Adjacent to the bridge are two houses (ca. 1900 & ca. 1950).

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single span bridge consists of 2 built-up deck girders on the outside and 2 closely-spaced I-beams at the center supporting a 16" deep reinforced concrete slab deck. The abutments are ashlar with concrete caps and wingwalls. No plans/records were located at the county offices, but the bridge appears to be built with salvaged materials and dates stylistically to ca. 1930. The railing is modern guide rail. The span is neither innovative nor historically or technologically distinguished.

INFOR MATION

PHOTO: 418:10a-12a (08/92) REVISED BY (DATE): QUAD: Farmingdale

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1300MA5 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MILL ROAD OVER GRAVELLY BROOK **FACILITY** MILL ROAD

TOWNSHIP MATAWAN BOROUGH

TYPE STRINGER **DESIGN** **MATERIAL** Wood

 # SPANS 3 **LENGTH** 41 ft **WIDTH** 18.5 ft

CONSTRUCTION DT 1940 **ALTERATION DT** 1956, 1991 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT OTIS R. SEAMAN, CO. ENG. **BUILDER** FRIEBOTT BROTHERS

SETTING / CONTEXT The 2-lane bridge spans a creek in a mature suburban development of Manasquan Borough. The area has modern homes (c.1950-70) on large wooded lots.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 3-span timber stringer bridge rests on braced timber pile bents. Beam guide rail railings have been added. According to county records, the 1940 timber stringer bridge was rebuilt in-kind in 1956 and again in 1991. No original 1940 bridge fabric remains. The bridge is a common type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 174:9, 431:12-13 (07/92) REVISED BY (DATE): QUAD: Keyport

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1300MA6 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CHURCH STREET OVER GRAVELLY BROOK **FACILITY** CHURCH STREET

TOWNSHIP ABERDEEN TOWNSHIP

TYPE DECK GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 40 ft **WIDTH** 22.2 ft

CONSTRUCTION DT 1923 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT GEORGE K. ALLEN, JR., CO. ENG. **BUILDER** S. S. THOMPSON & COMPANY

SETTING / CONTEXT The two-lane bridge spans a creek east of a large factory complex (c.1920-50) on the edge of Matawan Borough. Downstream from the bridge is a detached timber-stringer sidewalk with wood railings constructed in 1968.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 1923 single-span encased deck girder with floorbeams bridge has concrete balustrades, paneled fascia, and abutments with flared wingwalls. Beam guide rails have been added. Spalling is evident. The deteriorated bridge is a common type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 415:24-26 (07/92) REVISED BY (DATE): QUAD: Keyport

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1300MA9 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED RAVINE DRIVE (CR 6A) OVER MATAWAN CREEK **FACILITY** RAVINE DRIVE (CR 6A)

TOWNSHIP MATAWAN BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 28 ft **WIDTH** 30 ft

CONSTRUCTION DT 1927 **ALTERATION DT** 1949 **SOURCE** PLAQUE

DESIGNER/PATENT GEORGE K. ALLEN, JR., CO. ENG. **BUILDER**

SETTING / CONTEXT The two-lane bridge with single sidewalk spans the semi-circular concrete spillway to Lake Lefferts. The creek below the spillway is tidal and opens into marshlands. To the east is downtown Matawan. The area to the west is modern suburban residential development. Ravine Drive is on top of an earthen dam with timber bulkhead, and the bridge and dam/spillway were built in ca.1927 as part of a water control project stopping salt water incursion on Matawan Creek.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 1927 single-span encased steel stringer bridge has concrete balustrades and horizontally scored abutments. According to county records in 1949 and in 1955 the timber bulkhead wingwalls were rebuilt. They are now braced. Decorative light standards have been removed from the balustrades. The bridge is a common type, and the structural association of bridges and dam/spillways is not unusual. Neither the Lake Lefferts project nor the bridge are historically or technologically distinguished.

INFOR MATION

PHOTO: 415:27-30 (07/92) REVISED BY (DATE): QUAD: Keyport

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1300MT5 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CHURCH STREET OVER COMPTONS CREEK **FACILITY** CHURCH STREET

TOWNSHIP MIDDLETOWN TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Wood

 # SPANS 3 **LENGTH** 50 ft **WIDTH** 19.4 ft

CONSTRUCTION DT 1942 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT OTIS R. SEAMAN, CO. ENG. **BUILDER** FRIEBOTT BROTHERS

SETTING / CONTEXT The two-lane bridge spans tidal Comptons Creek near its confluence with the Raritan Bay at Belford Harbor. North of the bridge is a broad tidal marsh, and south an early 20th-century neighborhood of small cottages with numerous modern alterations. Approximately 250 ft. downstream from the bridge is an abandoned railroad right-of-way with timber stringer bridge. North of the bridge Church Street turns into a gravel road surface.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 1942 three-span haunched timber stringer bridge has timber pile bents with timber caps, timber deck, wood railings, and sheet pile bulkheads. Beam guide rails and utility pipes have been added. The bridge is an example of a common type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 425:32a-33a (09/92) REVISED BY (DATE): QUAD: Sandy Hook

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1300MT8 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CAMPBELL AVENUE OVER COMPTONS CREEK **FACILITY** CAMPBELL AVENUE

TOWNSHIP MIDDLETOWN TOWNSHIP

TYPE SLAB **DESIGN** LAMINATED **MATERIAL** Wood

 # SPANS 3 **LENGTH** 40 ft **WIDTH** 23 ft

CONSTRUCTION DT 1945 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT OTIS R. SEAMAN, CO. ENG. **BUILDER** FREIBOTT BROTHERS

SETTING / CONTEXT The two-lane bridge spans a tidal creek in a wetlands dividing the towns of Belford and Port Monmouth in Middletown Township. Belford is the older community with a mix of late-19th and 20th century housing with numerous modern alterations and intrusions. Southeast of the bridge is a clapboard church with a date stone of 1893. Port Monmouth to the west is mostly post-1940 housing.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 3-span timber slab bridge has timber pile bents with timber caps and timber sheet pile backwalls. The bridge was originally constructed in 1945, and has been repaired or replaced in-kind except for the wood railings that have been replaced with beam guide rails. The bridge is a common type in Monmouth County, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 425:30a, 431:6-7 (09/92) REVISED BY (DATE): QUAD: Sandy Hook

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1300N14 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0
NAME & FEATURE INTERSECTED GRAND AVENUE OVER SUNSET LAKE **FACILITY** GRAND AVENUE
TOWNSHIP ASBURY PARK CITY
TYPE MULTI GIRDER **DESIGN** **MATERIAL** Steel
 # SPANS 3 **LENGTH** 120 ft **WIDTH** 30.1 ft
CONSTRUCTION DT 1922 **ALTERATION DT** Demolished **SOURCE** COUNTY ENGINEER
DESIGNER/PATENT GEORGE K. ALLEN, JR., CO. ENG. **BUILDER** OWEN J. MELEE (1923)

SETTING / CONTEXT The 2-lane bridge with sidewalks spans Sunset Lake, a 5-block long lake and surrounding park in Asbury Park, one of New Jersey's most famous beach resorts. The park is a central feature of the city's layout, and the bridge is situated with a view of the historic beachfront hotels and convention hall. The surrounding residential neighborhood dates from c.1870-1930 with many unaltered permanent homes and summer cottages. The neighborhood possesses historic district potential.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No
CONSULT STATUS Bridge was Not Individually Eligible. Agreed Potential shore resort Historic District. Contributed.
CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The Grand Avenue bridge is a three-span deck girder with floorbeams and concrete abutments and piers. In 1922 the bridge was constructed with pipe railings, but in 1923 the bridge was rebuilt with paneled concrete parapets inset with mosaics and topped by decorative lanterns and light standards. The bridge is a representative example of period technology and is not individually notable, but it would contribute to the potential historic district because of its date of construction.

INFOR MATION

Bibliography:
History of Monmouth County, New Jersey, 1664-1920. New York: Lewis Historical Publishing Co., 1922. pp. 405-416.
Kobbe, Gustav. The New Jersey Coast and Pines. 1889; reprint ed., New York: Walking News, 1982. pp. 45-46.
Monmouth County Engineer. Bridge File: N-14.

Physical Description: The three-span multi deck girder with floor beams bridge is composed of three built-up steel plate deck girders with concrete deck and cantilevered sidewalk per span. The bridge abutments, wingwalls, and piers are reinforced concrete as is the bridge deck. The paneled concrete parapets have tile mosaics at center span that read "Sunset Lake and Park." Expansion joints have been cut in the parapets. Original street lighting has been removed and replaced with modern highway lighting. A nicely detailed concrete arch span with staircases is located at the southwest abutment connecting the upstream side sidewalk with a small manmade island in the lake. The small arched structure is finished with brick posts, and accenting and decorative iron railings.

Historical and Technological Significance: The 1922-23 Grand Avenue Bridge in Asbury Park City is not individually distinguished, but it is located within the boundaries of a potential historic district, and would be eligible under criterion A for its association with the events and broad patterns of history associated with the potential historic district. It was built within the period of significance of the district, which extends through at least 1940. The bridge is in Sunset Park, a manmade lake and surrounding green space, one block wide and eight blocks long oriented on the east/west axis. At the eastern, or beach, end of the park are the architecturally-impressive Paramount Theater and Convention Hall (c.1920), board walk, and early-20th century multi-story resort hotels. The park is bordered on the other sides by well-preserved and architecturally noteworthy late-19th and early-20th century seasonal and year-round residences that developed around the lake, a civic amenity that is historically the focal point of this portion of the community.

In the early 1870s Asbury Park was founded as an outgrowth of the Ocean Grove Camp Meeting Association. The New York and Long Branch Railroad extended its lines south in 1876, and Asbury Park quickly transformed into one of the most well known and popular resorts on the Shore with a boardwalk, bath house and hotels. The seasonally-oriented city was centrally planned and was noted for its modern conveniences including broad avenues, "running at right angles to the sea, from one to two hundred feet wide" (History of Monmouth County, p. 406). Sunset Lake and park were central features in the layout of the resort town, and they were designed to provide recreation and an east-west promenade. A boat house was located at the southern end of the small island accessed by the arch bridge off the Grand Avenue Bridge.

In 1922 the Grand Avenue bridge over Sunset Lake was constructed as part of the completion of a county highway project. Prior to 1922 the only highway bridges across the lake had been at Bond and Emory Streets. The deck girder was originally built with pipe railings and creosoted plank sidewalks, but in 1923 the railings were replaced with the more distinguished concrete parapets with mosaics and street lighting. The new railings were more in line with contemporary ideas of an appropriate style for municipal parks and public spaces. The bridge is a representative example of early-20th century plate girder bridge technology.

With the exception of removal of the original lighting, the bridge appears basically unchanged, but there is some spalling. In 1975 the expansion joints were cut in the parapets on both sides of the bridge.

Boundary Description and Justification: The bridge is located in a potential National Register historic district with a period of significance from ca. 1875-at least 1940. Since the bridge was built as a civic amenity in a planned resort community and was built in 1922-23, it is evaluated as a contributing resource to the potential historic district. The area surrounding the bridge would be included in the potential historic district. The span is not individually significant, and its evaluation is based on the area in which it is located being determined a historic district.

PHOTO: 180:4-7, 181:16-8a (08/92) REVISED BY (DATE): QUAD: Asbury Park

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1300O10 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0
NAME & FEATURE INTERSECTED SUNSET AVENUE OVER DEAL LAKE **FACILITY** SUNSET AVENUE
TOWNSHIP ASBURY PARK CITY
TYPE DECK GIRDER **DESIGN** ENCASED **MATERIAL** Steel
 # SPANS 5 **LENGTH** 284 ft **WIDTH** 26.4 ft

CONSTRUCTION DT 1924 **ALTERATION DT** **SOURCE** PLAQUE
DESIGNER/PATENT GEORGE K. ALLEN, JR., CO. ENG. **BUILDER** DOVER BOILER WORKS

SETTING / CONTEXT The 2-lane bridge with two sidewalks spans picturesque Deal Lake between Asbury Park City (east) and Wanamassa village in Ocean Township to the west. Deal Lake is a large, manmade water feature created in the late-19th century as part of the development of the beach resorts. On either side adjacent to the bridge are architecturally significant 1880-1929 residential areas in a good state of preservation. They appear to have National Register historic district potential.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No
CONSULT STATUS Not Individually Eligible. Potential Deal Lake Historic District. Contributing.
CONSULT DOCUMENTS SHPO Letter 03/12/01

SUMMARY The 5-span encased haunched deck girder with floorbeams bridge has concrete balustrades, paneled parapets on the eastern curved approach, and concrete abutments and piers with struts. Portions of the balustrades have been replaced with parapets. Because of the alterations and the fact that the builder is more commonly associated with earlier metal truss bridges, the bridge is not individually eligible for listing in the National Register. However, the bridge is located within a lakefront community which includes portions of both Asbury Park City and Wanamassa, and which comprises a potential historic district. Current information suggests the district would be eligible under Criteria A and C, and the period of significance would be from ca 1880 to 1929. The bridge would be a contributing element.

INFOR MATION

Bibliography:
History of Monmouth County, New Jersey 1664-1920. New York: Lewis Historical Publishing Co., 1922. pp. 465-472.
Kobbe, Gustav. The New Jersey Coast and Pines, 1889; reprint ed., New York: Walking News, 1982. p.45.
Monmouth County Engineer. Bridge Plans for Bridge Number O-10. 1924.
Ocean Township. The Township of Ocean Commemorative Book. 1949.
The WPA Guide to 1930s New Jersey. 1939; reprint ed., New Brunswick: Rutgers University Press, 1986. p. 682.

Physical Description: The bridge is a five span encased deck girder with built-up floor beams. The 55-foot long deck girders are haunched ranging in depth from 5 foot 6-1/2 inches depth at the bearings to 4 foot 6-1/2 inches depth at center span. The reinforced concrete abutments and piers with cross beams are founded on timber pile foundations. The cantilevered sidewalks have concrete balustrades. Original octagonal luminaires on pyramidal concrete standards have been removed and replaced with modern metal lighting. A few concrete balustrade panels have been replaced with solid concrete parapets.

Historical and Technological Significance: The 1924 Sunset Avenue bridge is not individually distinguished, but it is located within the boundaries of a potential historic district with Deal Lake as the focus (criterion C). The bridge spans an arm of Deal Lake, a manmade water feature that forms the border between Asbury Park City to the east and Wanamassa in Ocean Township to the west. Deal Lake extends nearly two miles inland from the ocean and is bordered by many architecturally noteworthy and well preserved late-19th and early-20th century homes with many oriented toward the lake. They comprise an impressive assemblage of buildings with good architectural integrity and few modern intrusions. The Wanamassa village area east of the Sunset Avenue bridge is a particularly well-preserved enclave of Craftsman bungalows. The bridge is contemporaneous with the residences and would be considered a contributing structure to a potential historic district. The lake borders the municipal boundaries of Allenhurst Borough, Asbury Park City, Deal Borough, Interlaken Borough, Loch Arbour Borough, and Ocean Township.

Deal Lake was originally an inlet of the ocean until it was diked sometime in the 18th century as a means of preserving fresh water for nearby fishermen, farmers, and a small tourist trade. In 1878 the New York & Long Branch Railroad extended its line south from Long Branch, and the dike was improved. Investors began to purchase land adjoining the lake in anticipation of the development of resort communities. The village of Loch Arbour, at the lake's northeastern end, was the first to be laid out in house lots, but growth around Deal Lake was not rapid until the first decade of the twentieth century. Development proceeded under the direction of a number of land companies, generally corresponding to present-day corporate boundaries. The companies advertised "thriving villages" for "men of wealth and position." The village of Wanamassa at the bridge's western approach began development in the 1890s as a YMCA camp meeting and revival community. An auditorium and running track were constructed, and house lots were sold. For a while the housing market slumped, and the property was purchased by Nathan J. Taylor. Wanamassa acquired a reputation as a "high-class bungalow colony." Numerous summer homes in the late-Victorian, Craftsman, and Colonial Revival styles were constructed. The historic period of development ended in 1929 with the Great Depression.

In 1924 the Sunset Avenue bridge was constructed across Sunset Lake. The western portions of the lake were some of the last of the lake front areas to be developed. The bridge was part of the realignment of Sunset Avenue. Its design, with concrete balustrades and handsome luminaires, was in keeping with contemporary ideas of bridge aesthetics. The span is a representative example of period deck girder bridge technology, and is one of two 1920s bridges spanning Deal Lake (Monmouth Road, 1929, 1300O13, Interlaken Borough) that contribute to the potential historic district.

Boundary Description and Justification: The bridge is located within a potential National Register-eligible historic district with a period of significance from ca. 1880 through 1929. If the district were created, the bridge, its superstructure and substructure, would lie within the district's boundaries and would be a contributing resource because it was built within the period of significance.

PHOTO: 180:35-38 (08/92) REVISED BY (DATE): QUAD: Asbury Park

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US
November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1300O11 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MAIN STREET OVER DEAL LAKE **FACILITY** MAIN STREET

TOWNSHIP INTERLAKEN BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 43 ft **WIDTH** 30 ft

CONSTRUCTION DT 1925 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT GEORGE K. ALLEN, JR., CO. ENG. **BUILDER** LOUIS J. SIELING

SETTING / CONTEXT The two-lane bridge with a sidewalk spans Deal Lake, a large, manmade lake that forms the border between Interlaken Borough to the southwest and Loch Arbour village to the north. The lake was created in the late-19th century to promote development of the beach resort towns. Unlike nearby neighborhoods bordering Deal Lake, the area adjacent the Main Street bridge does not possess historic district potential because of numerous modern intrusions including a car wash and restaurant.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 1925 single-span encased steel stringer bridge has concrete balustrades and abutments with wingwalls. The original octagonal lanterns with battered standards have been removed. The bridge is a common type in New Jersey, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 176:34a; 430:25-27 (08/92) REVISED BY (DATE): QUAD: Asbury Park

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1300O12 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CORLIES AVENUE (CR 31) OVER DEAL LAKE **FACILITY** CORLIES AVENUE

TOWNSHIP ALLENHURST BOROUGH

TYPE STRINGER **DESIGN** **MATERIAL** Wood

 # SPANS 20 **LENGTH** 302 ft **WIDTH** 24 ft

CONSTRUCTION DT 1941 **ALTERATION DT** 1977 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT OTIS R. SEAMAN, CO. ENG. **BUILDER** PROCTOR (1941)

SETTING / CONTEXT The two-lane bridge with two sidewalks spans Deal Lake, a manmade water feature that forms the border between Allenhurst Borough to the east, and West Allenhurst in Ocean Township to the west. The lake was created in the late-19th century as part of the development of the beach resort towns. On either side of the bridge are architecturally significant residential areas (1880-1929) that possess National Register historic district potential.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY In 1941 the bridge was built as a 17-span timber stringer with timber pile bents, and timber deck and railings. In 1977 it was substantially rebuilt as a 20-span timber stringer with timber pile bents, steel railings, and corrugated pan deck with an asphalt wearing surface. Little or no original bridge fabric remains, and the bridge is essentially an all modern structure. It would not contribute to the potential historic district based on its age.

INFOR MATION

PHOTO: 180:41-42; 430:21 (08/92) REVISED BY (DATE): QUAD: Asbury Park

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1300O13 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MONMOUTH ROAD (CR 15) OVER DEAL LAKE **FACILITY** MONMOUTH ROAD (CR 15)

TOWNSHIP INTERLAKEN BOROUGH

TYPE THRU GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 4 **LENGTH** 456 ft **WIDTH** 30 ft

CONSTRUCTION DT 1929 **ALTERATION DT** Demolished **SOURCE** PLAQUE

DESIGNER/PATENT GEORGE K. ALLEN, JR., CO. ENG. **BUILDER** WATCHUNG CONSTRUCTION CO.

SETTING / CONTEXT The 2-lane bridge with two sidewalks spans Deal Lake, a large manmade water feature that forms the border between Interlaken Borough to the south and West Allenhurst in Ocean Township to the north. The lake was created in the late-19th century as part of the development of the towns. The late-19th and early-20th century residential areas on both sides of the lake are architecturally distinguished and well preserved. They possess historic district potential.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Bridge was Not Individually Eligible. Potential Deal Lake Historic District. Contributed.

CONSULT DOCUMENTS SHPO Letter 03/12/01

SUMMARY The 4-span encased thru girder with floorbeams bridge has cantilevered sidewalks with balustrades that originally had luminaries and pipe railings on top of the girder. In 1963 the piers were reconstructed and changed from a rounded to a faceted profile. The bridge is representative of period technology and was constructed contemporaneously with the surrounding 1880-1929 resort community residences. While the bridge is not individually eligible for listing in the National Register of Historic Places, the bridge is located within a lakefront community which includes portions of both Asbury Park City and Wanamassa, and which comprises a potential historic district. Current information suggests the district would be eligible under Criteria A and C, and the period of significance would be from ca 1880 to 1929. The bridge would be a contributing element.

INFORMATION

Bibliography:

History of Monmouth County, New Jersey, 1664-1920. New York: Lewis Historical Publishing Co., 1922. pp. 465-472.
Kobbe, Gustav. The New Jersey Coast and Pines, 1889; reprint ed., New York: Walking News, 1982. p. 45.
Monmouth County Engineer. Bridge File: O-10.
WPA Guide to 1930s New Jersey. 1939; reprint ed., New Brunswick: Rutgers University Press, 1986. p. 682.

Physical Description: The bridge is a four-span concrete-encased steel thru girder with floor beams and a concrete deck. Each span has two five-foot depth girders with paneled fascia. The abutments and piers are reinforced concrete on pile foundations. The cantilevered sidewalks have standard-design concrete balustrades. Original lighting has been removed and modern metal lamps have been added.

Historical and Technological Significance: The 1929 Monmouth Road bridge is not individually distinguished, but it is located within the boundaries of the potential National Register historic district surrounding Deal Lake (criterion C). The bridge spans an arm of Deal Lake, a manmade water feature that forms the border between Interlaken Borough to the south and West Allenhurst in Ocean Township to the north. Deal Lake extends nearly two miles inland from the ocean and is bordered by many architecturally distinguished late-19th and early-20th century houses, some of which are oriented toward the lake. They form an impressive assemblage of buildings with good architectural integrity and few intrusions. The Interlaken Borough and West Allenhurst area has many well-preserved Colonial Revival style homes, most of which date from c.1910-1930. The bridge is contemporaneous with the residences and would be a contributing resource to a potential historic district. The lake borders the municipal boundaries of Allenhurst Borough, Asbury Park City, Deal Borough, Interlaken Borough, Loch Arbour Borough, and Ocean Township.

Deal Lake was originally an inlet of the ocean until it was diked sometime in the 18th century as a means of preserving fresh water for nearby fishermen, farmers, and a small tourist trade. In 1878 the New York & Long Branch Railroad extended its line south from Long Branch, and the dike was improved. Investors began to purchase land adjoining the lake in anticipation of the development of resort communities. The village of Loch Arbour, at the lake's northeastern end, was the first to be laid out in house lots, but growth around the lake was not rapid until the first decade of the twentieth century. Development proceeded under the direction of a number of land companies, generally corresponding to present-day corporate boundaries. In 1889 a group of New York City investors bought land in the area of Interlaken with the intention of building a resort; in 1896 the Coast Land Company purchased the tract of land incorporating Allenhurst; and, beginning in the 1900s, the Continental Investment Company began to sell house lots in Deal. The companies advertised "thriving villages" for "men of wealth and position." Numerous summer homes in the late-Victorian, Craftsman, and Colonial Revival styles were constructed. The historic period of development ended with the Second World War.

In 1929 the Monmouth Road bridge was constructed across Deal Lake. The western portions were some of the last of the lake front areas to be developed. The design of the bridge with concrete balustrades and handsome luminaires was in keeping with contemporary ideas of bridge aesthetics. The bridge is a representative example of period thru girder bridge technology, and is one of three 1920s bridges spanning Deal Lake including Sunset Avenue (1924, 1300O10, Asbury Park City) and Main Street (1925, 1300O11, Interlaken Borough). 1300O11 was evaluated as not significant because it is not located in a potential historic district.

Boundary Description and Justification: The bridge is located in a potential Deal Lake Historic District with a period of significance from 1880 through 1929. Thus it and its surroundings are evaluated as significant. The bridge would be within the district's boundaries and would be considered a contributing resource based on its date of construction.

PHOTO: 430:22-24 (08/92) REVISED BY (DATE): QUAD: Asbury Park

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1300O21 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED OCEAN AVENUE (CR 8) OVER LAKE TAKANASSEE **FACILITY** OCEAN AVENUE (CR 8)

TOWNSHIP LONG BRANCH CITY

TYPE T BEAM **DESIGN** **MATERIAL** Steel

 # SPANS 6 **LENGTH** 264 ft **WIDTH** 49.8 ft

CONSTRUCTION DT 1912 **ALTERATION DT** Demolished **SOURCE** PLAQUE

DESIGNER/PATENT W. A. VAN MATER **BUILDER** JESSE A. HOWLAND

SETTING / CONTEXT The two-lane bridge with two sidewalks spans Lake Takanassee, a manmade lake in the seashore resort community of Elberon in the southern part of Long Branch City. The resort consists of a mixture of early-20th century cottages, modern houses, and high-rise condominiums. Elberon was founded in the early-1880s as a health resort and casino for the wealthy.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Bridge was Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 11/22/95

SUMMARY The 7-span reinforced concrete T beam bridge has concrete balustrades with concrete light standards, cantilevered sidewalks, arched fascia stringers, concrete abutments, and concrete bents with concrete caps. Modern highway lighting has replaced original lanterns. The 1912 bridge is one of the earliest examples of concrete T beam construction in New Jersey. It is individually distinguished for its technological significance.

INFOR MATION

PHOTO: 181:34a-37a (08/92) REVISED BY (DATE): QUAD: Long Branch

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1300O30 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED ATLANTIC AVENUE (CR 29) OVER BRANCHPORT CREEK **FACILITY** ATLANTIC AVENUE (CR 29)

TOWNSHIP LONG BRANCH CITY

TYPE STRINGER **DESIGN** JACK ARCH (BRICK) **MATERIAL** Steel

 # SPANS 1 **LENGTH** 33 ft **WIDTH** 28.8 ft

CONSTRUCTION DT 1910ca **ALTERATION DT** **SOURCE** STYLE

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The two-lane bridge with two sidewalks spans a tidal tributary of the Shrewsbury River. The surroundings are suburban with a waterfront park and playground adjacent the bridge. Most of the nearby houses are early-20th century cottages with numerous modern alterations. Modern intrusions include a gas station and restaurant at the corner of Atlantic Avenue and Branchport Avenue.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span bridge has pipe railings, ashlar abutments, concrete-encased fascia stringers, and brick jack arches. Beam guide rails have been added. No record of the original date of construction was found at the county engineer's office, but stylistically the bridge dates from ca. 1910. A number of examples of brick jack bridges exist in New Jersey, including an eligible example 18E0104. This undocumented span is not historically nor technologically distinguished.

INFOR MATION

PHOTO: 422:43; 431:1-2 (09/92) REVISED BY (DATE): QUAD: Long Branch

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1300O35 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED ATLANTIC AVENUE (CR 29) OVER TROUTMANS CREEK **FACILITY** ATLANTIC AVENUE (CR 29)

TOWNSHIP LONG BRANCH CITY

TYPE THRU GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 62 ft **WIDTH** 26 ft

CONSTRUCTION DT 1925 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT GEORGE K. ALLEN, JR., CO. ENG. **BUILDER** JESSE A. HOWLAND

SETTING / CONTEXT The two-lane bridge with two sidewalks spans a tidal tributary of the Shrewsbury River. The suburban neighborhood consists of mostly modern single- and multi-family homes (c.1950-70). An older Victorian home is southwest of the bridge. A waterfront green strip borders to the northeast, and a gas station is to the northwest.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 1925 single-span encased thru girder with floorbeams bridge has cantilevered sidewalks with balustrades and scored concrete abutments with concrete piers for the girder bearings. Light standards have been removed from the balustrades, and beam guide rails have been added. The earth-filled approaches have sheet-pile bulkheads. The bridge is a representative example of a common bridge type and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 422:36-38; 431:3 (09/92) REVISED BY (DATE): QUAD: Long Branch

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1300R11 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED LAUREL AVENUE OVER WAACKAACK CREEK **FACILITY** LAUREL AVENUE

TOWNSHIP HAZLET TOWNSHIP

TYPE STRINGER **DESIGN** JACK ARCH (CONCRETE) **MATERIAL** Steel

 # SPANS 1 **LENGTH** 36 ft **WIDTH** 30 ft

CONSTRUCTION DT 1931 **ALTERATION DT** 1954 **SOURCE** PLAQUE

DESIGNER/PATENT GEORGE K. ALLEN, JR., CO. ENG. **BUILDER** S. S. THOMPSON

SETTING / CONTEXT The two-lane bridge with two sidewalks spans a tidal creek that forms the border between Keansburg Borough and West Keansburg in Hazlet Township. A small marina is downstream from the bridge. To the north is a small commercial area with a mixture of early-20th century and modern structures. The neighborhood to the south has mostly early-20th century cottages with numerous modern alterations.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 1931 single-span encased steel stringer bridge has concrete balustrades, paneled fascia, concrete jack arches, and concrete abutments with wingwalls. In 1954 repairs were made to the abutments and wingwalls using tie rods and anchor piles. The bridge is a common type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 425:18a-19a (09/92) REVISED BY (DATE): QUAD: Keyport

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1300R12 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MONROE STREET (CR 7) OVER WAACKAACK CREEK **FACILITY** MONROE STREET (CR 7)

TOWNSHIP HAZLET TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 32 ft **WIDTH** 29.9 ft

CONSTRUCTION DT 1927 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT GEORGE K. ALLEN, JR., CO. ENG. **BUILDER** LIDDLE & PFEIFER

SETTING / CONTEXT The two-lane bridge with single sidewalk spans a tidal creek that forms the border between Keansburg Borough to the east and West Keansburg in Hazlet Township to the west. East of the bridge is a tidal marsh. West of the bridge is a suburban neighborhood of early-20th century cottages with numerous modern alterations and intrusions.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span encased steel stringer bridge has concrete balustrades, paneled fascia, and concrete abutments. A utility pipe has been added to the downstream side. The bridge is a common type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 425:24a-25a (09/92) REVISED BY (DATE): QUAD: Keyport

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1300R13 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED TENTH STREET OVER WAACKAACK CREEK **FACILITY** TENTH STREET

TOWNSHIP HAZLET TOWNSHIP

TYPE SLAB **DESIGN** LAMINATED **MATERIAL** Wood

 # SPANS 2 **LENGTH** 33 ft **WIDTH** 23 ft

CONSTRUCTION DT 1944 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT OTIS R. SEAMAN, CO. ENG. **BUILDER** A. P. THOMPSON

SETTING / CONTEXT The two-lane bridge spans a tidal creek that forms the border between Keansburg Borough to the east and West Keansburg in Hazlet Township to the west. The bridge is located in a tidal marsh. To the east is a 5-way intersection, and a row of ranch homes giving way to early-20th century cottages and a small commercial district. West of the marsh is a neighborhood of early-20th century cottages with numerous modern intrusions.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span nail laminated timber slab bridge has timber pile bents with timber caps, timber sheet pile back walls, a timber deck, and beam guide rails. Utility pipes have been added on the downstream side. The bridge is a common type in the county, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 425:22a-23a, 431:8 (09/92) REVISED BY (DATE): QUAD: Keyport

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1300R24 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED JERSEY AVENUE OVER EAST CREEK **FACILITY** JERSEY AVENUE

TOWNSHIP UNION BEACH BOROUGH

TYPE STRINGER **DESIGN** **MATERIAL** Wood

 # SPANS 2 **LENGTH** 24 ft **WIDTH** 15.2 ft

CONSTRUCTION DT 1940 **ALTERATION DT** 1956 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT **BUILDER** J. LEPSKA (1956)

SETTING / CONTEXT The one-lane bridge spans a small tidal creek in a tidal marsh east of Union Beach. West of the bridge is a residential neighborhood with a mixture of modern and early-20th century homes. To the east is a baseball field and a factory complex. Parallel to Jersey Avenue is the abandoned right-of-way of the Central Railroad of New Jersey.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span timber stringer bridge has timber pile bents with sheet pile back walls, a plank deck with an asphalt wearing surface, and beam guide rails. In 1956 the bridge was rebuilt in-kind except for the timber piles. It is a representative example of a common bridge type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 425:16a-17a (09/92) REVISED BY (DATE): QUAD: Keyport

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1300R27 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED FOURTH STREET OVER WAACKAACK CREEK **FACILITY** FOURTH STREET

TOWNSHIP HAZLET TOWNSHIP

TYPE SLAB **DESIGN** LAMINATED **MATERIAL** Wood

 # SPANS 3 **LENGTH** 32 ft **WIDTH** 23.2 ft

CONSTRUCTION DT 1945 **ALTERATION DT** 1966 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT OTIS R. SEAMAN, CO. ENG. **BUILDER** FREIBOTT BROTHERS

SETTING / CONTEXT The two-lane bridge spans a tidal creek that forms the border between Keansburg Borough to the east and West Keansburg in Hazlet Township to the west. On both sides of the creek and tidal marsh are early-20th century cottages with numerous modern alterations and intrusions.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The three-span nail laminated timber slab has timber pile bents with cross bracing, sheet pile back walls, an asphalt road surface, and beam guide rails. The bridge was constructed in 1945 by Freibott Brothers. In 1966 the old 2x10 deck was replaced with a 2x12 deck, and the pile bearings were lowered to keep the same roadway elevation. The bridge is a representative example of a common type in the county, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 425:20a-21a (09/92) REVISED BY (DATE): QUAD: Keyport

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1300S13 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED TINTON AVENUE (CR 537) OVER PINE BROOK **FACILITY** TINTON AVENUE (CR 537)

TOWNSHIP TINTON FALLS BOROUGH

TYPE PONY TRUSS **DESIGN** PRATT **MATERIAL** Metal

 # SPANS 1 **LENGTH** 69 ft **WIDTH** 24.5 ft

CONSTRUCTION DT 1890ca **ALTERATION DT** 1944, 1953 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The two-lane bridge spans Pine Brook within the Tinton Falls Historic District (c.1700-1900), a historic crossroads village on both sides of the creek. South of the bridge is a congested intersection with several modern intrusions, and historic grist mill, converted to a restaurant. The 18th and 19th-century homes north of the bridge on Tinton Avenue have retained some of their historic character, but there are many intrusions and alterations to buildings in the district.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. May contribute. Listed. Tinton Falls Historic District. 11/10/1977. Not Rated.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 5-panel pin-connected Pratt pony truss with vertical end posts has been heavily altered and no longer functions as a truss. It is rusted and portions of the lower chords and diagonals are lost. In 1953 the bridge was underpinned with steel stringers on concrete piers, and a laminated deck added. The deteriorated bridge has lost its integrity of design and is too altered to contribute to the historic district.

INFOR MATION

Bibliography:
Monmouth County Engineer. Bridge File: S-13.
Office of New Jersey Heritage. National Register File: Monmouth County; Tinton Falls Historic District, 1977.

Physical Description: The truss leg bedstead bridge is a four-panel pin-connected Pratt pony truss. The upper chords and vertical end posts are built-up box beams with cover plates and lacing. The lower chords and verticals are angles with battens. The diagonals are eye bars, and the counters are round rod stock with turnbuckles. The built-up floor beams are placed above the lower chords and are connected to the verticals by rivets. The deck is a nail-laminated timber deck. It is not known whether the standard rolled members are steel or iron; the presumed age of the bridge suggests that wrought iron construction is likely. A single wood plank sidewalk with wood railing is cantilevered off the bridge's upstream side. The bridge has a lattice railing on the downstream side. The bridge bearings rest on riveted cylindrical metal caisson-like piers.

Numerous alterations have been made to the truss. All but one of the piers and bearings have been encased in concrete. The bridge originally had stone abutments, but these have been covered over and strengthened with concrete. The span is underpinned with concrete battered columns at the second and fourth panel points. Steel I-beams support the truss floor beams of the interior panels. The bridge no longer functions as a truss, portions of the lower chord are missing, the downstream truss is severely racked, and the bridge members are heavily rusted. The live load is carried by the stress-laminated timber deck and the system of underpinning. Utility pipes are supported by welded brackets off the truss's upstream side. Another utility pipe passes through holes cut in the floor beams on the downstream side. Beam guide rails have been added.

Historical and Technological Significance: The ca. 1890 Pratt truss pony truss lacks integrity because of alterations and deterioration. The alterations and deterioration have changed the bridge so much that, despite its uncommon design, it has lost its historical and technological significance. It is located within the boundaries of the National Register-listed Tinton Falls Historic District, an 18th- and 19th-century village with nine contributing residences, an early grist mill, and a number of archaeological and historical points of interest. The district lies on both sides of the Pine Brook, the feature the bridge crosses, but the bridge was not rated in the 1977 nomination. In recent years modern intrusions and alterations have compromised the historic character of a number of the sites on the southern side of the district. Not the least of the intrusions is increased traffic congestion and convenience stores at the intersection of Tinton Falls Road and Water Street immediately south of the bridge.

The bridge was built within the district's stated period of significance, but its alterations and loss of design integrity are so significant that it is non-functional as a bridge with the trusses now little more than a decorative railing for the underpinning and laminated deck that support the live loads. The original truss bridge is too altered to be evaluated as a contributing resource to the historic district.

The county engineer's records offered no data on the bridge's builder or date of construction. Stylistically the truss dates from circa 1890. The lack of documentation further limits the bridge's technological and historical significance. In 1953 the truss was underpinned, the sidewalk added, the concrete abutments built to strengthen the original stone abutments, and the nail-laminated deck constructed.

PHOTO: 421:8-21; 430:29-31 (09/92) REVISED BY (DATE): QUAD: Long Branch

NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1300S15 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED RIVERDALE AVENUE OVER PINE BROOK **FACILITY** RIVERDALE AVENUE

TOWNSHIP TINTON FALLS BOROUGH

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 42 ft **WIDTH** 20.4 ft

CONSTRUCTION DT 1931 **ALTERATION DT** 1940 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT GEORGE K. ALLEN, JR., CO. ENG. **BUILDER** UNKNOWN

SETTING / CONTEXT The two-lane bridge spans a small creek on a dead end road near the Garden State Parkway. The adjacent lots are undeveloped with woods and marsh. To the east is a modern residential subdevelopment.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span steel stringer bridge rests on timber pile bents with sheet pile back walls. Beam guide rails have been added. The bridge was built in 1931, and was rebuilt in 1940 using the existing I-beams on a new timber pile substructure. It is a representative example of a common bridge type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 422:5-6 (09/92) REVISED BY (DATE): QUAD: Long Branch

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1300S17 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WEST FRONT STREET (CR 12) OVER SWIMMING RIVER **FACILITY** WEST FRONT STREET (CR 12)

TOWNSHIP RED BANK BOROUGH

TYPE THRU GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 6 **LENGTH** 342 ft **WIDTH** 21.2 ft

CONSTRUCTION DT 1920 **ALTERATION DT** 1954 **SOURCE** PLAQUE

DESIGNER/PATENT GEORGE D. COOPER, CO. ENG. **BUILDER** AMERICAN BRIDGE COMPANY

SETTING / CONTEXT The two-lane bridge with single sidewalk spans the Swimming River west of downtown Red Bank. Next to the bridge's southeast abutment is a small boat rental. A multi-span deck girder bridge carries New Jersey Transit's North Coast Line across the river downstream. The neighborhood to the west is undistinguished suburban residential and commercial.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 6-span thru girder with floor beams bridge has concrete abutments circular column piers with struts and a wood-plank cantilevered sidewalk with pipe railing. It was constructed by the American Bridge Co. in 1920 to replace a 10 span bowstring pony truss bridge. In 1954 the steel grid deck replaced a wood deck, and steel spacers were placed on top of the existing stringers. The bridge is a representative example of a common type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 422:12-14 (09/92) REVISED BY (DATE): QUAD: Long Branch

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1300S31 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BINGHAM AVENUE LOCUST POINT ROAD OVER NAVESINK RIVER **FACILITY** BINGHAM AVENUE LOCUST POINT ROAD (CR 8A)

TOWNSHIP RUMSON BOROUGH

TYPE DOUBLE LEAF BASCULE **DESIGN** TRUNNION **MATERIAL** Steel

 # SPANS 57 **LENGTH** 2712 ft **WIDTH** 32 ft

CONSTRUCTION DT 1939 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT ASH HOWARD NEEDLES & TAMMEN **BUILDER** FRED T. LEY & COMPANY

SETTING / CONTEXT The two-lane bridge with single sidewalk spans the almost 1/2-mile wide Navesink River between Locust Point in Middletown Township and Rumson Borough. The setting is picturesque with residential communities on both banks of the navigable river. At Locust Point are some 19th-century estate homes interspersed with new construction. Next to the Rumson bridge approaches are a modern marina and restaurant.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge's main span is a double-leaf haunched deck girder bascule, and the approach spans are 16 haunched deck girder spans and 40 T-beam spans. The WPA-funded project is historically and technologically noteworthy. Its design details demonstrate careful attention to style and proportion including Moderne-style steel railings and operator houses. The largely original machinery is an early example of enclosed gearing. The bridge is a significant example of its type.

INFOR MATION

Bibliography:
Brown, Kathi Ann. Diversity by Design: Celebrating 75 Years of Howard Needles Tammen & Bergendorff, 1914-1989. New York: 989.
Monmouth County Engineer. Bridge File: S-31.
Monmouth County Historical Association. Vertical File: Bridges 1891 to 1940.
U. S. Patent Office. "L. R. Ash, et. al., Bascule Bridge Patent Number 1,633,565." 28 June 1927.

Physical Description: The well-preserved Oceanic Bridge is 57 spans and measures over 2700', or slightly more than a half a mile in length. To the north and south of the bascule span are 8 haunched deck girder with floor beam approach spans and 20 reinforced concrete T-beam spans. The main span is a 98'-span double-leaf haunched deck girder simple trunnion bascule with fixed counterweights. The substructure consists of concrete abutments, concrete column bents with concrete caps for the T-beam spans, and concrete piers with lateral bracing for the deck girder spans.

The double-leaf bascule span is operated by means of pinions which engage racks attached to the main girders. The pinions are operated through a train of gears connected to electric motors with back up gasoline engines. The bascule retains all of its original enclosed primary and secondary reducer gears. The bascule's electrically operated brakes appear to be modern replacements. The tail end of each bascule leaf carries a fixed concrete counterweight. The deck girder bascule has rolled I-beam floor beams and stringers with a modern steel grid deck. The toe locks are the original electrically operated jaw locks. In addition to the original manually operated metal crash barriers, automatic barriers and signals have been added. The bridge appears to retain its original operator's control panel and electrical systems.

The bridge is distinguished by its Moderne-style detailing. The two concrete operator's houses have a semi-circular profile with banded or ribbons windows and bold vertically-scored pylons with segmental tops flanking the entry doors. The manually-operated steel plate girder crash gates have circular cutouts, and bracketed concrete hinge posts. The concrete and metal railings on the approach spans and the similarly styled metal railings on the bascule span have bulbous "streamline" profiles.

Historical and Technological Significance. The 1939 Oceanic Bridge is one of the most architectonic and technologically distinguished 20th-century double leaf bascule bridges in New Jersey. It is eligible under criterion C of the National Register for embodying the distinctive characteristics of a type, period, and method of construction. The bascule was designed by the well-known firm of Ash-Howard-Needles & Tammen, the most prolific designers of movable span bridges in the late 1920s and 1930s in New Jersey. It makes use of the firm's patented trunnion supports. The bascule is exceptionally well preserved, and it retains almost all of its original operating machinery, gears, and equipment. It is one of the earliest documented uses of enclosed primary and reducer gears in New Jersey. The bridge's Moderne styling and well-proportioned design lend it a distinction not shared by many other bridges in the state.

The first bridge from Locust Point to Rumson across the Navesink River was constructed in 1891. It was a thru truss swing span with Warren pony truss and steel stringer approach spans on metal pilings fabricated by Dean and Westbrook of New York City. By the mid-1930s that bridge had fallen into poor condition, and local residents and municipalities began to look into the possibility of replacing the bridge. In 1937 the Rumson Borough Council and the Monmouth County Freeholders passed recommendations for applications to the State Highway Department and federal Public Works Administration, a source of funding, for a new bridge. In June 1938 the Federal Works Agency, Public Works Administration granted the county's application and agreed to pay 45 per cent of the estimated one million dollar cost of the new bridge. The firm of Ash-Howard-Needles and Tammen of New York and Kansas City acted as consulting engineers for the movable span, and the primary contractor was Fred T. Ley and Company. Lionel W. Lancaster performed the duties of resident engineer, and state bridge engineer Morris Goodkind consulted on the project. The bridge was completed in early 1940 and was representative of state-of-the-art bascule bridge technology and period aesthetics.

Ash-Howard-Needles and Tammen was one of the nation's leading designers of movable spans. The firm's principal members began their careers in the 1890s and 1900s under the tutelage of bridge engineer J. A. L. Waddell and his partner John Lyle Harrington. In 1914 Waddell and Harrington dissolved their partnership, and a new firm, Harrington, Howard, and Ash, was formed; in 1928 the partnership

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became Ash-Howard-Needles and Tammen. From 1914 to 1928 the firm designed more than 45 vertical lift bridges, 13 bascule bridges, and six rolling bascule bridges, including a series of 18 movable bridges across the Welland Canal in Ontario, Canada. During the New Deal era of the 1930s, the firm became one of the leading recipients of Public Works Administration bridge projects, including the Harlem River Triborough Bridge and the South Omaha Bridge over the Missouri River.

During the 1930s, Ash-Howard-Needles & Tammen was one of the most active designers of movable spans in New Jersey. In 1930 the firm completed work on the Burlington-Bristol vertical lift bridge across the Delaware River from New Jersey to Pennsylvania. Their work also included the bascule bridges for the Ocean Highway in Cape May County (Bridge No's 3900003-6) and over 6 bascule bridges for the New Jersey State Highway Department. The Oceanic Bridge is one of the best maintained and least altered of the group. In the 1940s the firm continued its activities in the state as the general consultant for the New Jersey Turnpike, and as the designers of the Delaware Memorial Bridge. Ash-Howard-Needles & Tammen played a significant role in the development of New Jersey's highway system.

The Oceanic Bridge appears to have no significant major repairs or alterations. In 1954 the primary power cables was replaced. In 1965 repairs were made to the concrete piers and piles. In 1970 the deck was repaired. In 1983 the northern curved seawall approach was reconstructed. In 1984 the operator's house windows were replaced. In 1992 the approach span piers were reconstructed.

Boundary Description and Justification: The bridge is individually distinguished, in and of itself, and the boundary is thus limited to the superstructure, substructure, and right-of-way over the river.

PHOTO: 420:1a-7a, 39a-44a (09/92) REVISED BY (DATE): QUAD: Sandy Hook

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1300U11 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED DAVIS STATION-IMLAYSTOWN ROAD OVER DOCTORS CREEK **FACILITY** DAVIS STATION IMLAYSTOWN ROAD

TOWNSHIP UPPER FREEHOLD TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 30 ft **WIDTH** 20.5 ft

CONSTRUCTION DT 1925 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT GEORGE K. ALLEN, JR., CO. ENG. **BUILDER** S. S. THOMPSON

SETTING / CONTEXT The two-lane bridge with sidewalks spans the mill pond spillway in the Imlaystown Historic District, an 18th- and 19th-century village of about 2 dozen residences and mill building. The village's main section is north of the bridge but a number of buildings are also found on the south side of the creek. The mill pond has fallen out of repair and has grown over with weeds.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Listed. Imlaystown Historic District. 01/03/1985. Noncontributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 1925 single span encased steel stringer bridge with concrete abutments, pipe railings, and timber spillway gate frame is a representative example of a common early-20th century bridge type. It is not within the period of significance of the Imlaystown Historic District (c.1700-1900), and does not contribute. Portions of the structurally associated dam, mill raceway system, and pond may be considered contributing to the district's historic character, but not the bridge based on its date.

INFORMATION

PHOTO: 416:38-43 (08/92) REVISED BY (DATE): QUAD: Allentown

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1300U12 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MAIN STREET (CR 539) OVER DOCTORS CREEK **FACILITY** MAIN STREET (CR 539)

TOWNSHIP ALLENTOWN BOROUGH

TYPE DECK GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 42 ft **WIDTH** 24 ft

CONSTRUCTION DT 1921 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT GEORGE D. COOPER, CO. ENG. **BUILDER** THOMPSON & MATTHEWS CO.

SETTING / CONTEXT The 2-lane bridge with sidewalks spans the concrete mill pond spillway in the Allentown Historic District, a large district incorporating the 18th, 19th, and early-20th century houses and commercial buildings in downtown Allentown. Next to the bridge is the old mill now converted to a gallery and restaurant. On either side of the crossing are numerous well-preserved historic houses in mature neighborhoods.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Listed. Allentown Historic District. 04/27/1982. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 1921 single-span steel deck girder with floorbeams bridge has concrete abutments with wing walls, pipe railings, and an 8-bay concrete spillway gate frame between its upstream wing walls. The bridge was built within the period of significance of the Allentown Historic District (c.1700-1941), and is thus evaluated as contributing structure. It is a part of the historic water power system and is a representative example of period bridge technology. It is not individually noteworthy.

INFOR MATION

Bibliography:
Monmouth County Engineer. Bridge Plans for Bridge Number U-12. 1921.
Office of New Jersey Heritage. Monmouth County: Allentown Historic District Nomination. 1982.

Physical Description: The bridge is a single-span, built-up deck girder with concrete-encased floor beams. The girders rests on concrete abutments with older masonry back and wingwalls. The bridge spans the spillway from an old mill pond, and built into the upstream side of the bridge is an eight-bay concrete spillway gate frame with wood gates. The bridge has two cantilevered sidewalks with pipe railings. Beam guide rails and chain link pedestrian fences have been added to the railings.

Historical and Technological Significance: The well-preserved 1921 deck girder bridge is within the boundaries of the Allentown Historic District, and is a contributing structure because it is was built within the district's 1780 to 1942 period of significance, and it illustrates the historic theme of community development (criterion A). The district is made up of numerous residential and commercial structures including the mill building, mill pond with raceway and metal water wheel west and south of the bridge. The bridge is not rated in the National Register nomination, although the bridge right-of-way is within the district boundaries and all of the adjacent buildings and lots are rated. The Main Street bridge is a representative example of early-20th century bridge technology, and it is historically associated with the impact of the automobile and highways on small rural villages such as Allentown. It is clearly related to the dates and broad historic themes associated with the district.

The bridge is located at a historic crossing, and in 1921 portions of the masonry abutments and wingwalls of a previous bridge were retained for the current deck girder's construction. What type of bridge was replaced is not currently known. The deck girder bridge with original pipe railings was designed by county engineer George D. Cooper and built by the Thompson and Matthews Company of Red Bank. A search of the county engineer's records revealed no major alterations to the deck girder bridge except for regular maintenance and repairs.

Boundary Description and Justification: The bridge is located in the National Register Allentown Historic District. The boundaries are delineated in the map that accompanies the nomination in the National Register files at the DEP Historic Preservation Office. The bridge is located within the specified boundaries, so the bridge is clearly within the district. Thus the bridge and its setting have been evaluated as significant.

PHOTO: 184:22-25 (08/92) REVISED BY (DATE): QUAD: Allentown

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1300U14 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED YARDVILLE-ALLENTOWN ROAD OVER DOCTORS CREEK **FACILITY** YARDVILLE ALLENTOWN ROAD (CR 524)

TOWNSHIP UPPER FREEHOLD TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 35 ft **WIDTH** 40 ft

CONSTRUCTION DT 1934 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The two lane bridge with shoulders and a single sidewalk spans a minor stream west of Allentown. The road is moderately developed with a mixture of new and old houses, some converted to small businesses. East of the bridge is a garage and a restaurant.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span encased steel stringer has concrete balustrades and abutments with wing walls. Beam guide rails have been added. The inscription indicates the bridge was built in 1934 by the New Jersey State Highway Department as part of NJ Route 37. The route has since been taken over by the county. The bridge is a representative example of a common NJ State Highway Department bridge type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 184:30-31 (08/92) REVISED BY (DATE): QUAD: Allentown

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BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1300U15 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BREZA ROAD OVER DOCTORS CREEK **FACILITY** BREZA ROAD

TOWNSHIP ALLENTOWN BOROUGH

TYPE SLAB **DESIGN** CONTINUOUS **MATERIAL** Reinforced Concrete

 # SPANS 3 **LENGTH** 49 ft **WIDTH** 22.3 ft

CONSTRUCTION DT 1945 **ALTERATION DT** 1971 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT **BUILDER** BAHR (1945)

SETTING / CONTEXT The two-lane bridge spans a minor stream in the western section of Allentown. South of the bridge is an apartment complex (c.1960-70), and to the north a waste water treatment plant.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY In 1945 the bridge was originally built as a 3-span laminated timber slab with timber pile bents and timber railing. In 1971 the bridge was rebuilt with new timber pile bents, continuous concrete slab deck, and beam guide rails. The bridge is essentially a modern structure, and it is not historically or technologically distinguished.

INFOR MATION

PHOTO: 184:26-27 (08/92) REVISED BY (DATE): QUAD: Allentown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1300U23 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED HARVEY ROAD OVER MIRY RUN **FACILITY** HARVEY ROAD

TOWNSHIP UPPER FREEHOLD TOWNSHIP

TYPE PONY TRUSS **DESIGN** WARREN **MATERIAL** Steel

 # SPANS 3 **LENGTH** 40 ft **WIDTH** 15 ft

CONSTRUCTION DT 1915ca **ALTERATION DT** 1945ca **SOURCE** STYLE

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The two-lane bridge spans a small creek in picturesque rural surroundings. Next to the bridge are wooded lots and horse pasture. Within view are two 19th-century farmhouses with outbuildings.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 03/12/01

SUMMARY The ca. 1915 rivet-connected Warren pony truss bridge with verticals, lattice railings, outriggers, and concrete abutments has been subjected to limited modifications. Like other truss bridges in Monmouth County, the floorbeams were all underpinned ca. 1945. There appear to have been no modifications to the trusses. Although timber stringers, not the trusses, support the live load, the loss of function of the trusses has minimal impact on the integrity of the structure. The 1915 date of construction is based on stylistic analysis of the bridge; no early records were located at the County Engineer's office. The bridge is one of four remaining in the County of this once common type. It is individually eligible for listing in the National Register of Historic Places under Criterion C as a representative example of a riveted Warren pony truss.

INFOR MATION

Bibliography:
Monmouth County Engineer. Inspection Report for Bridge U-23. 1949.

Physical Description: The bridge is a 3-panel rivet-connected Warren with verticals pony truss. It measures 40'-long and 15'-wide, and it is composed of standard rolled steel members. The upper chords, lower chords, diagonals, and verticals are all composed of riveted back-to-back steel angles. The flooring system consists of I-beam floor beams and new timber stringers with wood plank deck with asphalt wearing surface. The floor beams have been underpinned with timber piles, so the span now functions with live loads as a stringer rather than a truss span. The abutments are concrete. The bridge has lattice railings and rivet-connected outriggers that appear to be original.

Historical and Technological Significance: The Harvey Road Warren truss bridge is one of four similar examples of the type in the county (130MT21, Locust Avenue over Claypit Creek, c.1910, Middletown Twp.; 1300A23, Creamery Road over Yellow Brook, c.1910, Colts Neck Twp.; 1300U26, Smith Mill Road over Lahaway Creek, c.1915, Upper Freehold Twp.), but modifications to the way in which live loads are supported have significantly altered its technological and historical value. A review of the old plans and photographs located in the county engineer's office revealed that Warren pony truss bridges were common in Monmouth County. However, this example has no significant construction details, is only 40' long, and does not have integrity of original design. Additionally, it is undocumented. No records of the builder, date of construction, or plans survive with the county engineer. A 1949 inspection report indicates that the truss had been underpinned by that date. The county engineer underpinned most of the truss bridges in the 1940s and 1950s, and all of the known surviving highway truss bridges in the county have been underpinned. The Harvey Road bridge stylistically dates from ca. 1915, and is a representative but undistinguished example of pony truss bridge technology. Its rural setting is appropriate to its original historic context.

PHOTO: 416:1-6 (08/92) REVISED BY (DATE): QUAD: Allentown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1300U26 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED SMITH MILL ROAD OVER LAHAWAY CREEK **FACILITY** SMITH MILL ROAD

TOWNSHIP UPPER FREEHOLD TOWNSHIP

TYPE PONY TRUSS **DESIGN** WARREN **MATERIAL** Steel

 # SPANS 3 **LENGTH** 42 ft **WIDTH** 15.9 ft

CONSTRUCTION DT 1915ca **ALTERATION DT** 1950ca **SOURCE** STYLE

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The two-lane bridge spans a tree-lined creek in a modern residential subdevelopment of large houses on wooded lots.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 3-panel rivet-connected Warren pony truss with concrete-capped masonry abutments was underpinned at each floor beam ca. 1950. Timber stringers bearing on the original floor beams have been added, and the bridge now functions as a 3-span stringer rather than a truss bridge. No bridge plans survive at the county engineer's office. An altered example of a well represented bridge type in the area, the undocumented span has no distinguishing details nor historical associations.

INFOR MATION

Bibliography:
Monmouth County Engineer. Bridge Inspection Report for Bridge Number U-26. 1948.

Physical Description: The bridge is a 3-panel rivet-connected Warren pony truss. It measures 42'-long and 15.9'-wide, and is composed of standard rolled steel members. The upper chords, lower chords, and diagonals are all composed of riveted steel angles with gusset plates. The flooring system consists of I-beam floor beams, steel stringers reinforced with timber stringers, and a wood plank deck with an asphalt wearing surface. The bridge has outriggers with welded connections at the top chords and floor beams. They appear to be original elements that have been reconnected. The abutments are masonry with concrete repairs. The bridge has been underpinned with three timber pile bents supporting each floor beam. New 4x12 timber stringers have been added. They are deeper than the steel stringers, so the new timber stringers bearing on the floor beams and the abutments are what carry the live loads. The original railings have been removed and replaced with beam guide rails.

Historical and Technological Significance: The ca. 1915 Smith Mill Road Warren pony truss bridge is a standard design of its type with no distinguishing construction details, and it has been altered. While the trusses themselves appear to be complete, the placement of piles to support the floor beams (underpinning) and the addition of timber stringers to carry the deck and live load have functionally changed the span from a truss bridge to a stringer. The original design of the undistinguished bridge has been altered.

The county engineer's files offered no records of the Smith Mill Road bridge builder or date of construction nor any plans. The lack of documentation further detracts from its historic value. The bridge's style of construction suggests that it dates from ca. 1915. A 1948 inspection report lists the bridge in "poor condition." It is probable that shortly thereafter the truss was underpinned, a common practice in Monmouth County. In the last forty years the bridge's setting has changed from rural to suburban residential.

The bridge is one of four Warren trusses in the county (130MT21, Locust Ave. over Claypit Creek, c.1910, Middletown Twp.; 1300A23, Creamery Road over Yellow Brook, c. 1910, Colts Neck Twp.; 1300U23, Harvey Road over Miry Run, Upper Freehold Twp.). A review of old plans and photographs located in the county engineer's office revealed that Warren pony truss bridges were common in Monmouth County. The multi-span Locust Ave. bridge (130MT21) is the most technologically distinguished of the surviving bridges of this type and design.

PHOTO: 416:11-16 (08/92) REVISED BY (DATE): QUAD: Cassville

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1300U34 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED DOG HILL ROAD OVER DOCTORS CREEK **FACILITY** DOG HILL ROAD

TOWNSHIP UPPER FREEHOLD TOWNSHIP

TYPE BOX BEAM **DESIGN** **MATERIAL** Prestressed Concrete

 # SPANS 2 **LENGTH** 32 ft **WIDTH** 22.9 ft

CONSTRUCTION DT 1943 **ALTERATION DT** 1961 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT OTIS R. SEAMAN, CO. ENG. **BUILDER**

SETTING / CONTEXT The two-lane bridge spans a minor stream in a rural setting with fields, wooded lots, and scattered 19th- and 20th-century houses.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY In 1943 the bridge was built as a two-span laminated timber slab with timber pile bents and timber sheet pile back walls. In 1961 the bridge was rebuilt with a prestressed-concrete box beam superstructure on timber pile bents. The bridge is not historically or technologically distinguished based on its type and age.

INFOR MATION

PHOTO: 182:31-33, 431:18-19 (08/92) REVISED BY (DATE): QUAD: Allentown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1300U38 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED HOLMES MILL ROAD OVER MIRY RUN **FACILITY** HOLMES MILL ROAD

TOWNSHIP UPPER FREEHOLD TOWNSHIP

TYPE DECK GIRDER **DESIGN** JACK ARCH (CONCRETE) **MATERIAL** Steel

 # SPANS 1 **LENGTH** 26 ft **WIDTH** 21.4 ft

CONSTRUCTION DT 1920ca **ALTERATION DT** 1959 **SOURCE** STYLE

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The two-lane bridge spans the concrete spillway of a mill pond dam. The spillway gates have been removed, and the mill no longer exists. The mill foundations are in the undergrowth to the northeast of the bridge. The neighborhood is now lightly-developed residential with a mixture of new and old homes.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span deck girder bridge consists of two 20" rolled I-beam girders with six 10" floorbeams with concrete jack arches. The northern abutment is masonry and the southern abutment is concrete. Original construction records were not located at the county engineer's office, but stylistically it appears to date ca.1920 on an older masonry substructure. In 1959 the bridge was widened on one side with prestressed box beams. It is not historically or technologically distinguished.

INFOR MATION

PHOTO: 182:26-30 (08/92) REVISED BY (DATE): QUAD: Allentown

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1300U40 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED HOLMES MILL ROAD (CR 27) OVER LAHAWAY CREEK **FACILITY** HOLMES MILL ROAD (CR 27)

TOWNSHIP UPPER FREEHOLD TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 39 ft **WIDTH** 30.6 ft

CONSTRUCTION DT 1931 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT GEORGE K. ALLEN, JR., CO. ENG. **BUILDER** S. S. THOMPSON

SETTING / CONTEXT The two-lane bridge spans Lahaway Creek in a rural setting with woods, farmland, and scattered 19th- and 20th-century houses.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single span encased steel stringer bridge has standard-design concrete balustrades and abutments. Beam guide rails have been added. In 1931 the bridge replaced a single-span, 3-panel, Pratt pony truss. The bridge is a common type, and is not historically nor technologically distinguished.

INFOR MATION

PHOTO: 416:21-22 (08/92) REVISED BY (DATE): QUAD: New Egypt

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1300U47 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WALNFORD MILL ROAD OVER CROSSWICKS CREEK **FACILITY** WALNFORD MILL ROAD

TOWNSHIP UPPER FREEHOLD TOWNSHIP

TYPE PONY TRUSS **DESIGN** PRATT **MATERIAL** Wrought Iron

 # SPANS 4 **LENGTH** 62 ft **WIDTH** 14.8 ft

CONSTRUCTION DT 1885 **ALTERATION DT** 1948 **SOURCE** COMPANY RECORDS

DESIGNER/PATENT PHOENIX BRIDGE COMPANY **BUILDER** DEAN & WESTBROOK

SETTING / CONTEXT The single-lane bridge spans Crosswicks Creek in Walnford County Park, a National Register Historic District with grist mill (1871) and house (1773) to the northeast of the bridge. The picturesque historic site was the home of a prominent Quaker family. Just north of the bridge on Walnford Mill Road is a steel stringer bridge with Phoenix Column piers spanning the flood plain of Crosswicks Creek (1300U47).

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible. Listed. Walnford Historic District. 06/29/1976. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The pin-connected 4-panel Pratt pony truss has Phoenix Column top chords and end posts. In 1885 the Phoenix Bridge Company fabricated the truss for erection by New York City engineers Dean & Westbrook. In 1948 the bridge was underpinned with timber piles. The masonry abutments have been repaired with concrete numerous times. The bridge no longer functions as a truss, but its technological significance and date make it a contributing element to the Walnford Historic District (c.1770-1900).

INFOR MATION

Bibliography:
Burnham, Alan. "Forgotten Engineering: The Rise and Fall of the Phoenix Column." Architectural Record. April 1959.
Harshbarger, Patrick and Mary McCahon. A. G. Lichtenstein & Assoc. "New Jersey Phoenix Column Bridges." Paper for Society for Industrial Archeology. Pittsburgh, June 1993.
Monmouth County Engineer. Bridge File: U-47.
Office of New Jersey Heritage. National Register File: Monmouth County; Walnford Mill Historic District, 1976.
Phoenix Bridge Company Records. History of Orders, 1885. Accession 916. Hagley Museum and Library. Wilmington, Delaware.

Physical Description: The bridge is a 4-panel, cast and wrought-iron pin-connected Pratt pony truss with Phoenix Column sections for the upper chords and inclined end posts. The two members are joined by cast pieces. The lower chords are stamped eye bars, the verticals are angles with lacing, and the diagonals are loop welded eye bars. The counters are connected to the upper panel point by a clevis rather than an eye. The bottom connection, however, is the traditional eye loop. Another unusual feature is the outriggers which are similar to those on a 1885 Dean and Westbrook Phoenix column pony truss bridge in Hunterdon County (10XXF65, Hamden Road over South Branch of the Raritan River, Franklin Twp.). The outriggers on this bridge have been reconnected by welds, so while an original detail, the way they are connected is not. The trusses bear on girders that rest on masonry abutments that have numerous concrete repairs and reinforcing. The placement of the built-up floor beams above the lower chord with bolted connections is an original detail.

Braced timber pile bents with I-beam cap beams have been placed at each floor beam to underpin the trusses. Deep timber stringers bear on the bents, so the span now generally functions as a timber stringer bridge rather than a truss span. Other alterations include removal of the original railings and installation of beam guide rails. There are some minor repairs and strengthening.

Historical and Technological Significance: The Pratt pony truss bridge is a historically noteworthy example of late-19th century iron truss bridge construction using the patented Phoenix Column section. Walnford Road is the western border of the Walnford Mill Historic District, an eighteenth and nineteenth century historic site with large dwelling house (c.1773) and grist mill (c.1871) administered by the Monmouth County Park Commission. The bridge is a contributing structure and is eligible under both Criteria A and C of the National Register for its association with the historic events surrounding Walnford Mills, and as an example of a rare surviving bridge type embodying the characteristics of a significant type, period, and method of bridge construction. It was constructed within the period of significance of the historic district, and it retains its historic appearance.

Phoenix Bridge Company records date the Walnford Mill Road bridge to 1885. The company fabricated the bridge in its shops at Phoenixville, Pennsylvania under order from New York City engineers Dean and Westbrook. From the mid-1880s to the early 1890s Dean and Westbrook held an agreement with the Phoenix Bridge Company as agents for the construction of Phoenix Column highway bridges. Dean and Westbrook took responsibility for bidding the bridges, signing contracts with local officials, providing accurate information for Phoenix engineers to prepare plans and shop orders, and erecting the bridges on site. In New Jersey from 1885 to 1895 Dean and Westbrook erected at least 71 documented Phoenix Bridge Company truss bridges, of which six are known to survive (10XXF65, Hamden Road over South Branch of Raritan River, 1885, Franklin Twp., Hunterdon Co.; 10XXF82, Lower Lansdowne Road over Capoolong Creek, 1885, Franklin Twp., Hunterdon Co.; 1300U53, Province Line Road over Crosswicks Creek, 1891, Upper Freehold Twp., Monmouth Co.; 020042A, Doty Road over Ramapo River, 1891, Oakland Borough, Bergen Co.; 020044B, Elm Street over Hackensack River, 1892, Oradell Borough, Bergen Co.).

The patented Phoenix Column was developed in 1864 by David Reeve of the Phoenix Iron Company of Phoenixville, Pennsylvania. Its significance in the history of civil engineering was as a leading contribution to the substitution of wrought iron for cast iron in the compression members of bridges and buildings. It enjoyed tremendous popularity in the 1880s, and was important in the general acceptance of metal truss bridge technology. In the late-19th century the Phoenix Bridge Company, an offshoot of the Phoenix Iron Works, was one of the nation's leading innovators in structural iron and steel construction and a training ground for numerous civil engineers.

Although the Walnford Road bridge has been altered and no longer functions as a truss, it retains enough integrity of design to be

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considered an important example of a rare bridge type. Its significance is greatly enhanced by documentation of its construction in the Phoenix Bridge Company records. Company order books include casting and forging instructions for every bridge member, and it is possible to follow the truss fabrication from iron foundry and roll mill to machine shop. This level of documentation is rarely encountered and in combination with records that survive for other Phoenix Column trusses provides a laboratory for the study of late 19th-century bridge construction technology.

The Walnford Road bridge spans Crosswicks Creek at the Walnford Mill Historic Site. The Walnford Mill Historic District nomination lists the Walnford Road as one of the western boundaries of the district. The bridge was not rated in the nomination, but it appears to be within the district. It was built within the period of significance (c.1700-1899) of the district, and it contributes to the themes developed in the nomination. It is therefore a contributing resource.

The bridge played an important role in the transportation system that linked the mill, active until about 1929, with the surrounding country side, and it helped make the mill the economic center of the local agricultural-based economy. The historic crossing has been in use since at least the eighteenth century, and the current truss is the last of several bridges that have stood at or near the present right-of-way. The truss is an important element of the district's historic character. It is located just downstream from the grist mill, and is south of a stringer bridge with Phoenix Column piers that spans the river flood plain (1300U48).

Inspection reports and alteration plans at the Monmouth County Engineer's office indicate that in 1948 the bridge was underpinned. The timber pile cap beams were welded to the truss floor beams, new bridge seats poured, and the existing stone and concrete abutments repaired. Timber bulkheads were added. In 1969 the timber stringers and deck were reconstructed.

Boundary Description and Justification: The Walnford Road bridge is a contributing structure to the Walnford Mill Historic District. Walnford Road forms the western boundary of the district, but revisions to the nomination are currently underway to amend it to specifically rate the bridges and include newly acquired property on the east side of Walnford Road. Because the bridge is part of a larger historic setting, both it and its surroundings are evaluated as significant.

PHOTO: 182:18-25 (08/92) REVISED BY (DATE): QUAD: Allentown

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1300U48 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WALNFORD MILL ROAD OVER CROSSWICKS CREEK **FACILITY** WALNFORD MILL ROAD

TOWNSHIP UPPER FREEHOLD TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Metal

 # SPANS 8 **LENGTH** 75 ft **WIDTH** 17.1 ft

CONSTRUCTION DT 1893 **ALTERATION DT** 1943, 1993 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT PHOENIX BRIDGE COMPANY **BUILDER** DEAN & WESTBROOK

SETTING / CONTEXT The single-lane bridge spans the flood plain of Crosswicks Creek southwest of the Walnford grist mill (1877). The bridge is located in Walnford Historic District, a county park with mill, house (1773), and associated outbuildings. The historic site was the plantation-style home of a prominent Quaker family. Just south of the bridge on Walnford Mill Road is a pin-connected Pratt pony truss with Phoenix Columns (1300U47).

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible. Listed. Walnford Historic District. 06/29/1976 Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY In 1893, according to Phoenix Bridge Company records, the bridge was built as a 4-span rolled I-beam stringer supported on Phoenix Column bents. In 1943 timber pile bents and timber stringers were added to what is now an 8-span bridge. Original pipe railings were removed and beam guide rails added. The bridge is technologically significant because of the presence of the rare Phoenix Column bents, and it contributes to the historic district (c.1770-1900) based on date of construction.

INFOR MATION

Bibliography:
Burnham, Alan. "Forgotten Engineering: The Rise and Fall of the Phoenix Column." Architectural Record. April 1959.
Hunton, Gail, Monmouth County Parks Historian. Phone Conversation with J. Patrick Harshbarger, December 4, 1992.
Monmouth County Engineer. Bridge File: U-48.
Office of New Jersey Heritage. National Register Files: Monmouth County; Walnford Mill Historic District Nomination. 1976.
Phoenix Bridge Company Records. History of Orders, 1893. Accession 916. Hagley Museum and Library. Wilmington, Delaware.

Physical Description: The bridge is a metal and timber stringer span supported on brick abutments and bents. The bent columns are wrought-iron Phoenix Column sections, and the cap beams are built-up floor beams. The rolled I-beam stringers and Phoenix Column piers are rusted and deteriorated in spots. Newer timber stringers have been alternated with the metal stringers, and timber pile bents has been added, changing the bridge from a four span to an eight span configuration. The single-lane bridge has a plank deck with an asphalt wearing surface and beam guide rails.

Historical and Technological Significance: The bridge is a historically and technologically significant example of the use of Phoenix Column bents for a bridge's substructure. It is the only example of its type in the state. Walnford Mill Road is the western border of the Walnford Mill Historic District, an eighteenth and nineteenth century historic site with large dwelling house (c.1773) and a grist mill (c.1871) administered by the Monmouth County Parks Commission. The bridge is a contributing structure and is eligible under both Criteria A and C of the National Register for its association with the historic events surrounding Walnford Mills, and as an example of a rare surviving bridge type embodying the characteristics of a significant type, period, and method of bridge construction. It was constructed within the period of significance of the historic district, and retains its historic appearance.

Phoenix Bridge Company records show that the bridge's date of construction is 1893. The Phoenix Column bents were fabricated at the company's Phoenixville, Pennsylvania shops under order from New York City engineers Dean and Westbrook and shipped to Monmouth County via the Pennsylvania Railroad. Dean and Westbrook acted as agents for Phoenix Bridge Company highway bridges and took responsibility for bidding bridges, signing agreements with local officials, and erecting bridges on site. Instructions for the Walnford Mill Road bridge specify an "iron and steel flood bridge" with five Phoenix Column bents, six lines of rolled I-beam stringers, and pipe railings. Walnford Road across Crosswicks Creek was reportedly realigned in the late-nineteenth century, and the flood bridge over the river's floodplain may have been part of the realignment.

The patented Phoenix Column was developed in 1864 by David Reeve of the Phoenix Iron Company of Phoenixville, Pennsylvania. Its significance in the history of civil engineering was as a leading contribution to the substitution of wrought iron for cast iron in the compression members of bridges and buildings. It enjoyed tremendous popularity in the 1880s, and was important in the general acceptance of metal truss bridge technology. The most noted example of its use in a substructure was for the piers of the New York City Second Avenue Metropolitan Elevated Railway (1878).

The Walnford Road bridge spans Crosswicks Creek at the Walnford Mill Historic Site. The Walnford Mill Historic District nomination lists the Walnford Road as one of the western boundaries of the district. The bridge was not rated in the nomination, but it appears to be within the district. It was built within the period of significance (c.1700-1899) of the district, and it contributes to the themes developed in the nomination. It is therefore a contributing resource.

The bridge played an important role in the transportation system that linked the mill, active until about 1929, with the surrounding country side, and it helped make the mill the economic center of the local agricultural-based economy. The historic crossing has been in use since at least the eighteenth century. It is located just downstream from the grist mill, and is north of a Phoenix Column pony truss that spans the river (1300U48). The pony truss dates to 1885 and was also constructed by Dean and Westbrook.

Inspection reports and alteration plans at the Monmouth County Engineer's office indicate that in 1943 modifications were made to the

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stringer bridge converting it from a 4-span to an 8-span structure. Intermediate timber pile bents were driven, and timber stringers added to augment the rolled I-beam stringers. The original pipe railings were removed and beam guide rails added in their place.

Boundary Description and Justification: The Walnford Road bridge is a contributing structure to the Walnford Mill Historic District. Walnford Road forms the western boundary of the district, but revisions to the nomination are currently underway to amend it to specifically rate the bridges and include newly acquired property on the west side of Walnford Road. Because the bridge is part of a larger historic setting, both it and its surroundings are evaluated as significant.

PHOTO: 182:11-17 (08/92) REVISED BY (DATE): QUAD: Allentown

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1300U53 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PROVINCE LINE ROAD OVER CROSSWICKS CREEK **FACILITY** PROVINCE LINE ROAD

TOWNSHIP UPPER FREEHOLD TOWNSHIP

TYPE THRU TRUSS **DESIGN** PRATT **MATERIAL** Wrought Iron

 # SPANS 6 **LENGTH** 110 ft **WIDTH** 15.4 ft

CONSTRUCTION DT 1891 **ALTERATION DT** 1943 **SOURCE** PLAQUE

DESIGNER/PATENT PHOENIX BRIDGE COMPANY **BUILDER** DEAN & WESTBROOK

SETTING / CONTEXT The single-lane bridge spans a tree-lined creek in a rural wooded setting. Nearby, but out of sight of the bridge, are nurseries and scattered 19th- and 20th-century houses. About 1/2 mile south is the crossroads village of Ellisdale.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 7-panel, 110', pin-connected Pratt thru truss has Phoenix Column upper chords, vertical, and upper laterals, finials atop the portals, loop-forged eye-bar lower chords and diagonals, built-up floorbeams, and cast-iron connecting nodes. In 1943 the bridge was underpinned with steel stringers on timber piles. The span was constructed with patented Phoenix sections by well-known engineers Dean & Westbrook. It is a historically and technologically distinguished example of a rare type.

INFORMATION

Bibliography:
Burnham, Alan. "Forgotten Engineering: The Rise and Fall of the Phoenix Column." Architectural Record. April, 1959.
Darnell, Victor. Directory of American Bridge-Building Companies, 1840-1900. Washington, D.C.: Society for Industrial Archaeology, 1984.
Monmouth County Engineer. Bridge File: U-53.
Phoenix Bridge Company Records. Accession 916. Hagley Museum and Library. Wilmington, Delaware.

Physical Description: The bridge is a single-span seven-panel wrought and cast iron Pratt thru truss with patented Phoenix Column section for the upper chords, portals, upper lateral bracing, and verticals. The bottom chords consist of circular-headed eye bars. The principal diagonals and end panel hangers consist of needle-headed or loop forged eye bars. The center panel counters are rods. All panel points of the truss except the end panel hangers consist of cast iron pieces to receive the Phoenix Column sections. The built-up floor beams are supported by U-shaped hangers from the lower panel point pins. The floor beams support timber stringers with a plank deck and asphalt wear surface. The portals have decorative finials, and builders plaques that read "1891, Built By Dean & Westbrook, Bridge Engineers, New York." The abutments and wingwalls are rubble stone masonry.

The truss bridge has been altered by the addition of underpinning. Timber piles capped by a longitudinal beam stiffening member have been placed under each end of each floor beam. Additional timber floor beams supported on wood block risers and the longitudinal beams have been added at mid panel. The structure is in effect a six-span continuous deck girder bridge.

Historical and Technological Significance: The bridge is historically and technologically significant as an example of late-nineteenth-century iron truss bridge technology using patented Phoenix Column sections (criterion C). The pin-connected Pratt thru truss became the most successful and technologically important of the late-nineteenth century iron truss bridge types. Furthermore, the Province Line Road truss employs wrought iron Phoenix Columns. The patented Phoenix Column was developed in 1864 by David Reeve of the Phoenix Iron Company of Phoenixville, Pennsylvania. Its significance in the history of civil engineering was as a leading contribution to the substitution of wrought iron for cast iron in the compression members of bridges and buildings. It enjoyed tremendous popularity in the 1880s, and was important in the general acceptance of metal truss bridge technology.

The Province Line Road bridge was fabricated in 1891 by the Phoenix Bridge Company of Phoenixville, Pennsylvania and erected by Dean and Westbrook of New York City. Dean and Westbrook acted as agents for Phoenix Bridge Company highway truss bridges from the mid-1880s to the mid-1890s. Phoenix Bridge Company records show that Dean and Westbrook built over 70 Phoenix Column truss highway bridges in New Jersey from 1885 to 1895, and at least six including the Province Line Road bridge are extant (10XXF65, Hamden Road over South Branch of Raritan River, 1885, Franklin Twp., Hunterdon Co.; 10XXF82, Lower Lansdowne Road over Capoolong Creek, 1885, Franklin Twp., Hunterdon Co.; 1300U47, Walnford Mill Road over Crosswicks Creek, 1885, Upper Freehold Twp., Monmouth Co.; 020042A, Doty Road over Ramapo River, 1891, Oakland Borough, Bergen Co.; 020044B, Elm Street over Hackensack River, 1892, Oradell Borough, Bergen Co.). Of the six surviving trusses only two, the Province Line Road and Lower Lansdowne Road bridges are thru trusses, the others are pony trusses.

Because of the engineering significance of the Phoenix section, the bridge is evaluated as significant despite the fact that it was underpinned in 1943 and no longer functions as a truss bridge. The historic trusses appear to survive in basically unaltered condition.

Boundary Description and Justification: It is the trusses that are individually significant, not the later underpinning or altered substructure. The boundary is limited to the trusses themselves.

PHOTO: 182:4-10, 184:32-7 (08/92) REVISED BY (DATE): QUAD: Allentown

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1300U70 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED OLD YORK ROAD (CR 539) OVER ASSUNPINK CREEK **FACILITY** OLD YORK ROAD (CR 539)

TOWNSHIP UPPER FREEHOLD TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 2 **LENGTH** 46 ft **WIDTH** 30 ft

CONSTRUCTION DT 1941 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT OTIS R. SEAMAN, CO. ENG. **BUILDER** PROCTOR

SETTING / CONTEXT The two-lane bridge spans a creek in the state's Assunpink Wildlife Management Area. The area along the county highway is moderately developed with nurseries, farms, and modern housing. The area to the east is wooded. The bridge is about a mile downstream from Assunpink Lake.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 1941 two-span steel stringer bridge with pipe railings has scored concrete abutments, pier, and stepped wingwalls. Beam guide rails have been added. It is a historically and technologically undistinguished example of a common bridge type.

INFOR MATION

PHOTO: 183:1-3 (08/92) REVISED BY (DATE): QUAD: Allentown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1300U71 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED OLD YORK ROAD (CR 539) OVER NEW SHARON BROOK **FACILITY** OLD YORK ROAD (CR 539)

TOWNSHIP UPPER FREEHOLD TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 28 ft **WIDTH** 30.1 ft

CONSTRUCTION DT 1920 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The two-lane bridge spans a small brook on the north side of the small village of New Sharon. This section of Old York Road forms the border between Monmouth and Mercer County, and the bridge was built in 1920 as a joint county project. Next to the bridge are a 19th-century farmhouse, a modern pole barn, and a sod farm.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 1920 single-span encased steel stringer bridge has concrete abutments with wingwalls. The pipe railings have been removed, and beam guide rails have been added. The bridge is a representative example of a common bridge type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 183:4-5 (08/92) REVISED BY (DATE): QUAD: Allentown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1300W10 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MAIN STREET OVER WATSON CREEK **FACILITY** MAIN STREET

TOWNSHIP MANASQUAN BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 56 ft **WIDTH** 39 ft

CONSTRUCTION DT 1928 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT GEORGE K. ALLEN, JR., CO. ENG. **BUILDER** OWEN MELEE

SETTING / CONTEXT The two-lane bridge with two sidewalks spans a tidal creek north of Glimmer Glass. The neighborhood is residential with early-20th century summer cottages and late-20th century year-round houses. The creek is lined with timber bulkheads. The area does not appear to have historic district potential due to the extensive alterations to the structures.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span encased steel stringer bridge has concrete balustrades, paneled fascia, and concrete abutments and pier. The approaches have pipe railings and replacement beam guide rails. The 1928 encased steel stringer bridge is a representative example of a common bridge type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 161:6-7 (06/92) REVISED BY (DATE): QUAD: Point Pleasant

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1300W11 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED OCEAN AVENUE OVER WATSON CREEK **FACILITY** OCEAN AVENUE

TOWNSHIP MANASQUAN BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 58 ft **WIDTH** 30 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT GEORGE K. ALLEN, JR., CO. ENG. **BUILDER** S. THOMPSON & COMPANY

SETTING / CONTEXT The two-lane bridge with two sidewalks spans a bulkhead-lined tidal stream north of Glimmer Glass. The residential neighborhood consists of mid- to late-20th century houses, some seasonal and some converted to year-round. There are too many alterations to the cottages for the area to be evaluated as a potential historic district.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 1930 two-span encased steel stringer bridge has concrete balustrades, paneled fascia, concrete abutments and pier, and pipe railings on the approaches. It is a standard county design and a common type. It is not historically or technologically distinguished.

INFOR MATION

PHOTO: 161:8-9 (06/92) REVISED BY (DATE): QUAD: Point Pleasant

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1300W16 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED EIGHTEENTH AVENUE (CR 30) OVER WRECK POND BROOK **FACILITY** EIGHTEENTH AVENUE (CR 30)

TOWNSHIP WALL TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Wood

 # SPANS 3 **LENGTH** 48 ft **WIDTH** 23.2 ft

CONSTRUCTION DT 1943 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT **BUILDER** FREIBOTT BROTHERS

SETTING / CONTEXT The two-lane bridge spans a stream in a rural setting of woods, fields, and scattered farms.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The three-span timber stringer bridge with wood deck and asphalt wearing surface rests on braced timber pile bents with timber cap beams and sheet pile bulkheads. Beam guide rails and utility pipes have been added to the bridge. The bridge is a very common type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 162:21a-22a (06/92) REVISED BY (DATE): QUAD: Asbury Park

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1300W17 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED GLENDOLA ROAD OVER WRECK POND BROOK **FACILITY** GLENDOLA ROAD

TOWNSHIP WALL TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Wood

 # SPANS 2 **LENGTH** 33 ft **WIDTH** 23 ft

CONSTRUCTION DT 1943 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** FREIBOTT BROTHERS

SETTING / CONTEXT The two-lane bridge spans a small creek downstream from a small pond. The setting is residential with a mixture of late-20th century residences on large lots and older farm houses. To the north, but out of site of the bridge, is the NJ 18 and NJ 38 cloverleaf intersection.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed two-span timber stringer bridge has timber pile bents with timber cap beams, sheet pile bulkheads, a timber deck, and beam guide rails. It is a representative example of a very common bridge type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 162:23a-24a (06/92) REVISED BY (DATE): QUAD: Asbury Park

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1300W23 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED ALLAIRE ROAD (CR 524) OVER WRECK POND BROOK **FACILITY** ALLAIRE ROAD (CR 524)

TOWNSHIP WALL TOWNSHIP

TYPE SLAB **DESIGN** CONTINUOUS **MATERIAL** Reinforced Concrete

 # SPANS 4 **LENGTH** 64 ft **WIDTH** 30 ft

CONSTRUCTION DT 20th Century **ALTERATION DT** Unknown **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The two-lane bridge spans the concrete spillway from Trimmer's Pond on Wreck Pond Brook. The neighborhood is undistinguished late-20th century residential.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 4-span continuous concrete slab bridge has been heavily altered. The superstructure has been raised; battered concrete piers have been replaced by rolled section columns on concrete plinths, and the ashlar abutments have new concrete caps. No records related to the original construction or alterations were located in the county engineer's files. The bridge is technologically undistinguished, and the concrete slab superstructure is probably less than 50 years old.

INFOR MATION

PHOTO: 161:19-21 (06/92) REVISED BY (DATE): QUAD: Asbury Park

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1300W27 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED FIRST AVENUE OVER WRECK POND **FACILITY** FIRST AVENUE

TOWNSHIP SEA GIRT BOROUGH

TYPE ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 77 ft **WIDTH** 35.9 ft

CONSTRUCTION DT 1916 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT JOHN T. SIMPSON **BUILDER** OWEN MELEE

SETTING / CONTEXT The two lane bridge with two sidewalks spans Wreck Pond on the corporate line between Spring Lake to the north and Sea Girt to the south. The neighborhood is a well-maintained coastal resort community with late-19th and early 20th-century detached houses bordering the lake. Spring Lake Borough is a National Register multiple property listing (1870-1935) including hotels and boarding houses, residences, churches, commercial and civic buildings, and landscape and recreation structures.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible. Listed. Spring Lake Multiple Property. 03/08/1991. Contributing.

CONSULT DOCUMENTS SHPO Letter 3/12/01

SUMMARY The 1916 reinforced concrete arch has paneled parapets with posts with stepped caps. Within the boundaries of the Spring Lake multiple property listing, the unaltered bridge appears eligible under the nomination's specified criteria for landscape and recreation structures. It spans Wreck Pond, a naturally occurring recreational feature and park, and is part of the street plan and general landscaping and public improvements that contributed to Spring Lake's transformation into a resort community. The bridge is individually eligible for listing in the National Register under Criteria A and C, and is a contributing element of the Spring Lake Multiple Property District.

INFOR MATION

Bibliography:
Office of New Jersey Heritage. National Register File: Monmouth County; Spring Lake, New Jersey as a Coastal Resort, 1870-1935, 1990.

Physical Description: The First Avenue bridge carries two lanes of traffic with two sidewalks over Wreck Pond. The bridge is a 77-foot span reinforced-concrete elliptical arch. It has concrete parapets with paneled posts with stepped caps. The parapets extend over the long, plain concrete wing walls. Utility pipes have been added on the downstream side of the bridge. The span appears to survive in unaltered condition.

Historical and Technological Significance: The First Avenue reinforced concrete arch bridge built in 1916 is significant for its historical association (Criterion A) with the development of Spring Lake as a shore resort from 1870 to 1935. It meets the registration requirements for landscape and recreational structures (Property Type #5, Section F, pp. 23-28) in the 1990 Spring Lake Multiple Property Documentation Form. Spring Lake is a well-preserved resort community with numerous surviving hotels, summer residences, churches, civic and business buildings, and landscape features. It is representative of several Jersey Shore resorts that in the late nineteenth century were established and promoted by real estate developers.

The Spring Lake Multiple Property Documentation Form did not develop bridges as a specific property type, but it did broadly define general landscape and recreational structures as "the various interventions which contributed to Spring Lake's transformation from a farming to a resort community." It listed as examples of possible eligible types tree-lined streets, the grid street pattern, boardwalks, public parks, and lakes.

The First Avenue bridge, constructed in 1916, was part of the efforts that changed Spring Lake's natural landscape into a cultural landscape. The bridge spans Wreck Pond, a feature mentioned in the multiple property nomination as conspicuous for little premeditated landscaping, and as important for suggesting "the way the early resort must have looked like." The bridge was indicative of human intervention into the natural landscape, and was historically associated with efforts to improve streets and highways in the growing shore resort. The reinforced-concrete arch bridge type was considered as aesthetically appropriate for parks and naturalistic landscaping, and it was not surprising that it was chosen for this location. Bridge plaques indicate that the bridge was designed by engineer John T. Simpson under the supervision of county engineer George D. Cooper. Owen Melee constructed the bridge and was known to be active in the construction of several other early reinforced-concrete bridges in Monmouth County. The bridge is technologically representative of period reinforced concrete arch construction, and conveys the context of the multiple property nomination through its design, setting, materials, workmanship, feeling, and historical association.

No plans or records of bridge construction were located at the county engineer's office.

Boundary Description and Justification: The bridge is eligible under the existing registration requirements spelled out in the 1990 Spring Lake Multiple Property Documentation Form National Register nomination. The boundaries of the nomination are the Spring Lake Borough corporate boundaries. Wreck Pond is Spring Lake Borough's southern corporate boundary and the bridge spans the pond, so it is within the National Register listed area.

PHOTO: 161:12-14 (06/92 JPH (5/96)) REVISED BY (DATE): QUAD: Asbury Park

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1300W31 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED OCEAN ROAD OVER NORTH BRANCH OF WRECK POND **FACILITY** OCEAN ROAD

TOWNSHIP SPRING LAKE BOROUGH

TYPE SLAB **DESIGN** LAMINATED **MATERIAL** Wood

 # SPANS 2 **LENGTH** 32 ft **WIDTH** 20.2 ft

CONSTRUCTION DT 1940 **ALTERATION DT** 1986 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The two lane bridge with single sidewalk spans a large tidal pond in a well-maintained residential area of early-20th through late-20th century detached houses.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 7/28/92

SUMMARY The two-span nail-laminated timber slab bridge has concrete abutments and timber pile bents with timber cap beams. The bridge was originally constructed in 1940. It was rebuilt in-kind with beam guide rails in 1986. It is a representative example of a common bridge type in the county, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 161:15-16 (06/92) REVISED BY (DATE): QUAD: Asbury Park

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1300W35 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BRIGHTON AVENUE OVER SHARK RIVER **FACILITY** BRIGHTON AVENUE

TOWNSHIP WALL TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Wood

 # SPANS 6 **LENGTH** 91 ft **WIDTH** 29 ft

CONSTRUCTION DT 1943 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT OTIS R. SEAMAN, CO. ENG. **BUILDER** HOWLAND

SETTING / CONTEXT The two-lane bridge spans the Shark River near the intersection of Brighton Road and NJ 18, a modern divided highway. The bridge is located within the boundaries of Shark River County Park, a multi-use recreation area that includes the preserved tidal wetlands adjacent the bridge. The communities surrounding the park are modern suburban residential.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The six-span timber stringer bridge rests on timber pile bents with timber cap beams and cross bracing. It has timber sheet pile bulkheads and timber plank deck with asphalt wear surface. Beam guide rails have replaced the original wood railings, and a utility pipe is attached to the upstream side. The bridge is a representative example of a very common type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 180:19-20; 430:18 (08/92) REVISED BY (DATE): QUAD: Asbury Park

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1300W36 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED REMSEN MILL ROAD OVER SHARK RIVER **FACILITY** REMSEN MILL ROAD

TOWNSHIP WALL TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 2 **LENGTH** 33 ft **WIDTH** 21 ft

CONSTRUCTION DT 1945 **ALTERATION DT** Unknown **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT OTIS R. SEAMAN, CO. ENG. **BUILDER** MCGREEVEY

SETTING / CONTEXT The two-lane bridge spans the Shark River in Shark River County Park, a multi-use recreation area. Adjacent the bridge are woods, and a water company pump station. The community bordering the park is a 1960s ranch house subdevelopment. Upstream is a concrete dam.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY In 1945 the bridge was built as a 1-span steel stringer using salvaged rolled I-beams. Subsequently the bridge was strengthened by the addition of timber stringers and a timber pile bent with an I-beam cap beam. The original bearing ends are supported on wood pile bents with timber cap abutments with sheet pile bulkheads. Beam guide rails have been added. The altered bridge is a common type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 180:26; 430:19-20 (08/92) REVISED BY (DATE): QUAD: Asbury Park

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1300W43 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED OCEAN AVENUE OVER SHARK RIVER **FACILITY** OCEAN AVENUE

TOWNSHIP AVON-BY-THE-SEA BOROUGH

TYPE DOUBLE LEAF BASCULE **DESIGN** TRUNNION **MATERIAL** Steel

 # SPANS 3 **LENGTH** 339 ft **WIDTH** 40 ft

CONSTRUCTION DT 1936 **ALTERATION DT** 1987 **SOURCE** PLAQUE/PLANS

DESIGNER/PATENT ASH, HOWARD, NEEDLES & TAMMEN **BUILDER** MERRIT-CHAPMAN & MCLEAN

SETTING / CONTEXT The two-lane bridge with sidewalks spans the Shark River, which forms the border between Avon-by-the-Sea Borough and Belmar Borough, beach resort towns originally developed in the late-19th and early-20th centuries. Ocean Avenue parallels the beach. The bridge is located at the mouth of the navigable Shark River, and is one of the busiest movable spans in the state, opening an average of over 8,000 times per year.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The double-leaf bascule bridge with two encased haunched deck girder approach spans has concrete mechanical houses, cantilevered sidewalks with sheet metal balustrades, and concrete substructure. Originally designed in 1936 by Ash-Howard-Needles-Tammen, the bridge was extensively rebuilt in 1987 with new welded deck girder leafs, speed reducers, electrical wiring, and locks. The span is too altered to be significant. Distinguished examples of the bridge type remain in the county (1300S31).

INFOR MATION

Bibliography:
Monmouth County Engineer. Bridge File: W-43.

Physical Description: The main span of the 3-span haunched deck girder with floor beams bridge is a double-leaf trunnion bascule. The approach spans are encased. The substructure consists of concrete abutments and piers. The double-leaf bascule span is operated by means of pinions which engage racks attached to the main girders. The main girders have been rebuilt, the original riveted girders replaced with all new welded-stiffener plate girders. The pinions are operated through a train of gears connected to electric motors with back up gasoline engines. While the span operates in the original manner, most of the fabric related to the movable leafs is new. The electric motors, racks, rack pinions, rack pinion shafts, primary and secondary reducing gears, brakes and locks are modern replacements as are the welded movable leaf girders with concrete counterweights attached to the tail ends. They are finished with metal sidewalk railings that repeat the style of the concrete balustrades of the approach spans. Automatic traffic signals and barriers also have been added to the bridge. The concrete operator's house and control panel are original, but the electrical systems have been updated with automatic controls for opening and closing.

The two-story concrete operator's houses on opposite sides of the double leaf bascule have rectangular floor plans and are Moderne in style with vertical scoring and lantern-style roof lines. The interiors have been remodeled. The roofs of the two one-story machinery houses provide observation platforms for pedestrians.

Historical and Technological Significance: The 1936 Ocean Avenue double-leaf bascule bridge is one of over a dozen regional examples of Ash-Howard-Needles & Tammen (AHNT) designed trunnion bascule bridges dating from the late 1920s-1930s. This one was built by the Merritt-Chapman-McLean Corporation. The bridge is not an early example of the bridge type, and it is highly altered. The movable leafs are welded girders placed in 1987, and the motors, racks, pinions, shafts, enclosed gears, brakes, and toe locks are also modern replacements. The approach spans enjoy more integrity than the movable span. Because of the loss of so much original fabric, this example of what is a well represented bridge type, is not historically nor technologically distinguished. More complete examples remain, and they better reflect the technological significance of the bridge type (see 1300S31, Oceanic Bridge over the Navesink River, 1939, Middletown Township). The patent associated with the AHNT design is for the trunnion tower. The design eclipsed the Strauss-designed bascule in popularity in the state in the late 1920s.

PHOTO: 175:25a-30a (08/92) REVISED BY (DATE): QUAD: Asbury Park

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1300W57 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BENTZ ROAD OVER WRECK POND BROOK **FACILITY** BENTZ ROAD

TOWNSHIP WALL TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Wood

 # SPANS 3 **LENGTH** 48 ft **WIDTH** 19 ft

CONSTRUCTION DT 1945 **ALTERATION DT** 1988 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The two-lane bridge spans a minor stream. The surrounding area is residential with late-19th and 20th-century housing and scattered agricultural fields.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The three-span timber stringer bridge has braced timber pile bents, sheet pile bulkheads, a plank deck, and beam guide rails. The bridge was originally built in 1945, but the present structure is an in-kind replacement constructed in 1988. The bridge is a common type in the county, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 161:24-25 (06/92) REVISED BY (DATE): QUAD: Asbury Park

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1302150 **CO** MONMOUTH **OWNER** NJDOT **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WEST MAIN STREET (CR 537) OVER US 9 **FACILITY** WEST MAIN STREET (CR 537)

TOWNSHIP FREEHOLD BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 73 ft **WIDTH** 40 ft

CONSTRUCTION DT 1938 **ALTERATION DT** 1988 **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries 4 lanes and a sidewalk of CR 537 over a 4-lane highway and sidewalks. It is located south of downtown Freehold. The surroundings are suburban with 20th-century residential developments, apartment complexes, and shopping centers. Southwest of the bridge is the Freehold Raceway. Monmouth County Historical Association's Covenhoven House (c.1752) is located at a street corner northeast of the overpass.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span steel stringer bridge has concrete abutments with vertical score detailing and concrete column piers. The original portion, built in 1938, was an encased steel stringer bridge with concrete balustrades. In 1988 the span was widened on each side, and concrete parapets with chain link fence barriers were added. The bridge is a common type with alterations, and it is not historically or technologically distinguished.

INFOR MATION

PHOTO: 419:42-44 (09/92) REVISED BY (DATE): QUAD: Freehold

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1303150 **CO** MONMOUTH **OWNER** NJDOT **MILEPOINT** 114.59

NAME & FEATURE INTERSECTED US 9 OVER CR 522 & FREEHOLD SECONDARY (CONRAIL) **FACILITY** US 9

TOWNSHIP FREEHOLD TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 5 **LENGTH** 191 ft **WIDTH** 54 ft

CONSTRUCTION DT 1938 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries four lanes and two sidewalks of US 9 over two lanes of the Englishtown-Freehold Road (CR 522) and a single track of ConRail's Freehold Secondary, the former Pennsylvania Railroad. The overpass is located west of downtown Freehold in a transition area between the town and the countryside. The area to the east and along US 9 is light commercial/industrial. To the west are cornfields, woods, a cemetery, and scattered 19th- and 20th-century residences.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The five-span skewed encased steel stringer bridge has concrete balustrades with inlaid tile inscriptions, and concrete stub abutments and pier bents. The Moderne-detailed bridge is typical of numerous 1920s and 1930s overpasses built under the New Jersey State Highway Department highway expansion programs. The US 9 bridge was constructed in 1938 as part of NJ Route 4 improvements. It is not historically or technologically distinguished.

INFOR MATION

PHOTO: 419:4-7 (09/92) REVISED BY (DATE): QUAD: Freehold

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1303155 **CO** MONMOUTH **OWNER** NJDOT **MILEPOINT** 117.39

NAME & FEATURE INTERSECTED US 9 OVER MILFORD BROOK **FACILITY** US 9

TOWNSHIP MANALAPAN TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 25 ft **WIDTH** 90 ft

CONSTRUCTION DT 1939 **ALTERATION DT** 1964 **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The four-lane bridge with 10'-wide grass median, shoulders, and sidewalks spans a small brook. US 9 is a heavily developed commercial strip. Adjacent the bridge are a used-car lot and a number of small businesses.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span concrete slab bridge has a concrete substructure and low parapets. Beam guide rails have been added. In 1939 the bridge was built as part of the NJ Route 4 improvements. In 1964 it was widened from two to four lanes with a concrete slab addition to carry the northbound lanes. The altered bridge is a representative example of a common bridge type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 419:13-14 (09/92) REVISED BY (DATE): QUAD: Freehold

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1303156 **CO** MONMOUTH **OWNER** NJDOT **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED GORDON'S CORNER ROAD OVER US 9 **FACILITY** GORDON'S CORNER ROAD

TOWNSHIP MANALAPAN TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 121 ft **WIDTH** 52.2 ft

CONSTRUCTION DT 1939 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries two lanes with a raised median and two sidewalks of Gordon's Corner Road over six lanes with Jersey barrier of US 9. The setting is suburban with strip malls along US 9. West of the bridge is an office building, and to the east is a residence (c.1800) and a shopping center.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed two-span encased steel stringer overpass has concrete balustrades, concrete abutments and column piers with Moderne detailing, inlaid tile inscriptions, and original bracket lights above the center pier. Chain link fence has been added to the balustrades, and beam guide rails have been added along the roadways. The 1939 bridge is a representative example of a common NJ State Highway Department overpass type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 419:15-17 (09/92) REVISED BY (DATE): QUAD: Freehold

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1303161 **CO** MONMOUTH **OWNER** NJDOT **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED UNION HILL ROAD OVER US 9 **FACILITY** UNION HILL ROAD

TOWNSHIP MARLBORO TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 94 ft **WIDTH** 30 ft

CONSTRUCTION DT 1940 **ALTERATION DT** 1964 **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries a 2-lane road with two sidewalks over a 4-lane, Jersey barrier divided highway. The setting is suburban with residential subdevelopments, shopping centers, and office buildings. Along Union Hill Road are some 19th- and early 20th-century residential structures.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The western span of the 2-span bridge is a 1940 encased steel stringer with concrete balustrades, and its eastern span is a 1964 prestressed box beam with solid concrete parapets molded to appear like balustrades. In 1940, when the single encased steel stringer span was built, the NJ State Hwy. Dept. planned to eventually widen US 9 (former NJ 4). In 1964 the box beam span was added with matching Moderne detailing and parapets. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 419:25-27 (09/92) REVISED BY (DATE): QUAD: Freehold

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1304151 **CO** MONMOUTH **OWNER** NJDOT **MILEPOINT** 19.81

NAME & FEATURE INTERSECTED OLD NJ 33 OVER MILLSTONE RIVER **FACILITY** OLD NJ 33

TOWNSHIP MILLSTONE TOWNSHIP

TYPE DECK GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 44 ft **WIDTH** 40 ft

CONSTRUCTION DT 1926 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The two lane bridge with two sidewalks spans the Millstone River in a lightly-developed area of early-20th century houses and farmers' fields. The bridge is on a short stretch of old NJ 33 that in 1971 was bypassed immediately south by a four-lane divided highway. Across the divided highway from the bridge is a bank (c.1980).

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed single-span deck girder with floorbeams bridge has concrete balustrades with stylized end consoles and a concrete substructure. Beam guide rails have been added. In 1926 the bridge was built as part of NJ Route 7 improvements. The highway was later redesignated NJ 33. In 1971 the old 2-lane highway was bypassed by a modern 4-lane divided highway. The bridge is a representative example of a common bridge type and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 416:26, 431:15-16 (08/92) REVISED BY (DATE): QUAD: Jamesburg

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1304156 **CO** MONMOUTH **OWNER** NJDOT **MILEPOINT** 23.6

NAME & FEATURE INTERSECTED NJ 33 OVER BRANCH OF MANALAPAN BROOK **FACILITY** NJ 33

TOWNSHIP MANALAPAN TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 37 ft **WIDTH** 96.5 ft

CONSTRUCTION DT 1926 **ALTERATION DT** 1967 **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries a 4-lane divided highway with grass median over a small brook. The setting is lightly developed mixed-use with fields, a corporate office building, and a gas station nearby.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span encased steel stringer bridge with concrete balustrade and substructure has been widened with prestressed concrete box beams with concrete parapet on the westbound side. In 1926 the bridge was originally built as part of the NJ Route 7 improvements. The highway was later redesignated NJ 33, and in 1967 the bridge was widened from two to four lanes to accommodate dualization. The bridge is a common type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 417:24-26 (08/92) REVISED BY (DATE): QUAD: Freehold

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1307150 **CO** MONMOUTH **OWNER** NJDOT **MILEPOINT** 1.6

NAME & FEATURE INTERSECTED NJ 34 OVER EAST FELIX BIKE PATH **FACILITY** NJ 34

TOWNSHIP WALL TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 167 ft **WIDTH** 54 ft

CONSTRUCTION DT 1936 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries a 4-lane highway with mountable barrier over a bikepath and walkway that utilizes the former right-of-way of the Pennsylvania Railroad's Freehold and Jamesburg branch. The railroad right-of-way was developed in the 1870s. The highway is lined with late-20th century commercial and light industrial structures.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The three-span encased steel stringer overpass has paneled concrete parapets, concrete bents with crash walls, and concrete abutments. In 1936 the bridge was built as a grade elimination project as part of state highway improvements. It is a representative example of a common overpass bridge type found throughout the state, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 160:15a-16a (06/92) REVISED BY (DATE): QUAD: Asbury Park

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1307151 **CO** MONMOUTH **OWNER** NJDOT **MILEPOINT** 1.95

NAME & FEATURE INTERSECTED NJ 34 OVER ATLANTIC AVENUE (CR 524) **FACILITY** NJ 34

TOWNSHIP WALL TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 65 ft **WIDTH** 54 ft

CONSTRUCTION DT 1936 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries a four-lane road with a sidewalk and mountable median of NJ 34 over two lanes of Atlantic Avenue (CR 524). The setting is suburban with scattered late-20th century commercial and residential structures.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed single-span encased steel stringer bridge has concrete balustrades and concrete substructure with fluted pilasters. In 1936 the bridge was built as part of NJ Route 34 improvements. It is a representative example of a common NJ State Highway Department bridge type found throughout the state. It is not historically or technologically distinguished.

INFOR MATION

PHOTO: 160:13a-14a (06/92) REVISED BY (DATE): QUAD: Asbury Park

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1308150 **CO** MONMOUTH **OWNER** NJDOT **MILEPOINT** 8.77

NAME & FEATURE INTERSECTED NJ 34 SB OVER NJ 33 WESTBOUND **FACILITY** NJ 34 SOUTHBOUND

TOWNSHIP HOWELL TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 34 ft **WIDTH** 24 ft

CONSTRUCTION DT 1936 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries a single lane of NJ 34 southbound over a single lane of NJ 33 westbound at the intersection of NJ 33 and NJ 34 south of US Naval Weapons Station Earle. The intersection is developed with late-20th century restaurants, gas stations, and a motel.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span encased steel stringer bridge has concrete balustrades and abutments with Moderne detailing. Beam guide rails have been added to the roadways. The bridge is a representative example of a common NJ State Highway Department bridge type. It is not historically or technologically distinguished.

INFOR MATION

PHOTO: 181:38a-40a (08/92) REVISED BY (DATE): QUAD: Farmingdale

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1308151 **CO** MONMOUTH **OWNER** OTHER FEDERA **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED EARLE RAILROAD OVER NJ 34 **FACILITY** EARLE RAILROAD (US NAVAL WEAPONS STATION EARLE)

TOWNSHIP HOWELL TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 2 **LENGTH** 110 ft **WIDTH** 40 ft

CONSTRUCTION DT 1942 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge carries a single railroad track and two-lane highway over two lanes of NJ 34. It is located within the US Naval Weapons Station Earle reservation, a World War II-vintage facility started in 1942. The railroad connects weapons storage and assembly facilities with US Navy wharf's at Sandy Hook Bay. It is named for a WW I admiral who headed Navy ordnance. The area adjacent the bridge is wooded and undeveloped. Access to the Naval Weapons Station is restricted.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Earle Navel Weapons System Historic District, May contribute.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span concrete slab bridge has concrete parapets and crash walls. The abutments and pier have checker-board scoring, and the pier has a streamlined design. The bridge is the property of the United States Government and is one of three similar bridges (1313150, 1315151) on the Earle reservation. Neither the base, a common type of Navy installation, nor the bridge itself are historically or technologically distinguished.

INFOR MATION

PHOTO: 181:3a-4a (08/92) REVISED BY (DATE): QUAD: Farmingdale

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1308152 **CO** MONMOUTH **OWNER** NJDOT **MILEPOINT** 13.28

NAME & FEATURE INTERSECTED NJ 34 OVER MINE BROOK **FACILITY** NJ 34

TOWNSHIP COLTS NECK TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 27 ft **WIDTH** 50 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The three-lane bridge spans a small brook just north of the NJ 34 and CR 537 intersection at the village of Colts Neck. To the south are late-20th century buildings including a hotel and gas station. To the north are a late-20th century residential subdevelopment, bank, farm produce market, and shopping center.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 1930 skewed single-span reinforced concrete slab bridge has concrete balustrades and substructure. It is a representative example of a common New Jersey State Highway Department bridge type. It is not historically or technologically distinguished.

INFOR MATION

PHOTO: 418:27a-28a (08/92) REVISED BY (DATE): QUAD: Marlboro

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1308153 **CO** MONMOUTH **OWNER** NJDOT **MILEPOINT** 13.75

NAME & FEATURE INTERSECTED NJ 34 OVER YELLOW BROOK **FACILITY** NJ 34

TOWNSHIP COLTS NECK TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 34 ft **WIDTH** 50 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The two-lane bridge with shoulders carries NJ 34 over a small brook north of Colts Neck village. East of the bridge is a small wooded municipal park. North and south of the bridge are late-20th century buildings including a shopping center and farm stand.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span encased steel stringer bridge has concrete balustrades and scored abutments and wingwalls. The bridge is a representative example of one of the most common New Jersey State Highway Department bridge types and designs. In 1930 it was built as part of NJ Route 34. It is not historically or technologically distinguished.

INFOR MATION

PHOTO: 418:30a-31a (08/92) REVISED BY (DATE): QUAD: Marlboro

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1308154 **CO** MONMOUTH **OWNER** NJDOT **MILEPOINT** 16.0

NAME & FEATURE INTERSECTED NJ 34 OVER BIG BROOK **FACILITY** NJ 34

TOWNSHIP COLTS NECK TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 36 ft **WIDTH** 50 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The two-lane bridge with shoulders carries NJ Route 34 over a small brook. The setting is residential with a mixture of 19th- and 20th-century housing on large lots. Some open farmland remains. Downstream is a pond.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed, single-span encased steel stringer bridge has concrete balustrades, paneled fascia, and scored concrete abutments and wingwalls. Beam guide rails have been added. The bridge is a representative example of one of the most commonly used New Jersey State Highway Department bridge types and designs. In 1930 it was built as part of NJ Route 34. It is not historically or technologically distinguished.

INFOR MATION

PHOTO: 421:22-24 (09/92) REVISED BY (DATE): QUAD: Marlboro

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1309150 **CO** MONMOUTH **OWNER** NJDOT **MILEPOINT** 22.25

NAME & FEATURE INTERSECTED NJ 34 OVER GRAVELLY BROOK **FACILITY** NJ 34

TOWNSHIP MATAWAN BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 39 ft **WIDTH** 50 ft

CONSTRUCTION DT 1929 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The two-lane bridge with two sidewalks and shoulders carries NJ Route 34 over a small brook. The setting is heavily-developed suburban with mid- to late-20th century strip malls. Immediately north of the bridge is an abandoned railroad overpass (1309151).

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span encased steel stringer bridge has concrete balustrades and scored concrete abutments and wingwalls. It is a representative example of one of the most common New Jersey State Highway Department bridge types. In 1929 it was built as part of NJ Route 34. It is not historically or technologically distinguished.

INFOR MATION

PHOTO: 415:20-21 (07/92) REVISED BY (DATE): QUAD: Keyport

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1309151 **CO** MONMOUTH **OWNER** STATE AGENCY **MILEPOINT** 1.21

NAME & FEATURE INTERSECTED MATAWAN-FREEHOLD LINE (NJT) OVER NJ 34 **FACILITY** MATAWAN FREEHOLD LINE (NEW JERSEY TRANSIT)

TOWNSHIP MATAWAN BOROUGH

TYPE THRU GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 3 **LENGTH** 84 ft **WIDTH** 11.8 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT CENTRAL RAILROAD OF NEW JERSEY **BUILDER**

SETTING / CONTEXT The bridge carries a single railroad track over four lanes of NJ 34 south of the NJ 34 and NJ 79 intersection. The railroad line was developed in the 1870s by the Freehold and New York Railroad, a line owned by the Central Railroad of New Jersey. The track is currently part of New Jersey Transit's system, but has been unused for a number of years. The setting is heavily-developed suburban with strip malls and small businesses lining NJ 34.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed three-span thru girder with floorbeams bridge has brick curbs, a ballasted steel deck, laced steel bents with brackets, and concrete abutments and wingwalls. In 1930 it was built as a grade elimination project associated with the construction of NJ 34. It is a representative example of a common railroad overpass type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 415:17-18 (07/92) REVISED BY (DATE): QUAD: Keyport

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 130HL31 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WEST FARMS ROAD OVER MANASQUAN RIVER **FACILITY** WEST FARMS ROAD

TOWNSHIP HOWELL TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 66 ft **WIDTH** 30 ft

CONSTRUCTION DT 1938 **ALTERATION DT** 1960ca **SOURCE** PLAQUE

DESIGNER/PATENT OTIS R. SEAMAN, CO. ENG. **BUILDER** THOMAS PROCTOR COMPANY

SETTING / CONTEXT The bridge carries two lanes and a single sidewalk over the Manasquan River. The setting is residential with mostly late-20th century homes lining West Farms Road. Some older 19th-century buildings, open farm land, and horse pasture remains.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span steel stringer bridge has concrete abutments and vertical spindle metal railings attached to the fascia stringers by riveted metal brackets. In 1938 the bridge was built by the Thomas Proctor Company of Long Branch. Circa 1960 the original steel grid deck was replaced with concrete. The altered bridge is an example of a common bridge type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 418:8a-9a (08/92) REVISED BY (DATE): QUAD: Farmingdale

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 130HL45 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED ALLAIRE ROAD (CR 524) OVER MINGAMAHONE BROOK **FACILITY** ALLAIRE ROAD (CR 524)

TOWNSHIP HOWELL TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 52 ft **WIDTH** 29 ft

CONSTRUCTION DT 1926 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT **BUILDER** OWEN MELEE

SETTING / CONTEXT The two-lane bridge with a single sidewalk spans a small brook in Allaire State Park. The setting is forested with trails and campgrounds to the north. South of the bridge is the I-295 right-of-way.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 1926 single-span encased steel stringer bridge has concrete abutments with wingwalls and concrete balustrades with a solid parapet section at the center of the bridge. The balustrade treatment is a variation on a common design, but in all other respects the bridge is a representative example of one of the most common pre-1946 bridge types in New Jersey. It is not historically or technologically distinguished.

INFOR MATION

PHOTO: 430:8-10 (06/92) REVISED BY (DATE): QUAD: Farmingdale

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 130HL53 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED LAKEWOOD-FARMINGDALE ROAD OVER HAY STACK BROOK **FACILITY** LAKEWOOD FARMINDALE ROAD (CR 547)

TOWNSHIP HOWELL TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 2 **LENGTH** 30 ft **WIDTH** 29.3 ft

CONSTRUCTION DT 1920ca **ALTERATION DT** 1944 **SOURCE** STYLE/COUNTY ENGNR

DESIGNER/PATENT OTIS R. SEAMAN, CO. ENG. **BUILDER** FREIBOTT BROTHERS (1944)

SETTING / CONTEXT The two-lane bridge spans a small brook in a residential community of late-20th century homes.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span steel stringer bridge with plank deck and asphalt wearing surface rests on timber pile bents with timber sheet pile backwalls. No records of the original construction were located at the county engineer's office. In 1944 it was rebuilt using existing 15" I-beams on a new timber pile substructure. Beam guide rails have replaced iron lattice railings. The bridge is an altered example of a common bridge type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 160:6a-7a (06/92) REVISED BY (DATE): QUAD: Lakewood

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 130HL61 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED LAKEWOOD-ALLENWOOD ROAD OVER HAY STACK BROOK **FACILITY** LAKEWOOD ALLENWOOD ROAD

TOWNSHIP HOWELL TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Wood

 # SPANS 2 **LENGTH** 33 ft **WIDTH** 23 ft

CONSTRUCTION DT 1945 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT OTIS R. SEAMAN, CO. ENG. **BUILDER** A. P. THOMPSON

SETTING / CONTEXT The two-lane bridge spans a small brook in a residential area of scattered late-20th century houses. Some open fields, pastures, and wooded lots remain.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span timber stringer bridge has timber pile bents with timber sheet pile back walls, a plank deck with an asphalt wearing surface, and beam guide rails. The 1945 bridge has probably been rebuilt in-kind although no repair records were located at the county engineer's office. It is a representative example of a common bridge type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 160:11a-12a (06/92) REVISED BY (DATE): QUAD: Lakewood

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 130HL67 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0
NAME & FEATURE INTERSECTED PREVENTORIUM ROAD OVER MANASQUAN RIVER **FACILITY** PREVENTORIUM ROAD
TOWNSHIP HOWELL TOWNSHIP
TYPE THRU TRUSS **DESIGN** PRATT HALF HIP **MATERIAL** Steel
 # SPANS 6 **LENGTH** 94 ft **WIDTH** 15 ft
CONSTRUCTION DT 1899 **ALTERATION DT** 1949 **SOURCE** PLAQUE
DESIGNER/PATENT **BUILDER** WROUGHT IRON BRIDGE CO.

SETTING / CONTEXT The single-lane bridge spans the Manasquan River south of Farmingdale Borough. It is located on a dead-end road that provides access to the Howell County Park and Golf Course on the river's south bank. The park is located at the former site of the Farmingdale preventorium, established in 1909 to protect children from tuberculosis. The old preventorium buildings have been converted to township offices. North of the bridge is the Howell Township High School (c.1960).

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No
CONSULT STATUS Individually Eligible.
CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 94' long, 5-panel pin-connected Pratt thru truss is one of two surviving metal thru truss highway bridges in the county. The superstructure appears complete with original basket-end hangers, railings, and plaques. In 1949 it was underpinned with timber pile bents at the beams and bearings. The span was fabricated by a nationally significant bridge manufacturer, the Wrought Iron Bridge Co. It is a well-preserved and technologically significant example of an increasingly rare bridge type.

INFOR MATION

Bibliography:
Bates, Barbara. Bargaining for Life. A Social History of Tuberculosis, 1876-1938. Philadelphia: University of Pennsylvania Press, 1990. pp. 275-278.
Darnell, Victor. Directory of American Bridge Building Companies, 1840-1900. Washington, DC: Society for Industrial Archeology, 1984.
Monmouth County Engineer. Bridge Plans and Inspection Reports for Bridge Number HL-67. 1949.
Simmons, David. "Bridge Preservation in Ohio." Ohio Cities and Villages. Vol. 26, No. 8, August 1978, pp. 13-18.
Wrought Iron Bridge Company. "Illustrated Pamphlet of Wrought Iron Bridges Built By Wrought Iron Bridge Company, Canton, Ohio," 1885.

Physical Description: The 94'-long 5-panel pin-connected Pratt half hip thru truss bridge is composed of rolled sections. The top chords and inclined end posts consist of a built-up box member, and the lower chords are paired eye bars with loop-forged eyes. The verticals are toe-out channels with lacing, except for the hip verticals which are bar stock with basket-like ends to pick up the lower panel point pin. The diagonals are paired eye bars, and the counters single bars with turnbuckles. The I-beam floor beams are connected to the panel point pins by U-shaped hangers. The upper struts are channels with rivet-connected upper and lower plates, and the upper laterals are rods with turnbuckles. The A-frame portal bracing, which is composed of angles, carries a makers plaque. The stringers support an asphalt pan deck. The end bearings, which have been encased in concrete, rest on cylindrical riveted metal caisson-like columns with timber sheet pile back walls. The truss lines have metal lattice railings. It is not known whether the bridge is composed of steel and/or iron members, but given the 1899 date of construction, it is most likely steel.

The truss has been altered by the addition of timber pile bent with I-beam cap underpinning. The timber pile bents support I-beam girders which in turn support the original truss floor beams and a series of additional intermediate I-beam floor beams. The bridge structurally acts as a six-span deck girder.

Historical and Technological Significance: The 1899 Preventorium Road Pratt half hip thru truss bridge is historically and technologically significant as a reasonably well preserved example of an important late-19th century truss bridge type (criterion C). During the late-19th century, the Pratt truss type was one of the most common truss bridges in the country, and it played a role in the widespread acceptance of metal truss bridge technology. Pratt trusses were once very common in New Jersey, but only a small number survive. In Monmouth County only one other thru truss highway bridge is known to survive (1300U53, Province Line Road over Crosswicks Creek, 1891, Upper Freehold Twp.). While the bridge has been underpinned and does not function as a single-span thru truss span, the trusses have survived in basically unaltered condition which contributes to its historical and technological significance as does the fact that the bridge is documented.

The bridge was designed and fabricated by the Wrought Iron Bridge Company of Canton, Ohio. Organized in 1864 by David Hammond, the company was one of the first wrought iron truss manufacturers, and continued in existence for 36 years before being absorbed by the giant American Bridge Company in 1900. The company claimed in its promotional literature to have constructed trusses in 30 states, mostly east of the Mississippi River. In Canton, the fabricator had shops for the drafting, laying out, shearing, drilling, punching, and riveting of truss members, but did not roll its own iron or steel. The Wrought Iron Bridge Company was recognized as one of the most significant national manufacturers of iron and steel trusses because of its workmanship and prolificacy. Unlike many of its competitors, the Wrought Iron Bridge Company did not specialize in one truss type, but constructed a wide diversity of small and large, inexpensive and expensive truss types, depending upon local preferences. According to its 1885 catalogue, at least 10 Wrought Iron Bridge Company trusses were built in New Jersey prior to 1885, 6 in Middlesex County, 3 in Mercer County, and 1 in Union County. Two other Wrought Iron Bridge Co. bridges are known to survive in Somerset County, the well-preserved Nevius Street Bridge (1886, 18E0801, Raritan Borough), a two-span double-intersecting Pratt thru truss across the Raritan River in the town of Raritan, and the Higginsville Road over the South Branch of the Raritan River bridge (1893, 18A0605, Branchburg Twp.), a one-span Pratt thru truss similar to the Preventorium Road bridge in Monmouth County.

The Preventorium Road bridge is located on a dead-end road that provides access to the Howell Township Golf Course and County Park.

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
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November 12, 2002

The golf course and park were once the grounds of the Farmingdale Preventorium. In 1909 the Preventorium was founded by a doctor from New York City as a radical measure to prevent children from contracting tuberculosis. Children, many poor and from immigrant families, were transported from the city to isolate them from crowded urban conditions and the threat of the disease. A number of the Preventorium buildings survive, and some have been converted to Township office buildings. The buildings are located on the opposite side of the golf course from the bridge. The Preventorium postdated the bridge by at least ten years, and was not associated with the bridge's construction, although it did eventually lend its name to the road.

County engineer's inspection records and plans indicate that in 1949 the truss was underpinned. Underpinning was a common practice in Monmouth County, and all of the county's surviving truss bridges have been similarly altered.

In summary, the Wrought Iron Bridge Co. was one of the most successful of the many small designers/fabricators who dominated 19th-century bridge construction. The Preventorium Road bridge is an important example of their craftsmanship, as well as a significant example of a bridge type that was once common in Monmouth County and New Jersey as a whole.

Boundary Description and Justification: The bridge is individually eligible, and it is the trusses and original substructure, not the later underpinning or alterations that are significant. The boundary is limited to the original portions of the bridge and the substructure.

PHOTO: 417:3-11; 430:15-17 (08/92) REVISED BY (DATE): QUAD: Farmingdale

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 130MA11 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED ABERDEEN ROAD OVER MATAWAN CREEK **FACILITY** ABERDEEN ROAD

TOWNSHIP MATAWAN BOROUGH

TYPE BOX BEAM **DESIGN** **MATERIAL** Prestressed Concrete

 # SPANS 4 **LENGTH** 46 ft **WIDTH** 24.5 ft

CONSTRUCTION DT 1945 **ALTERATION DT** 1961 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT OTIS R. SEAMAN, CO. ENG. **BUILDER** A. P. THOMPSON (1945)

SETTING / CONTEXT The two-lane bridge with a separate timber stringer sidewalk spans a tidal creek in a low lying marsh northwest of downtown Matawan. On either side of the marsh are residential neighborhoods with a mixture of late-19th and early-20th century houses with modern alterations.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 4-span prestressed concrete box beam bridge with beam guide rails rests on timber pile bents with concrete caps and sheet pile back walls. In 1945 the bridge was built as a 4-span laminated timber slab with timber pile bents. In 1961 the timber slab was replaced with a prestressed concrete box beam superstructure. The bridge is essentially a modern structure, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 415:31-33 (07/92) REVISED BY (DATE): QUAD: Keyport

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 130MA13 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MAIN STREET (CR 516) OVER LAKE MATAWAN SPILLWAY **FACILITY** MAIN STREET (CR 516)

TOWNSHIP MATAWAN BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 43 ft **WIDTH** 33 ft

CONSTRUCTION DT 1925 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT GEORGE K. ALLEN, JR., CO. ENG. **BUILDER** LOUIS J. SIELING

SETTING / CONTEXT The 2-lane bridge with sidewalks spans the overflow from the semi-circular concrete spillway/dam from Lake Matawan north of downtown Matawan. The setting is a densely-developed commercial/residential district near the Matawan New Jersey Transit train station. The area has some early-20th century houses with alterations. Modern intrusions include convenience stores and parking lots. The dam/spillway is a common design and not historically or technologically distinguished.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single span encased steel stringer bridge has concrete-capped masonry abutments that probably predate the bridge. The concrete balustrades have Arts and Craft style tile mosaics that read "Lake Matawan." Similarly styled light standards and lanterns have been removed. The bridge is an example of a very common bridge type in a heavily altered setting. Neither it nor the setting are historically or technologically distinguished.

INFOR MATION

PHOTO: 415:34-39 (07/92) REVISED BY (DATE): QUAD: Matawan

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 130MA14 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED AMBOY AVENUE OVER MATAWAN CREEK **FACILITY** AMBOY AVENUE

TOWNSHIP ABERDEEN TOWNSHIP

TYPE DECK GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 4 **LENGTH** 272 ft **WIDTH** 26.2 ft

CONSTRUCTION DT 1915 **ALTERATION DT** 1965 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT STRAUSS BRIDGE COMPANY **BUILDER**

SETTING / CONTEXT The two-lane bridge with two sidewalks spans Matawan Creek near its confluence with Raritan Bay. The creek is lined with marinas and is navigable by small craft. Next to the bridge are several restaurants.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY In 1915 the 4-span bridge was built as a Strauss double-leaf haunched deck girder bascule with 3 deck girder with floorbeams approach spans. In 1965 the bascule was fixed, and the counterweights and operating machinery and houses were removed. The concrete substructure has been rebuilt several times with metal sheet piling, concrete pile, and I-beam cap beam additions. The altered bridge lacks design integrity, and is no longer historically or technologically distinguished.

INFOR MATION

PHOTO: 415:1-4,43-44 (07/92) REVISED BY (DATE): QUAD: Keyport

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 130ML30 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED TICETOWN ROAD OVER MATAWAN BROOK **FACILITY** TICETOWN ROAD

TOWNSHIP MARLBORO TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 24 ft **WIDTH** 17.8 ft

CONSTRUCTION DT 1910ca **ALTERATION DT** 1980ca **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The two-lane bridge spans a small brook. To the east is a subdevelopment with mostly late-20th century houses. To the west is a horse farm.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single span bridge has steel stringers paired with timber stringers on the interior and fascia timber stringers. It has a timber plank deck, concrete abutments, and beam guide rails. Original construction date is undocumented as no plans or early records survive. The steel stringers are estimated by the county engineer to date from ca. 1910. Lattice railings are discarded in bushes beside the bridge. It is an altered example of a common bridge type, and is not historically noteworthy.

INFOR MATION

PHOTO: 174:6-8 (07/92) REVISED BY (DATE): QUAD: South Amboy

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 130MN16 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MAIN STREET (CR 3) OVER WEAMACONK BROOK **FACILITY** MAIN STREET (CR 3)

TOWNSHIP MANALAPAN TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 29 ft **WIDTH** 26 ft

CONSTRUCTION DT 1928 **ALTERATION DT** 1977 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The two-lane bridge spans a small brook southeast of the village of Tennent. The village includes a mixture of 19th to late-20th century residences, a railroad depot, and garden supply store. The area south of the bridge is lightly developed with residences, but retains a rural character with some farm land and wooded lots. The village does not possess historic district potential.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY In 1928 the bridge was built as a single-span encased steel stringer with balustrades and concrete abutments. When the bridge was widened with prestressed concrete box beams in 1977, the balustrades were removed. The abutments have been gunited, and beam guide rails have been added. The bridge does not possess integrity of design, and it is not historically or technologically distinguished.

INFOR MATION

PHOTO: 417:40-41 (08/92) REVISED BY (DATE): QUAD: Freehold

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 130MN27 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED IRON ORE ROAD (CR 527 ALT) OVER MANALAPAN BROOK **FACILITY** IRON ORE ROAD (CR 527 ALT)

TOWNSHIP MANALAPAN TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Wood

 # SPANS 2 **LENGTH** 33 ft **WIDTH** 23 ft

CONSTRUCTION DT 1943 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT OTIS R. SEAMAN, CO. ENG. **BUILDER** A. P. THOMPSON

SETTING / CONTEXT The two-lane bridge span a small brook. The setting is rural with horse and cow pastures, and a mixture of 19th- and 20th-century farm buildings.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span timber stringer bridge rests on timber pile bents with sheet pile back walls. Beam guide rails have replaced the original wood railings. No repair records were located at the county engineer's office, but it is probable that the bridge has been rebuilt in-kind since it was constructed in 1943. It is a representative example of a common bridge type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 417:34-35 (08/92) REVISED BY (DATE): QUAD: Jamesburg

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 130MN28 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED DEY GROVE ROAD OVER MANALAPAN BROOK **FACILITY** DEY GROVE ROAD

TOWNSHIP MANALAPAN TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 40 ft **WIDTH** 21 ft

CONSTRUCTION DT 1931 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT GEORGE K. ALLEN, JR., CO. ENG. **BUILDER** A. P. THOMPSON

SETTING / CONTEXT The two-lane bridge spans a brook running through horse and cow pastures. The setting is rural with a mixture of 19th- and 20th-century farm buildings.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span steel stringer with timber deck with an asphalt wearing surface rests on timber pile bents with sheet pile back walls. Beam guide rails replace the original wood railings. In 1931 the steel stringer bridge replaced a single-span timber king post truss. The bridge is a representative example of a common bridge type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 417:32, 431:14 (08/92) REVISED BY (DATE): QUAD: Jamesburg

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 130MN29 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED IRON ORE ROAD OVER BRANCH OF MANALAPAN BROOK **FACILITY** IRON ORE ROAD (CR 527 ALT)

TOWNSHIP MANALAPAN TOWNSHIP

TYPE STRINGER **DESIGN** CONTINUOUS **MATERIAL** Steel

 # SPANS 2 **LENGTH** 25 ft **WIDTH** 23.7 ft

CONSTRUCTION DT 1920ca **ALTERATION DT** 1943 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The two-lane bridge spans a small brook. The setting is rural with horse pasture, wooded lots, and scattered 19th- and 20th century residences.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed 2-span bridge has alternating timber and steel stringers resting on timber pile bents except for the western abutment which is concrete. According to 1941 inspection records, the bridge was built as a single span steel stringer prior to 1941. In 1943 the bridge was reinforced with timber stringers, and the substructure rebuilt. The bridge is an example of a common bridge type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 419:20-22 (09/92) REVISED BY (DATE): QUAD: Jamesburg

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 130MN30 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WATER STREET (CR 522) OVER WEAMACONK CREEK **FACILITY** WATER STREET (CR 522)

TOWNSHIP ENGLISHTOWN BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 42 ft **WIDTH** 29.1 ft

CONSTRUCTION DT 1923 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT GEORGE K. ALLEN, JR., CO. ENG. **BUILDER** OWEN J. MELEE

SETTING / CONTEXT The two-lane bridge with two sidewalks spans a creek running through Englishtown Borough. The town's main block is located east of the bridge and has a mixture of 18th-, 19th-, and 20th-century structures, including the Englishtown Inn (c.1732). Although there are some well-preserved buildings, the town generally lacks the continuity and cohesiveness for historic district status. West of the bridge is a late-20th century residential subdivision.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span encased steel stringer bridge has concrete abutments, paneled concrete parapets, and pipe railings on the approaches. Utility pipes have been attached to the southern elevation. The 1923 bridge is a representative example of a common bridge type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 417:27-28 (08/92) REVISED BY (DATE): QUAD: Freehold

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 130MN34 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED OLD BRIDGE ROAD (CR 527) OVER MATCHAPONIX CREEK **FACILITY** OLD BRIDGE ROAD (CR 527)

TOWNSHIP MANALAPAN TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 54 ft **WIDTH** 31.2 ft

CONSTRUCTION DT 1930 **ALTERATION DT** 1987 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT GEORGE K. ALLEN, JR., CO. ENG. **BUILDER** OWEN J. MELEE

SETTING / CONTEXT The two-lane bridge spans Matchaponix Creek. Southeast of the bridge is a large flea market with parking lots. The setting is mixed-used residential and commercial with mostly late-20th century buildings.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span steel stringer bridge has concrete abutments and wingwalls. In 1930 the bridge was built as an encased steel stringer with concrete balustrades. In 1987 the concrete deck was rebuilt, and the balustrades were replaced with concrete curbing and beam guide rails. A utility pipe has been attached. The bridge is an example of a common bridge type and lacks integrity of original design. It is not historically or technologically distinguished.

INFOR MATION

PHOTO: 419:23-24 (09/92) REVISED BY (DATE): QUAD: Freehold

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 130MT11 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED LEONARDVILLE ROAD (CR 516) OVER COMPTONS CREEK **FACILITY** LEONARDVILLE ROAD (CR 516)

TOWNSHIP MIDDLETOWN TOWNSHIP

TYPE RIGID FRAME **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 2 **LENGTH** 34 ft **WIDTH** 30 ft

CONSTRUCTION DT 1924 **ALTERATION DT** 1951 **SOURCE** PLAQUE

DESIGNER/PATENT GEORGE K. ALLEN, JR., CO. ENG. **BUILDER** L. J. SEILING

SETTING / CONTEXT The two-lane bridge with separate concrete slab safety sidewalk spans a small creek in a heavily-developed suburban area. To the east is a commercial strip with convenience stores, supermarkets, and gas stations. To the west is a residential area with some older 19th-century homes with modern additions and alterations.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 1924 skewed two-span rigid frame bridge has concrete balustrades and concrete substructure. In 1951 the substructure was repaired with new concrete footers and bulkheads. In 1962 the safety sidewalk was installed. Although not a common type in Monmouth County, the rigid frame bridge is a technologically representative example of a bridge type that was well established by the 1920s. It is not historically or technologically distinguished.

INFOR MATION

PHOTO: 425:28a-29a (09/92) REVISED BY (DATE): QUAD: Sandy Hook

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 130MT21 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED LOCUST AVENUE (CR 8 ALT) OVER CLAYPIT CREEK **FACILITY** LOCUST AVENUE (CR 8 ALT)

TOWNSHIP MIDDLETOWN TOWNSHIP

TYPE PONY TRUSS **DESIGN** WARREN **MATERIAL** Steel

 # SPANS 24 **LENGTH** 408 ft **WIDTH** 19 ft

CONSTRUCTION DT 1910ca **ALTERATION DT** 1952 **SOURCE** STYLE

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The two-lane bridge with wood plank sidewalk spans Claypit Creek, a tidal tributary of the Navesink River. It is located within the boundaries of Navesink Village Historic District, an 18th- and 19th-century maritime and commercial community with workers' housing, general stores, mill sites, and churches on both sides of Claypit Creek. The district survives within a suburban area that is heavily developed with late-20th century housing.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible. Listed. Navesink Village Historic District. 08/08/1975. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The originally 5-span, 5-panel riveted Warren truss bridge is the only multi-span example of its type in the county. The trusses are well preserved, although like all other trusses in the county, it has been underpinned with timber pile bents. No early records were with the county engineer, but the bridge's style dates c.1910, placing it outside the dates of significance of the historic district. It is a technologically significant example of an increasingly rare truss type.

INFORMATION

Bibliography:
Monmouth County Engineer. Bridge File: MT-21.
Office of New Jersey Heritage. National Register File: Monmouth Co.: Navesink Historic District Nomination. 1975.

Physical Description: The 408-foot long bridge spans tidal Claypit Creek near its confluence with the Navesink River in Middletown Township. The bridge consists of five rivet-connected Warren pony truss spans made of standard rolled steel members. The upper and lower chords are toe-in angles with web plates, and the diagonals are angles set back-to-back. The floor system consists of built-up floor beams, timber stringers, and steel grid deck. The bridge has angle outriggers and pipe railings attached to the trusses. The five-panel trusses bear on riveted cylindrical steel piers with struts. The trusses have been underpinned with braced timber pile bents at each truss floorbeam creating a 24-span structure. The northern piers have an ashlar back wall and wingwalls. Beam guide rails and a utility pipe have been added.

Historical and Technological Significance: The ca. 1910 Locust Avenue bridge is technologically significant as an multi-span example of an increasingly rare metal truss bridge type that was once common in Monmouth County. It is one of four similar Warren pony truss bridges in the county; all have been underpinned, which compromises their integrity of design, and none are documented as to date of construction or fabricator (1300A23, Creamery Road over Yellow Brook, Colts Neck Township; 1300U23, Harvey Road over Miry Run, Upper Freehold Township; 1300U26, Smith Mill Road over Lahaway Creek, Upper Freehold Township). This example has been evaluated as locally significant because it is the only multi-span example in county and because it has the cylindrical riveted columns supporting the bearings. They are not a common construction detail. The trusses themselves have no significant construction details, but are representative examples of what was one of the most popular highway bridge types during the first two decades the twentieth century. The riveted Warren pony truss played a significant role in the early-20th century county road improvement campaigns.

The county engineer's office has no records of the Locust Avenue bridge's builder or date of construction. Stylistically the bridge dates from ca. 1910. An inspection report indicates that in 1952 the truss was underpinned. The county engineer underpinned most of the county's truss bridges in the 1940s and 1950s, and all of the known surviving highway truss bridges in the county have been underpinned. In 1956 the steel grid deck replaced a timber deck.

The bridge is located within the stated boundaries of the Navesink Historic District, an eighteenth- and nineteenth-century maritime and commercial community with workers' housing, general stores, mill sites, and churches on both sides of the river. The early twentieth-century bridge does not contribute to the district's period of significance or historic themes. The community, however, retains much of the same character it had at the time of the bridge's construction.

Boundary Description and Justification: The bridge is individually eligible, in and of itself, including superstructure, substructure, and right-of-way over the river. Even though it is located within the National Register listed Navesink Historic District, the period of significance specified in the nomination is limited to the 18th and 19th centuries. The bridge should thus be evaluated as a noncontributing resource to the district based on its dates of construction.

PHOTO: 420:33a-38a (09/92) REVISED BY (DATE): QUAD: Sandy Hook

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 130MT31 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WEST FRONT STREET OVER JUMPING BROOK **FACILITY** WEST FRONT STREET

TOWNSHIP MIDDLETOWN TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 27 ft **WIDTH** 26 ft

CONSTRUCTION DT 20th Century **ALTERATION DT** 1948, 1970ca **SOURCE** STYLE

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The two-lane bridge spans a brook in a wooded suburban residential area west of Red Bank.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span steel stringer bridge with a concrete deck rests on timber piles with concrete cap beams placed around earlier stone abutments. Pile sheeting is used for back walls and wingwalls. In 1948 the bridge was rebuilt using the existing steel stringers and stone abutments. The pile and cap beams were added and the bridge widened. Ca. 1970 the concrete deck was placed. The altered bridge is an example of a common type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 422:7-8 (09/92) REVISED BY (DATE): QUAD: Long Branch

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 130MT50 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MOUNT AVENUE OVER GRANDE AVENUE **FACILITY** MOUNT AVENUE

TOWNSHIP ATLANTIC HIGHLAND BOROUGH

TYPE STEEL ARCH **DESIGN** ELLIPTICAL **MATERIAL** Steel

 # SPANS 1 **LENGTH** 61 ft **WIDTH** 20.8 ft

CONSTRUCTION DT 1896 **ALTERATION DT** 1993 **SOURCE** INSCRIPTION

DESIGNER/PATENT JAMES MUSER **BUILDER** N. WOODWARD

SETTING / CONTEXT The bridge carries a two-lane street over a two-lane street with two sidewalks. It is located on Mount Mitchell, a peak overlooking Raritan Bay. The setting is residential with a mixture of late-19th to late-20th century suburban residences with numerous modern intrusions. The streets and house lots on Mount Mitchell were first laid out in the 1880s by the Hillside Park Improvement Company for the purposes of a summer resort and religious camp meeting association.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed, Melan-type steel-concrete arch bridge with highly decorative detailing ranks as one of the earliest examples of its type in the nation. The designer is not documented, but it is the earliest use of the technology in New Jersey. Built with curved steel open-web beams set in concrete, the span represents the transition to use of concrete in bridges. Its handsome rustic detailing is historically associated with the development of the Atlantic Highlands summer resort.

INFOR MATION

Bibliography:
Atlantic Highlands Historical Society. Vertical File: The Stone Bridge.
Atlantic Highlands Borough Council. Minutes. 1894-1896.
Condit, Carl. American Building Art: The 20th Century. New York: Oxford University Press, 1960.
History of Monmouth County, New Jersey, 1664-1920. New York: Lewis Historical Publishing Company, 1922.
Jackson, Donald. Great American Bridges and Dams. Washington, DC: The Preservation Press, 1988.
Leonard, Thomas H. From Indian Trail to Electric Rail. Atlantic Highlands: Atlantic Highlands Journal, 1923.

Physical Description: The skewed 61'-long single-span elliptical arch bridge is an early example of a steel-concrete span composed of eight rolled I-beams encased in plain concrete. It is built on a skew of 53 degrees. The custom, rustic-style bridge is distinctively finished with rubble stone spandrels walls and parapets with caps of stones set on end. The stone parapets have built-in benches for pedestrians, and a curved stairway is located at the bridge's northwest approach. The parapets have stone pylons that terminated in planters. The bridge has large earth-filled approaches with masonry retaining walls. Date stones on the bridge read "1896, N. Woodward Builder" and "Oonuehkoi." The bridge is structurally unaltered, but there is moisture penetration damage. The masonry has been repointed with historically inappropriate grapevine joints. Historic photographs reveal that the original mortar was held back from the surface plane.

Historical and Technological Significance: The 1895-1896 steel-concrete bridge ranks as one of the historically most significant examples of its type in the nation owing to its date of construction and state of preservation (criterion C). It may well rank as the oldest large example of a Melan Arch in the country. It is older than the 1897 Wyckoff Avenue bridge over Ho-Ho-Kus Brook (020033E, Wyckoff Twp., Bergen County) and the 1898 West Broadway bridge over Passaic River (1600017, Paterson City, Passaic County) that were designed and built by Thacher & Keepers of Detroit. The bridge type, a series of parallel iron or steel beams curved to the profile of the soffit and encased in plain concrete, was developed by Viennese engineer Josef Melan. He received an American patent for his design in 1894, but the German-born engineer Fritz von Emperge is credited with popularizing it in this country. Edwin Thacher and William Mueser were two of the leading designers and builders of Melan bridges during the late 19th and early 20th centuries. Edwin Thacher (1839-1920) moved to New York and went into business with Mueser in 1901, and their firm, styled Concrete Steel Engineering Company, was responsible for several important examples of the technology, like the 1911 7-span bridge at Wichita, Kansas, and the 1914-15 6-span Hudson River bridge at Glens Falls, New York.

Although no plans have been identified, physical evidence reveals that the Mount Avenue bridge is a Melan-type arch. Historian Carl Condit in his endnotes specifically attributes the bridge's design to William Muesser of the Melan Arch Construction Company of New York City (p. 341). He states that Muesser compensated for the torsional stresses associated with Mount Avenue bridge's skew by placing three sets of transverse tie rods between the arch ribs approximately 4' on center. How he came by that data, as well as the information naming Muesser, is not cited. Locally available materials, including the Minutes of the Atlantic Highlands Borough Council, The Atlantic Highlands Journal, and The New York Times, do not cite Muesser or name a designer in association with the bridge. In these sources credit for the bridge is given to local resident George Lawrie.

Little is known about Lawrie, who is also not listed in The New York Times. He moved to Atlantic Highlands after 1890, and he owned property on the east side of the bridge. Lawrie spearheaded the drive to have the bridge built as a civic amenity in an area dominated by large, gracious Queen Anne-style "cottages." At its September 3, 1895 meeting, the Borough Council voted to repair the Mount Avenue bridge. In response to the need to work on the bridge, George Lawrie volunteered at the council's November 2, 1895 meeting that if "the borough would give him $800. toward building a stone bridge over Grand Avenue on Mount Avenue, he would guarantee subscriptions of $1,200. and upwards additional toward the cost of building said bridge with the total cost projected by Lawrie to be about $2,000." It is apparent that Lawrie already possessed plans for the proposed span as bids for its construction were to be opened on November 11, and plans "were on file at the clerks office." It was reported at the December 3 council meeting that no bids for the "new rustic stone bridge" were received, but at the 5 December meeting, it was recorded that "a bid was received for building a bridge over Grand Avenue on Mount Avenue from contractor Nimrod Woodward." The amount of the bid was $800. On 10 December 1895 it was noted that the old bridge had been torn down, thus clearing the way for the new steel-concrete span. George Lawrie served as "supervisor" of construction

of the new bridge, and he also solicited contributions to pay the $3,569.50 it cost to build it.
Atlantic Highlands Borough is a late-nineteenth and twentieth century seashore resort community. It began in the early 1880s under the auspices of the Atlantic Highlands Association, which purchased 300 acres of land for a summer resort and religious camp meeting. It was incorporated as a borough in 1891. Mount Mitchell, on which the bridge is located, was a popular spot for its expansive view of the Raritan Bay, and was the location of some of the town's earliest resort homes. At the mountain's summit was a municipal park with a lookout tower known as Observatory Park. The steepness of the drive made travel to the top difficult, and Mount Avenue was known locally as "break-neck hill." A circular street plan with house lots was laid out on the mountain by the town's land developers, and led to the need for a bridge to carry Mount Avenue over Grand Avenue and on up the hill. In the 1880s the Atlantic Highlands Association paid for the construction of a chestnut timber "dry" bridge at the crossing.

On August 15, 1896, at a dedication ceremony, George Lawrie turned the bridge over to the Borough. He named the bridge "Oonuenkoi" commemorating an Indian tribe that once live in the vicinity of Atlantic Highlands, thus explaining the mysterious inscription on the bridge's date stone. The local paper dubbed the bridge "An Ornament to the Town and an Eighth Wonder," and further claimed that "the structure spoke for the work of the builders and would do so for centuries perhaps."

Today the residential district surrounding the bridge is a mixture of late-nineteenth, early-twentieth, and late-twentieth century housing, and lacks the cohesiveness necessary for a historic district. Nonetheless, the bridge is historically associated with the development of one of the Jersey Shore's earliest resort communities, and is one of the area's most significant examples of the type of public improvements undertaken by local residents and governments to make their towns more attractive and amenable to seasonal visitors.

Boundary Description and Justification: The bridge is individually eligible, in and of itself, including superstructure, substructure, wingwalls, and retaining walls. It is located in an area that was developed in the late-19th century with large Queen Anne-style dwellings, but there are so many mid- to late-20th century infill buildings that the area probably does not have historic district potential. Several of the late-19th century structures, however, may be individually eligible. The Lawrie house was reportedly lost to fire in the 1920s or 1930s.

PHOTO: 425:1a-7a,41a-44a (09/92) REVISED BY (DATE): QUAD: Sandy Hook

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 130U114 **CO** MONMOUTH **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED TRENTON FORKED RIVER ROAD OVER LAHAWAY CREEK **FACILITY** TRENTON FORKED RIVER ROAD (CR 539)

TOWNSHIP UPPER FREEHOLD TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 56 ft **WIDTH** 40 ft

CONSTRUCTION DT 1939 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The two-lane bridge with shoulders and sidewalk spans Lahaway Creek near the intersection of CR 539 and CR 537. A number of produce stands and small commercial buildings line the county roads. The area is mixed-use residential and agricultural with 19th- and 20th-century houses.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span encased steel stringer bridge has concrete balustrades and abutments with stepped wingwalls on the downstream side. In 1939 the bridge was constructed as part of NJ Route 37. The state highway transferred it to the county. The span is a representative example of a common NJ State Highway Department bridge type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 416:17-18 (08/92) REVISED BY (DATE): QUAD: New Egypt

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1310152 **CO** MONMOUTH **OWNER** NJDOT **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED SCHOOL HOUSE ROAD OVER NJ 35 **FACILITY** SCHOOL HOUSE ROAD

TOWNSHIP BRIELLE BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 70 ft **WIDTH** 30 ft

CONSTRUCTION DT 1931 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries two lanes with two sidewalks over a four lane limited access highway with two sidewalks. The setting is residential with late-20th century detached homes on wooded lots.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The three-span bridge has an encased steel stringer center span and two shorter concrete slab approach spans. It has concrete balustrades, paneled fascia, and vertically-scored concrete abutments and concrete bents with arched struts. In 1931 the bridge was built as part of the NJ Route 35 improvements. It is a standard NJ State Highway Department bridge type and design, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 160:30a-32a (06/92) REVISED BY (DATE): QUAD: Point Pleasant

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1310153 **CO** MONMOUTH **OWNER** NJDOT **MILEPOINT** 17.07

NAME & FEATURE INTERSECTED NJ 35 OVER EAST FELIX BICYCLE PATH **FACILITY** NJ 35

TOWNSHIP WALL TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 118 ft **WIDTH** 50 ft

CONSTRUCTION DT 1932 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries a 4-lane highway and single sidewalk over a bike path that utilizes the former right-of-way of the Pennsylvania Railroad. The line was originally developed in the 1870s by the Freehold and Jamesburg Railroad Company. The setting is residential with late-20th century houses and a playground.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The three-span encased steel stringer bridge has paneled concrete parapets, concrete abutments and bents with crash walls and arched struts. Beam guide rails have been added. It is a common bridge type and a standard overpass design used by the New Jersey State Highway Department. It is not historically or technologically distinguished.

INFOR MATION

PHOTO: 161:10-11 (06/92) REVISED BY (DATE): QUAD: Asbury Park

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1310155 **CO** MONMOUTH **OWNER** NJDOT **MILEPOINT** 18.2

NAME & FEATURE INTERSECTED NJ 35 OVER NORTH BRANCH OF WRECK POND **FACILITY** NJ 35

TOWNSHIP WALL TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 22 ft **WIDTH** 50 ft

CONSTRUCTION DT 1931 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The two lane bridge with shoulders spans a small brook. The highway is a commercial strip with late-20th century buildings.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span reinforced-concrete slab bridge has concrete balustrades and substructure. Beam guide rails and a utility pipe have been added. In 1931 the bridge was built as part of the NJ Route 35 improvements. It is a common New Jersey State Highway Department bridge type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 161:17-18 (06/92) REVISED BY (DATE): QUAD: Asbury Park

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1311150 **CO** MONMOUTH **OWNER** NJDOT **MILEPOINT** 21.7

NAME & FEATURE INTERSECTED NJ 35 OVER SHARK RIVER **FACILITY** NJ 35

TOWNSHIP BELMAR BOROUGH

TYPE SINGLE LEAF BASCULE **DESIGN** TRUNNION **MATERIAL** Steel

 # SPANS 6 **LENGTH** 540 ft **WIDTH** 40 ft

CONSTRUCTION DT 1927 **ALTERATION DT** 1990 **SOURCE** PLANS

DESIGNER/PATENT SCHERZER ROLLING LIFT BR. CO. **BUILDER**

SETTING / CONTEXT The movable span bridge carries four lanes of traffic and a single sidewalk over a navigable river. The setting is a heavily-developed beach resort town with mostly late-20th century condominiums, detached houses, marinas, and restaurants. South of the bridge is the early-20th century Belmar Municipal Building. Parallel to the bridge is the North Jersey Coast Line railroad's Scherzer rolling lift bascule bridge.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 01/10/92

SUMMARY The bridge has a single-leaf deck girder trunnion bascule main span with fixed concrete counterweight and five encased deck girder with truss lateral bracing approach spans. The movable span has been rehabilitated with new reduction gearing, electric motors, brakes, locks, controls, and remodeled operators houses. Several examples of better preserved and more historically distinguished single-leaf trunnion bascule bridges exist. This span is too altered to be evaluated as noteworthy.

INFOR MATION

Bibliography:
New Jersey Department of Transportation. Bridge Plans and Reports for Bridge 1311150, 1927-1990.
New Jersey Transit. New Jersey Transit Historic Bridge Survey, 1991.

Physical Description: The 540-foot long bridge over the navigable Shark River consists of a single-leaf bascule main span and five multi deck girder approach spans, two to the south and three to the north. The single leaf bascule has an overall span of 60', and consists of two haunched deck girders with floor beams and steel grid deck. The bascule is of the simple trunnion type with a concrete counterweight affixed to the heel end of the leaf. The counterweight dips into the river at high water, and the condition has caused serious deterioration. It is operated by means of pinions which engage segmental racks on each girder. The pinions are operated by sets of drive shafts and gears connected to electric motors with back up gasoline engines. The electrical system, motors, primary and secondary reducers, motor brake, machinery brakes, and locks are all modern replacements. The racks, pinions, and trunnions are original. Automatic traffic signals and barriers have been added to the bridge. The concrete operator's and machinery houses have been significantly remodeled with new windows, doors, roofing, and floor plans. A second floor has been added to the eastern machinery house to protect new electrical cabinets from high water. The bascule has its original metal railings.

The approach spans are encased deck girders. Each span consists of three girders with lateral bracing. The approaches have concrete balustrades and substructure. Modern highway lighting and beam guide rails have been added.

Historical and Technological Significance: The Route 35 over Shark River bascule bridge is one of several known surviving 1920s and 1930s movable spans on the shore. It retains some of its original appearance, but significant alterations have been made to the operating and mechanical systems and the machinery houses, thus limiting its technological significance. In 1961 the steel grid deck replaced a timber deck; in 1973 underwater repairs were made to the concrete piers; and in 1989-1991 a major rehabilitation of the operating systems was undertaken. Several better preserved and historically distinguished examples of 1920s and 1930s single-leaf bascule bridge technology exist in New Jersey including Mantoloking Road over Barnegat Bay (1938, Ocean County, Bridge Number 1506006), and four Ocean Highway Bridges (c.1932-40, Cape May County, Bridge Numbers 310003-6). In Monmouth County two well preserved examples of the technologically similar double leaf bascule bridge are the Oceanic Bridge over the Navesink River (1937-39, Bridge 1300S31, Middletown Twp.), and the NJ 36 over the Shrewsbury River Bridge (1932, Bridge 1315150, Highlands Borough).

The bridge was designed by the Scherzer Rolling Lift Bridge Company of Chicago. The company was famous for its rolling lift bridges, but also engineered and designed other movable bridge types. The NJ Route 35 bridge, a simple trunnion bascule, is not a rolling lift bridge, and is not a technologically or historically significant example of the firm's work. Immediately adjacent the NJ Route 35 bridge is a Scherzer rolling lift bridge (1937) that carries the New Jersey Transit North Jersey Coast Line. The railroad bridge has been recommended eligible in the 1991 New Jersey Transit Railroad Bridge survey.

PHOTO: 175:11a-21a (08/92) REVISED BY (DATE): QUAD: Asbury Park

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1311151 **CO** MONMOUTH **OWNER** NJDOT **MILEPOINT** 21.77

NAME & FEATURE INTERSECTED NJ 35 OVER NORTH CHANNEL OF SHARK RIVER **FACILITY** NJ 35

TOWNSHIP NEPTUNE CITY BOROUGH

TYPE MULTI GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 220 ft **WIDTH** 40 ft

CONSTRUCTION DT 1927 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries four lanes of traffic and a single sidewalk over a tidal stream near the beach. The setting is a heavily developed summer resort town with marinas, condominiums, motels, and restaurants. The bridge is just north of the NJ 35 bascule bridge (1311150) over the main channel of the Shark River. Downstream is a timber stringer on timber pile bents bridge carrying the New Jersey Transit North Coast Line.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 10/03/90

SUMMARY Each span of the three span bridge consists of three encased deck girders with encased truss struts. The bridge has concrete balustrades, abutments, and piers, and a cantilevered sidewalk. Beam guide rails and highway lighting have been added. In 1927 the bridge was built as part of the NJ Route 35 improvements. It is an example of a common bridge type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 176:16a-18a (08/92) REVISED BY (DATE): QUAD: Asbury Park

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1312154 **CO** MONMOUTH **OWNER** NJDOT **MILEPOINT** 34.5

NAME & FEATURE INTERSECTED NJ 35 OVER NAVESINK RIVER **FACILITY** NJ 35

TOWNSHIP MIDDLETOWN TOWNSHIP

TYPE MULTI GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 12 **LENGTH** 1002 ft **WIDTH** 38.7 ft

CONSTRUCTION DT 1926 **ALTERATION DT** Demolished **SOURCE** PLANS

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries four lanes of traffic and a sidewalk over the Navesink River north of Red Bank. The setting is urban with a mixed-use commercial and residential neighborhood of late-19th and 20th century buildings to the south. The north bank of the river is an older residential area with early-20th century houses and a number of modern intrusions including an office building.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Bridge was Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY Each span of the simply supported 12-span bridge consists of three encased deck girders with encased truss struts. The bridge has concrete balustrades, concrete abutments and piers, and a cantilevered sidewalk. Modern highway lighting has been added. In 1926 the bridge was built as part of the NJ Route 35 improvements. It is a multi-span example of a common bridge type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 422:15-16 (09/92) REVISED BY (DATE): QUAD: Long Branch

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1313150 **CO** MONMOUTH **OWNER** OTHER FEDERA **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED EARLE RAILROAD OVER NJ 35 **FACILITY** EARLE RAILROAD (US NAVAL WEAPONS STATION EARLE)

TOWNSHIP MIDDLETOWN TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 89 ft **WIDTH** 63 ft

CONSTRUCTION DT 1942 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge carries two railroad tracks and a two-lane highway over four lanes with Jersey barriers and two sidewalks of NJ 35. The span is part of a restricted access railroad and highway used to carry munitions from the Naval Weapons Station Earle to warships at wharf's in Sandy Hook Bay. The World War II-vintage facility was started in 1942, and it named for a WWI admiral who headed Navy ordnance. The surrounding area is suburban with late 20th-century residences and shopping centers.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Earle Navel Weapons System Historic District, May contribute.

CONSULT DOCUMENTS SHPO Letter 3/12/01

SUMMARY The one-span reinforced concrete slab bridge has concrete parapet crash walls dividing its tracks and roadways. It has concrete abutments with checker-pattern scoring. It is one of three similar bridges (i.e. 1308151, 1315151) to carry munitions from the Earle Naval Weapons Station. The road and railway provided the direct link between inland ammunition storage and the docks on the Raritan Bay. The bridge is not individually eligible for listing in the National Register, but is a contributing element of a potential Earle Navel Ammunition Depot Historic District, eligible for listing in the National Register under Criteria A and C.

INFOR MATION

PHOTO: 422:17-20 (09/92) REVISED BY (DATE): QUAD: Sandy Hook

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1313151 **CO** MONMOUTH **OWNER** NJDOT **MILEPOINT** 39.82

NAME & FEATURE INTERSECTED NJ 35 OVER MAHORAS BROOK **FACILITY** NJ 35

TOWNSHIP HOLMDEL TOWNSHIP

TYPE ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 55 ft **WIDTH** 74 ft

CONSTRUCTION DT 1915ca **ALTERATION DT** 1928, 1968 **SOURCE** PLANS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The 4-lane bridge with sidewalks, shoulders, and Jersey barrier median spans a creek near Hendricksons Corners in Holmdel Township. The setting is mixed-use commercial and residential with mostly late-20th century structures and a few scattered 19th-century houses with modern alterations.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span reinforced-concrete arch has been widened at least three times. In 1919 the state took over an existing county-built arch bridge with concrete parapets (by style c.1915) and widened it from 23' to 30'. In 1928 the bridge was once again widened from 30' to 60', and in 1968 from 60' to 74' with bullnose parapets. In each case the shape of the previous arch was matched by the sensitively designed addition. The altered bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 425:26a-27a (09/92) REVISED BY (DATE): QUAD: Keyport

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1313153 **CO** MONMOUTH **OWNER** NJDOT **MILEPOINT** 43.59

NAME & FEATURE INTERSECTED NJ 35 NB OVER NJ 36 EAST AND GSP RAMP **FACILITY** NJ 35 NORTHBOUND

TOWNSHIP KEYPORT BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 116 ft **WIDTH** 30 ft

CONSTRUCTION DT 1931 **ALTERATION DT** 1953 **SOURCE** PLANS/INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries two lanes with two sidewalks of NJ Route 35 Northbound over two lanes of NJ Route 36 Eastbound, and over a single-lane entrance ramp to the Garden State Parkway. The setting is suburban with late-20th century commercial buildings and car lots near the intersection of three major highways.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed two-span encased steel stringer bridge has concrete balustrades, concrete abutments, and a concrete pier with scored pilasters. The encasing has been removed from the eastern side stringers. The bridge was built in two sections. In 1931 the eastern span was constructed over NJ Route 36. In 1953 the western span was completed during the construction of the Garden State Parkway. The bridge is a common NJ State Hwy. Dept. type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 424:6a-7a (09/92) REVISED BY (DATE): QUAD: Keyport

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1313155 **CO** MONMOUTH **OWNER** NJDOT **MILEPOINT** 43.75

NAME & FEATURE INTERSECTED NJ 35 OVER LUPPATATONG CREEK **FACILITY** NJ 35

TOWNSHIP KEYPORT BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 44 ft **WIDTH** 86 ft

CONSTRUCTION DT 1927 **ALTERATION DT** 1965 **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The four-lane bridge with Jersey barrier median and two sidewalks spans a small creek. NJ 35 is a suburban commercial strip, and adjacent to the bridge is a car dealership.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span encased steel stringer bridge with concrete balustrade and substructure has been widened on the upstream side with prestressed concrete box beams with concrete parapet. In 1927 the bridge was constructed as part of NJ Route 35, and in 1965 it was widened to accommodate a 4-lane divided highway. It is a common New Jersey State Highway Department bridge type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 415:5, 431:10-11 (07/92) REVISED BY (DATE): QUAD: Keyport

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1314154 **CO** MONMOUTH **OWNER** NJDOT **MILEPOINT** 5.36

NAME & FEATURE INTERSECTED NJ 36 OVER TROUTMANS CREEK **FACILITY** NJ 36

TOWNSHIP LONG BRANCH CITY

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 2 **LENGTH** 35 ft **WIDTH** 40 ft

CONSTRUCTION DT 1941 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT OTIS R. SEAMAN, CO. ENG. **BUILDER**

SETTING / CONTEXT The bridge carries two lanes and two sidewalks over Troutman's Creek, a tidal tributary of the Shrewsbury River. The bridge is located west of the beach, and is in a suburban area of mostly Fifties-style ranch houses. To the southeast is a municipal sewage treatment plant and offices.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span continuous steel stringer bridge with encased fascia stringers has pipe railings and concrete abutments and pier. Beam guide rails have been added, and the substructure has been repaired. The 1941 county-built bridge was transferred to the state as part of the extension of NJ Route 36 south of Sea Bright. It is an example of a common bridge type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 421:34-37 (09/92) REVISED BY (DATE): QUAD: Long Branch

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1315150 **CO** MONMOUTH **OWNER** NJDOT **MILEPOINT** 11.68

NAME & FEATURE INTERSECTED NJ 36 OVER SHREWSBURY RIVER & BAY AVENUE **FACILITY** NJ 36

TOWNSHIP HIGHLANDS BOROUGH

TYPE DOUBLE LEAF BASCULE **DESIGN** TRUNNION **MATERIAL** Steel

 # SPANS 12 **LENGTH** 1241 ft **WIDTH** 44 ft

CONSTRUCTION DT 1932 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT WADDELL & HARDESTY, NYC **BUILDER**

SETTING / CONTEXT The bridge carries four lanes of traffic and two sidewalks over the Shrewsbury River near its confluence with Sandy Hook Bay. The bridge connects the Highlands promontory on the mainland with the beach resorts on the peninsula. Twin Lights Historic Site (1862) overlooks the bridge. The setting is picturesque, but numerous modern intrusions such as restaurants, marinas, and a highway interchange at the entrance to Sandy Hook preclude a historic district adjacent the bridge.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 6/6/91

SUMMARY The main span of the 12-span bridge is a 140'-span double-leaf haunched deck girder trunnion bascule. The 11 approach spans are multi deck girders with concrete balustrades. The bascule retains its original or inkind replacement gearing, controls, and electrical systems. In 1931 the bridge was designed by the noted engineering firm of Waddell & Hardesty. It is an exceptionally well-preserved and beautifully situated example of early-20th century movable bridge technology.

INFOR MATION

PHOTO: 420:24a-32a (09/92) REVISED BY (DATE): QUAD: Sandy Hook

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1315151 **CO** MONMOUTH **OWNER** OTHER FEDERA **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED EARLE RAILROAD OVER NJ 36 **FACILITY** EARLE RAILROAD (US NAVAL WEAPONS STATION EARLE)

TOWNSHIP MIDDLETOWN TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 2 **LENGTH** 132 ft **WIDTH** 62 ft

CONSTRUCTION DT 1942 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge carries two railroad tracks and a two-lane road over four lanes with Jersey barriers of NJ 36. The Earle Railroad carries munitions from the US Naval Weapons Station Earle in central Monmouth County to warships at wharf's in Sandy Hook Bay. Access to the bridge is restricted. The bridge is located east of the military station's main entrance. The setting is suburban with late-20th century residential and commercial areas adjacent the weapons station.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Earle Naval Weapons System Historic District, May contribute.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 62' wide, 2-span reinforced concrete slab bridge has concrete parapets and crash walls between the tracks and roadway. The abutments and "streamlined" pier are scored in a checkered pattern. The bridge is the property of the U.S. Government, and is one of three similar 1940s bridges (1313150, 1308151) built for Earle Naval Weapons Station that was built starting in 1942. It is named for an admiral who headed ordnance in WW I. The base and bridge are not historically noteworthy.

INFOR MATION

PHOTO: 431:4-5 (09/92) REVISED BY (DATE): QUAD: Sandy Hook

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1315157 **CO** MONMOUTH **OWNER** NJDOT **MILEPOINT** 22.7

NAME & FEATURE INTERSECTED NJ 36 OVER FLAT CREEK **FACILITY** NJ 36

TOWNSHIP UNION BEACH BOROUGH

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 27 ft **WIDTH** 82 ft

CONSTRUCTION DT 1927 **ALTERATION DT** 1964 **SOURCE** NJDOT

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries a 5-lane divided highway and two sidewalks over a creek. NJ 36 forms the corporate boundary between Union Beach Borough to the north and Hazlet Township to the south. The setting is suburban with late-20th century commercial development along NJ 36. To the southeast is a public school with parking lot (c.1960). To the northeast is an undistinguished residential area (c.1900-1940).

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span concrete slab bridge has been widened on both sides with prestressed concrete box beams with concrete parapets. The slab was constructed in 1927, and was widened in 1964. A chain link fence and utility pipe have been added to one side. The bridge is a common type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 424:8a-10a (09/92) REVISED BY (DATE): QUAD: Keyport

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1317150 **CO** MONMOUTH **OWNER** NJDOT **MILEPOINT** 1.45

NAME & FEATURE INTERSECTED NJ 138 OVER NORTH BRANCH OF WRECK POND **FACILITY** NJ 138

TOWNSHIP WALL TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 24 ft **WIDTH** 102 ft

CONSTRUCTION DT 1941 **ALTERATION DT** 1979 **SOURCE** PLANS

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries 4 lanes of traffic with 30'-wide grass median over a minor stream. The setting is suburban with late-20th century residential areas bordered by wooded lots.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span concrete slab bridge with concrete abutments and wingwalls has beam guide rails. In 1941 it was constructed as a two-lane wide bridge as part of NJ Route 38. In 1979 it was widened to four lanes with a concrete slab addition to carry the eastbound lanes. In 1988 the highway route was redesignated NJ 138. The bridge is a common type, and is neither historically nor technologically distinguished.

INFOR MATION

PHOTO: 162:25a-26a (06/92) REVISED BY (DATE): QUAD: Asbury Park

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1321150 **CO** MONMOUTH **OWNER** NJDOT **MILEPOINT** 5.9

NAME & FEATURE INTERSECTED NJ 71 OVER SHARK RIVER **FACILITY** NJ 71

TOWNSHIP AVON-BY-THE-SEA BOROUGH

TYPE DOUBLE LEAF BASCULE **DESIGN** TRUNNION **MATERIAL** Steel

 # SPANS 10 **LENGTH** 860 ft **WIDTH** 50 ft

CONSTRUCTION DT 1932 **ALTERATION DT** 1991 **SOURCE** PLANS

DESIGNER/PATENT ASH, HOWARD, NEEDLES & TAMMEN **BUILDER**

SETTING / CONTEXT The movable bridge carries 4 lanes of traffic and two sidewalks over a navigable portion of the Shark River. The bridge is located between the beach resort towns of Avon-by-the-Sea and Belmar. The area is heavily developed with marinas, restaurants, stores, and late-19th to late-20th century seasonal and year-round homes and apartments.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 10-span haunched deck girder bridge has a double-leaf bascule with fixed concrete counterweights main span. The approach spans are encased. The bascule is one of over 12 in southeast New Jersey from the 1920s and 1930s designed by the noted firm of Ash Howard Needles & Tammen. A representative example of the type, the span is altered with new reducers, motors, controls, locks, electrical systems, and remodeled operators houses. The alterations make the span less significant than others.

INFOR MATION

Bibliography:
NJDOT. Plan File: 1321150.

Physical Description: The main span of the 860'-long 10-span bridge is a 90'-long double-leaf bascule. The two approach spans to the south and seven to the north are haunched deck multi girders on a concrete substructure. The bridge is finished with standard-design concrete balustrades, and the enclosures on the movable leafs are the same style executed in metal. Operators/machinery houses are set at each corner of the movable leafs. They have been remodeled with oversized metal pyramidal hip roofs and new metal windows and doors.

The movable leafs are composed of four haunched girders with floor beams and an open steel grid deck. The bascule leafs have fixed counterweights at the tail ends. Each leaf is operated by a pinion that engages a rack affixed to the outside of the fascia girders. While the trunnions and trunnion towers are original, the motors, controls, electrical systems, back up operation, primary reducers, motor brakes, machinery brakes, and locks are all new. The secondary reducers are original as are the racks and pinions. The operators' and equipment houses have also been redone.

Historical and Technological Significance: The 1932 NJ 71 bascule bridge over the Shark River is an altered example of the most common post-1925 movable bridge type in southeast New Jersey. It is one of over 12 patented Ash-Howard-Needles & Tammen movable bridges built between 1928 and 1941 in the Monmouth-Cape May County region. Many of the examples survive in unaltered condition. The Shark River bridge retains its integrity of function and some original or in kind replacement fabric. But, in comparison, this span is not a well preserved example and is thus less technologically significant than others of the same design built in the same time period. The patent related to the bridge addresses the design of the trunnion tower. More complete examples of bridges of the same design in Monmouth County are Oceanic Bridge over the Navesink River (1300S31, 1939, Middletown Twp.) and NJ 36 over the Navesink River (1315150, 1932, Highlands Borough).

PHOTO: 175:13a,22a-25a (09/92) REVISED BY (DATE): QUAD: Asbury Park

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1321152 **CO** MONMOUTH **OWNER** NJDOT **MILEPOINT** 9.4

NAME & FEATURE INTERSECTED NJ 71 OVER DEAL LAKE **FACILITY** NJ 71

TOWNSHIP ASBURY PARK CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 9 **LENGTH** 462 ft **WIDTH** 50 ft

CONSTRUCTION DT 1931 **ALTERATION DT** Demolished: 1993 **SOURCE** PLANS

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries two lanes of traffic and two sidewalks across Deal Lake, a manmade water feature forming the border between Asbury Park City and Loch Arbour Borough. Deal Lake was created in the 1880s as part of the development of the shore resorts. It is lined with many well-preserved late-19th and ealry-20th century summer cottages and year-round homes that form a potentially large historic district or multiple-property nomination.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 6/22/92

SUMMARY The nine-span encased steel stringer bridge has standard-design concrete balustrades with pylons at the approaches (modern lights), paneled fascia, and concrete abutments and piers with Moderne-style paneled pilasters. The well detailed bridge is representative of the handsome designs produced by the State Highway Department Bridge Division in the Morris Goodkind era (1925-1955).

INFOR MATION

PHOTO: 176:31a-33a (08/92) REVISED BY (DATE): QUAD: Asbury Park

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NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1321154 **CO** MONMOUTH **OWNER** NJDOT **MILEPOINT** 11.58

NAME & FEATURE INTERSECTED NJ 71 OVER NJT NORTH JERSEY COAST LINE RAILROAD **FACILITY** NJ 71

TOWNSHIP DEAL BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 73 ft **WIDTH** 58 ft

CONSTRUCTION DT 1937 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries 4 lanes of traffic with mountable median and 2 sidewalks over two tracks of New Jersey Transit's North Coast Line. The railroad right-of-way was developed in the 1860s by the Long Branch and Sea-shore Railroad. The setting is suburban with mostly undistinguished early to late 20th-century residences and small businesses.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed single-span encased steel stringer bridge has concrete balustrades and abutments with wingwalls. Beam guide rails have been added and blast plates removed. It is a representative example of a common New Jersey State Highway Department railroad overpass bridge type from the 1930s. It is not historically or technologically distinguished.

INFOR MATION

PHOTO: 181:25a-27a (08/91) REVISED BY (DATE): QUAD: Long Branch

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1322152 **CO** MONMOUTH **OWNER** NJDOT **MILEPOINT** 6.15

NAME & FEATURE INTERSECTED NJ 79 OVER BIG BROOK **FACILITY** NJ 79

TOWNSHIP MARLBORO TOWNSHIP

TYPE RIGID FRAME **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 24 ft **WIDTH** 41 ft

CONSTRUCTION DT 1938 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries two lanes of traffic with shoulders over a minor creek. The setting is suburban with late-20th century residential subdevelopments. To the northeast is the Marlboro High School (c.1960-70).

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed single-span rigid frame bridge has concrete abutments and wingwalls. Beam guide rails have been added. In 1938 the bridge was built by the New Jersey State Highway Department as part of state highway improvements. It is a historically and technologically undistinguished example of the rigid frame bridge type.

INFOR MATION

PHOTO: 420:17a-18a (09/92) REVISED BY (DATE): QUAD: Marlboro

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1336150 **CO** MONMOUTH **OWNER** NJDOT **MILEPOINT** 4.36

NAME & FEATURE INTERSECTED NJ 33 BUSINESS OVER FREEHOLD BRANCH CONRAIL **FACILITY** NJ 33 BUSINESS

TOWNSHIP FREEHOLD TOWNSHIP

TYPE THRU GIRDER **DESIGN** PARTIALLY ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 113 ft **WIDTH** 30 ft

CONSTRUCTION DT 1925 **ALTERATION DT** Unknown **SOURCE** INSCRIPTION

DESIGNER/PATENT PENNSYLVANIA RR ENGINEERING **BUILDER** BETHLEHEM STEEL COMPANY

SETTING / CONTEXT The bridge carries two lanes of traffic and a sidewalk over a single track of ConRail's Freehold Branch, the former Pennsylvania Railroad (PRR) branch from Freehold to Matawan. The railroad right-of-way was originally developed in the 1870s by the Freehold and Jamesburg Railroad Company. The bridge is located in a transition zone between commercial and industrial development in Freehold Borough to the west, and light residential development and farmland to the east.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two span steel thru girder with encased floorbeams has a cantilevered sidewalk with pipe railing and concrete abutments with wingwalls. Two single column rolled steel I-beam piers with concrete footings were added at an undocumented date. In 1925 the PRR contracted with the Bethlehem Steel Company to build the grade elimination project bridge. It is a representative example of one of the most common railroad crossing bridge types, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 419:1-3 (09/92) REVISED BY (DATE): QUAD: Adelphia

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1337150 **CO** MONMOUTH **OWNER** NJDOT **MILEPOINT** 35.3

NAME & FEATURE INTERSECTED NJ 33 EAST & NJ 34 SOUTH OVER SOUTHERN DIVISION RR **FACILITY** NJ 33 EAST & NJ 34 SOUTH

TOWNSHIP HOWELL TOWNSHIP

TYPE THRU GIRDER **DESIGN** PARTIALLY ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 43 ft **WIDTH** 40.5 ft

CONSTRUCTION DT 1927 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT CENTRAL RR OF NJ ENGINEERING **BUILDER** BETHLEHEM STEEL COMPANY

SETTING / CONTEXT The two-lane bridge carries NJ 33 Eastbound and NJ 34 Southbound over a single track of ConRail's Southern Division, the former Central Railroad of New Jersey's Port Monmouth to Lakewood branch. The railroad right-of-way was originally developed in the 1860s by the Raritan and Delaware Bay RR Company. The bridge shares its abutment with a separate steel stringer bridge (1337151) carrying the highway's opposing lanes. Next to the bridge is a pole barn housing a flea market.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed single-span thru girder with an encased floorbeam and stringers bridge has a cantilevered sidewalk with metal railing. The original concrete abutment has been extended to the north to carry a separate steel stringer bridge. In 1927 the Central RR of NJ contracted with the Bethlehem Steel Co. for the grade elimination project associated with NJ Route 7. The bridge is a representative example of thru girder construction, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 181:41a-43a (08/92) REVISED BY (DATE): QUAD: Farmingdale

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1337151 **CO** MONMOUTH **OWNER** NJDOT **MILEPOINT** 35.47

NAME & FEATURE INTERSECTED NJ 33 WEST & NJ 34 NORTH OVER SOUTHERN DIVISION RR **FACILITY** NJ 33 WESTBOUND & NJ 34 NORTHBOUND

TOWNSHIP HOWELL TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 41 ft **WIDTH** 32 ft

CONSTRUCTION DT 1936 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The two-lane bridge with a single sidewalk carries NJ 33 westbound and NJ 34 northbound over a single track of ConRail's Southern Division, the former Central Railroad of New Jersey. The railroad right-of-way was originally developed in the 1860s by the Raritan & Delaware Bay RR Co. The bridge shares its abutment with a separate thru girder bridge (1927, 1337150) carrying the highway's opposite lanes. The setting is commercial with late-20th century buildings and a flea market.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY In 1936 the single-span encased steel stringer bridge with concrete balustrade was built as part of the dualization of the state highway. Its concrete abutment is an extension of the older abutment of the adjacent but structurally separate thru girder superstructure that carried the original two-lane highway. Beam guide rails have been added. The bridge is an example of one of the most common bridge types, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 181:1a-2a,44a (08/92) REVISED BY (DATE): QUAD: Farmingdale

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1360161 **CO** MONMOUTH **OWNER** STATE AGENCY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED RED HILL ROAD OVER NJT NORTH JERSEY COAST LINE **FACILITY** RED HILL ROAD

TOWNSHIP MIDDLETOWN TOWNSHIP

TYPE THRU GIRDER **DESIGN** PARTIALLY ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 50 ft **WIDTH** 29.2 ft

CONSTRUCTION DT 1922 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT NEW YORK & LONG BRANCH RR **BUILDER** S. S. THOMPSON

SETTING / CONTEXT The bridge carries two lanes and a sidewalk over two tracks of New Jersey Transit's North Coast Line, the former New York and Long Branch Railroad. The right-of-way was developed by the railroad in the late 1860s. The overpass is located in the southwest corner of the Kings Highway Historic District (c.1670-1900). The district consists of residential, civic, religious, and educational buildings associated with one of the oldest settlements in New Jersey.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Listed. Kings Highway Historic District. 01/08/1974. Noncontributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 1922 skewed single-span steel thru-girder with encased floorbeams bridge has a cantilevered sidewalk and concrete abutments with wingwalls. Six-foot high barrier walls covered by simulated-wood aluminum siding have been built to protect the railway's high voltage wires. The bridge is not within the Kings Highway Historic District's themes or period of significance. It is an example of a common railroad overpass bridge type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 426:8-10 (09/92) REVISED BY (DATE): QUAD: Sandy Hook

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NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1361158 **CO** MONMOUTH **OWNER** STATE AGENCY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PARK AVENUE OVER NJT NORTH JERSEY COAST LINE **FACILITY** PARK AVENUE

TOWNSHIP LONG BRANCH CITY

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 3 **LENGTH** 66 ft **WIDTH** 30 ft

CONSTRUCTION DT 1913 **ALTERATION DT** 1978 **SOURCE** PLANS

DESIGNER/PATENT NEW YORK & LONG BRANCH RR **BUILDER** AMERICAN BRIDGE COMPANY

SETTING / CONTEXT The bridge carries two-lanes of traffic and two sidewalks over two tracks of New Jersey Transit's North Coast Line, the former New York & Long Branch Railroad, a division of the Central RR of New Jersey. The right-of-way was developed in the early 1870s. The bridge is located in a beach resort town with a mixture of early to late 20th-century residences. To the west is a municipal recreation area with ball courts and fields.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 3-span steel stringer bridge with original metal lattice railings rests on concrete abutments and riveted, cross-braced steel bents with built-up girder caps. The approach spans are original and have concrete jack arches. The center span is a 1978 replacement. The cross-braced steel bents are a common detail and are not technologically significant. The significantly altered bridge is not associated with an important period of the railway's history. It is also technologically undistinguished.

INFOR MATION

PHOTO: 181:28a-33a (08/92) REVISED BY (DATE): QUAD: Long Branch

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1361163 **CO** MONMOUTH **OWNER** CITY OR MUNC. **MILEPOINT** 26.36

NAME & FEATURE INTERSECTED SYDNEY ROAD OVER NJT NORTH JERSEY COAST LINE **FACILITY** SYDNEY ROAD

TOWNSHIP DEAL BOROUGH

TYPE THRU GIRDER **DESIGN** PARTIALLY ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 69 ft **WIDTH** 19 ft

CONSTRUCTION DT 1917 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The two-lane bridge spans two tracks of New Jersey Transit's North Jersey Coast Line, the former New York & Long Branch RR, a division of the Central Railroad of New Jersey. The right-of-way was originally developed in the 1870s. The setting is residential with late-19th and early-20th century wealthy beach resort hotels and residences to the east, and late-20th century development to the west. The area near Deal Lake is a potential historic district or multiple property nomination.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible. Potentially eligible resort Historic District. May contribute.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span thru girder with encased floorbeams is one of the most architectonic of its type in the state. It has brick-faced abutments, terra cotta urns and scroll brackets, and brick detailing including planters and gateway. In 1917 the bridge was constructed as part of the development of the beach resort community, and is associated with other landscaping design elements such as brick walls and gates. It is a historically and aesthetically distinguished example of its type.

INFOR MATION

Bibliography:
History of Monmouth County, New Jersey, 1664-1920. New York: Lewis Historical Publishing Company, 1922.
Ocean Township. The Township of Ocean Commemorative Book. 1949.

Physical Description: The single-span riveted built-up steel plate thru girder with encased floor beams bridge is supported on brick-faced abutments. While the bridge itself has no distinguishing details, its decoration ranks among the most significant in the state. It is embellished with brick and terra cotta trim that matches that used for the walls and entrance gates that are adjacent to the bridge. Each corner of the bridge has a brick pedestal with large terra cotta consoles and topped by handsome oversized urn-shaped finals. Decorative brick panels have also been constructed between the concrete curbs and the top flange of the girders at every fourth panel across the bridge. The bridge is currently closed to vehicular traffic. The inside face of the girders is painted yellow. Some plate girder webs have rusted through in places. The span and its decorative elements survive unaltered.

Historical and Technological Significance: The 1917 Sydney Road overpass with its brick and terra-cotta detailing is one of the most architectonic thru girder bridges in the state. While the span itself is not technologically distinguished, the bridge is artistically noteworthy. It is historically associated with the social and economic development of the late-nineteenth and early-twentieth century seasonal resort residential community that borders Deal Lake. It is an integral part of the resort's cultural landscape and street plan. It is eligible under Criteria A and C of the National Register.

The bridge is located on the former grounds of the Hathaway House, a famous beachfront hotel that was popular during the late-nineteenth and early-twentieth centuries. In the 1910s the extensive hotel grounds, which stretched from the ocean to Deal Lake, were taken over for a residential development. The bridge was constructed as part of a larger landscaping plan for the residential development of the property. The brick-faced bridge abutments extend into terra-cotta tile topped brick walls that separate the residential areas from the railroad right-of-way. The eastern bridge approach at Sydney Road and Atlantic Avenue has a circular brick wall entryway with brick towers topped by urns. A sign in one of the towers reads "Deal Harbor." It is unknown whether Deal Harbor was the name of the development or the name of an estate house that may have stood on the western side of the bridge. No period house was identified on the west side of the bridge. Most of the houses date from after World War II.

Plans for the bridge were not located at NJDOT or at the county engineer's office. The railroad was developed in the 1870s by the New Jersey Southern Railway, a branch of the Central Railroad of New Jersey. The bridge is not of significance to the history of the railway, but is illustrative of the need to build above-grade crossings in response to increases in population and tourism at the Jersey shore during the early twentieth century.

Boundary Description and Justification: The bridge is individually eligible, in and of itself, including superstructure, substructure, wingwalls, boundary walls, and right-of-way over the railroad right-of-way. The surroundings do not have historic district potential.

PHOTO: 180:2-3,181:20-24a (08/92) REVISED BY (DATE): QUAD: Asbury Park

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1367152 **CO** MONMOUTH **OWNER** STATE AGENCY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED HARNLEY ROAD OVER FREEHOLD BRANCH **FACILITY** HARNLEY ROAD

TOWNSHIP MARLBORO TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Wood

 # SPANS 3 **LENGTH** 75 ft **WIDTH** 11 ft

CONSTRUCTION DT 1913 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT CENTRAL RAILROAD OF NEW JERSEY **BUILDER**

SETTING / CONTEXT The single-lane bridge spans a single abandoned track of the former Central Railroad of New Jersey's Freehold Branch. The right-of-way was developed in the late-1870s by the New York and Freehold Railroad, later absorbed by the Central RR of NJ. Harnley Road is an unimproved road closed to through traffic. The setting is wooded with several old abandoned outbuildings. The area has been used as a garbage dump. Parallel to the railroad tracks is an electric power line right-of-way.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The three-span haunched timber stringer bridge has timber railings, timber deck, brick abutments with timber caps, and timber piers with timber caps, cross bracing, and brick footers. The timber is deteriorated and the bridge closed to traffic. In 1913 the bridge was built by the Central Railroad of New Jersey. It has been rebuilt and repaired in-kind. It is an example of a common bridge type, and is not associated with the historic period of the railway.

INFOR MATION

PHOTO: 426:2-4 (11/92) REVISED BY (DATE): QUAD: Keyport

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1400073 **CO** MORRIS **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED LANDING ROAD (CR 631) OVER MORRISTOWN LINE & CANAL ROW **FACILITY** LANDING ROAD (CR 631)

TOWNSHIP ROXBURY TOWNSHIP

TYPE DECK ARCH **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 2 **LENGTH** 136 ft **WIDTH** 29.6 ft

CONSTRUCTION DT 1907 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT DL&W RR OFFICE OF ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is contiguous to the Landing RR station in a commercial area. It carries a two-lane road sidewalks over active tracks of a commuter railroad and the abandoned Morris Canal R-O-W (National Register), filled and used as a parking lot. The NJ Cutoff connects with the main line about 1400' west of the bridge. The setting has lost its integrity due to alterations to the canal and station.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible. Historic District Status Unresolved.

CONSULT DOCUMENTS SHPO Finding 02/25/95

SUMMARY The two-span reinforced concrete deck arch bridge with a simple metal railing is technologically significant as a relatively early steel and concrete arch. It is also important for its historical associations with both the Morris Canal, still a navigable waterway when the bridge was built, and the DL&W Railroad, a leader in the use of concrete for bridges in the early 1900s. There is spalling on the east fascia and bowing on the west fascia.

INFOR MATION

Bibliography:
Lowenthal, L. & Greenberg, W. T., Jr. The Lackawanna Railroad in Northwest New Jersey. 1984.
Morris County Freeholders Minutes. June 8, 1887.

Physical Description: The 136'-long two-span concrete deck arch bridge adjacent to the Landing (Lake Hopatcong) passenger station is enclosed by a simple pipe railing that is original to 1907. The arch springs from about 10' above the ground. While the arches and west fascia have been gunited, there is severe spalling on the east fascia. The bridge crosses two active tracks of the Morristown Line and the abandoned Morris Canal right-of-way, now filled and used as a parking lot. On the north side, adjacent to the arch, are stone retaining walls while concrete retaining walls are on the south.

HISTORICAL AND TECHNOLOGICAL SIGNIFICANCE: The bridge is the earliest earth-filled concrete deck arch in Morris County and the only two-span example of the bridge type in the county. It was designed and built in 1907 by Delaware Lackawanna & Western Railroad, a nationally recognized early leader in the use of concrete in bridge construction (Criterion C).

Although the 1907 multi-span bridge is just east of the National Register-listed 1912 Lake Hopatcong (Landing) station and about 1400 east of the junction of the New Jersey Cutoff with the DL&W's main line, it was built before either of those improvements were underway. In fact, it was constructed when the 1908-1911 New Jersey Cutoff was in the planning stage. Thus the Landing Road bridge ranks as one of the earliest documented reinforced concrete deck arch bridges built by the railroad in the state.

Landing was the major intermodal transfer station for the Lake Hopatcong vacation trade. The 1912 relocation of the station to the uphill or south side of the track required rebuilding the road and bridge into Landing. The station complex originally included a now non-extant concrete pedestrian bridge and access stairs from the station to the north side of the track and covered track side platforms.

The northern arch of the bridge crossed the Morris Canal during the active period of the waterway, which was abandoned in 1924. Although the canal has been filled and this section is used as a parking lot, the right-of-way is listed in the National Register in 1974.

Boundary Description and Justification: The bridge is first and foremost individually significant. It is located to the east of the National Register-listed Landing passenger station, and it crosses the National Register-listed right-of-way of the Morris Canal. Both listed resources have been significantly altered (the canal has been filled and the platform bridge and stair towers built as part of the station have been removed) thus altering the original context of the highway bridge. Because the setting has lost its integrity, the eligible boundary is limited to the span itself.

PHOTO: 508:26A-27A (06/91) REVISED BY (DATE): QUAD: Stanhope

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1400082 **CO** MORRIS **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MORRIS AVENUE OVER ABANDONED MORRIS CANAL ROW **FACILITY** MORRIS AVENUE

TOWNSHIP BOONTON TOWN

TYPE DECK TRUSS **DESIGN** WARREN **MATERIAL** Steel

 # SPANS 2 **LENGTH** 111 ft **WIDTH** 20 ft

CONSTRUCTION DT 1908 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT DL&W RR OFFICE OF ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located approximately ten feet from Main Street at the end of the central business district and parallel to the Boonton Line of the Delaware, Lackawanna & Western Railroad. It crosses the abandoned Morris Canal R-O-W which has been filled and is listed in the National Register. Buildings along the main street adjacent to the bridge are predominantly mid- to late-19th century. The bridge was constructed by the DL&W Railroad for a road connecting its two stations in town.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 10/04/88

SUMMARY Built during the active years of the Morris Canal, the skewed bridge, consisting of a short deck girder and a riveted Warren with verticals deck truss spans, was part of the Morris Avenue extension that connected the DL&W freight station with Main Street. it is supported on ashlar abutments and built-up steel bents. The bridge is one of 2 built by the railroad in Boonton. It, and the other example (1400083) were evaluated by the SHPO as not eligible.

INFOR MATION

PHOTO: 503:16-17,516:17-18A (05/91) REVISED BY (DATE): QUAD: Boonton

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1400083 **CO** MORRIS **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MORRIS AVENUE OVER ROCKAWAY RIVER & SERVICE ROAD **FACILITY** MORRIS AVENUE

TOWNSHIP BOONTON TOWN

TYPE DECK TRUSS **DESIGN** WARREN **MATERIAL** Steel

 # SPANS 2 **LENGTH** 162 ft **WIDTH** 20 ft

CONSTRUCTION DT 1908 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT DL&W RR OFFICE OF ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located behind the central business district and just north of a parallel bridge carrying the Boonton Line over the same features. The section of road is wooded and undeveloped due to the topography. The bridge is included in the Morris County Historic Sites Survey, which contains some misinformation about the abutments materials and construction dates. The bridge was constructed by the DL&W Railroad to provide a road between its two stations in Boonton.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 10/04/88

SUMMARY The steel bridge is composed of two riveted deck truss spans over the waterway and a shallower riveted deck plate girder span over the roadway. One of two similar bridges built by the DL&W RR, it is an unaltered example of an uncommon bridge type. It was constructed as part of the extension of Mossis Avenue to Main Street during a major improvement campaign. The original lattice railing is also well preserved. The SHPO has evaluated this and the other (1400082) as not eligible.

INFOR MATION

PHOTO: 503:13-15 (05/91) REVISED BY (DATE): QUAD: Boonton

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1400084 **CO** MORRIS **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WASHINGTON STREET (US 202) OVER JERSEY CITY RESERVOIR **FACILITY** WASHINGTON STREET (US 202)

TOWNSHIP BOONTON TOWN

TYPE DECK TRUSS **DESIGN** PRATT **MATERIAL** Steel

 # SPANS 5 **LENGTH** 497 ft **WIDTH** 23.5 ft

CONSTRUCTION DT 1895 **ALTERATION DT** 1909, 1989 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT CANTON BRIDGE COMPANY **BUILDER** CANTON BRIDGE COMPANY

SETTING / CONTEXT Spanning the headwaters of the Jersey City Reservoir, the bridge separates a wooded light industrial/commercial area of Parsippany Troy Hills Township from a dense residential area of Boonton Town. The bridge was part of a county improvement to provide a shorter route between Boonton and Morristown, prior to the construction of the reservoir. The Morris County Planning Board recognizes the bridge as a historic structure.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The deep, pin-connected deck truss bridge has had several modifications including concrete piers added in 1903 and numerous reinforcements and additions to the trusses beginning in 1909. The replacement of the northernmost span with two stringer spans in 1988 eliminated a difficult approach. The truss is historically significant due to its association with the boom years of Boonton. It is technologically distinctive because of its type and many of the alterations are historic changes.

INFOR MATION

Bibliography:
Robinson, E. Robinson's Atlas of Morris County. 1887.
Dempsey, A.F. "Old Boonton and The Jersey City Reservoir." 1982.
A Little Paper Called Boonton, Aug. 23, 1894; May 18,1895; Jun. 8, 1895; Jun. 15, 1895; Oct. 12, 1895; Oct.19, 1895; Nov. 16, 1895; Nov. 23, 1895; Dec. 7, 1895; Dec. 28, 1895; Jan 4, 1896; Jan. 18, 1896; Jan. 25,1896; Feb. 1, 1896; Mar. 28, 1896.
Postcards in the collection of Jean Lee, Boonton Historical Society.
Morris County Freeholders Minutes. Oct. 14, 1903; Nov. 11, 1903; April 12, 1905; June 12, 1907.
"Bridge Building," The American Pictorial Monthly. June-July-August 1902.

Physical Description: The deep three-quarter deck truss bridge, originally built as a 5-span bridge with 4 deck truss spans and one short stringer or girder span on the north end, retains four of the pin-connected deck trusses. It is composed of built-up members with the top chords, inclined end posts, and verticals are toe-out channels with lacing and cover plates; a bottom chords are stamped eye bars. Sway bracing is round eye bar with turnbuckles. The diagonals and counters are stamped eye bars with turnbuckles. The truss was originally supported by stone abutments and steel bents.

The bridge, however, has been modified by a succession of additional members to strengthen the trusses and protect the piers from water damage when the reservoir was filled eight years after the bridge was constructed. Additions to the truss include a middle chord and knee braces for the floor beams, added in 1909, when the original plank deck was replaced with concrete; intermediate diagonals between the bottom and middle chord; and various riveted and bolted reinforcements. Additional diagonal tension members have been added to some panels. The riveted floor beams are apparently original, although the deck was replaced with metal deck pans on new steel stringers in 1958. Concrete piers, presumably cast around the original steel piers, were added by A. W. Edwards & Co., a local contractor, just before the reservoir was flooded in 1903.

The most significant alteration was the removal of the two northernmost spans (one deck truss and one stringer or multi girder) in 1987-1988 and replaced with two stringer spans supported by a concrete hammerhead piers to eliminate a difficult approach angle. A new concrete deck and various bolted repairs to strengthen weak truss members were made at that time. The 1988 rehabilitation was done in a sympathetic manner ensuring that the bridge would continue to function as a pin-connected span.

HISTORICAL AND TECHNOLOGICAL SIGNIFICANCE: The 480' pin-connected Pratt deck truss bridge built in 1895 as a 5-span structure was considered a major accomplishment by the Canton Bridge Company. The bridge is one of two pin-connected deck truss highway bridges documented in the state making it a rare survivor of its type (Criterion C). The span has been modified quite a few times, but the work has been accomplished in a manner that has been sensitive to the original design and thus is not intrusive. The modifications do not detract from the technological significance of the span.

Modifications/alterations began as early as 1903, when the concrete piers were added to protect the structure from water and/or ice damage from the new reservoir. The bridge was previously supported on high built-up steel bents. At that time jurisdiction of the piers passed to the Jersey City Water Supply Company while the superstructure remained with the county. In 1909 the bottom chords, diagonals and pins were adjusted, and the mid-chords were added. That work was designed by noted civil engineer J.A. L. Waddell. The flooring system was done in 1958, but the original built-up floor beams were retained. In 1987-1988, the northernmost 2 span were removed and replaced with modern steel stringer spans on an improved realignment. Truss members were also repaired/strengthened at that time. The 1988 work was designed by A. G. Lichtenstein & Associates for Morris County. The numerous modifications/alterations have changed the trusses from a light, traditional Pratt structure to one of much heavier proportions. Despite the alterations, most of which are either historic changes or done in a manner that is sensitive to the original design and type, the bridge is technologically distinguished because of the rarity of its type, in the depth of the trusses, and the length of the spans. The south abutment and wingwalls are documented examples of the work of Theodore Ringlieb, a local stone mason who contracted for the stonework on numerous bridges in the county.

PHOTO: 503:20-23 (05/91) REVISED BY (DATE): QUAD: Boonton

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US
November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1400118 **CO** MORRIS **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MARTIN LUTHER KING AVENUE OVER WHIPPANY RIVER **FACILITY** MARTIN LUTHER KING AVENUE

TOWNSHIP MORRISTOWN TOWN

TYPE STONE ARCH **DESIGN** BARREL **MATERIAL** Stone

 # SPANS 3 **LENGTH** 66 ft **WIDTH** 30.5 ft

CONSTRUCTION DT 1822 **ALTERATION DT** 1883, 1928 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in a mixed use area behind the central business district. Contiguous to the bridge are a playground and commercial/retail establishments, while low-income housing and a toxic waste site are in the immediate neighborhood. The mid-18th century Morristown business district was near the bridge, but relocated to the present site around the Green in the late 18th century. The bridge carries two lanes of traffic and two sidewalks over a major watercourse.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 2-span stone arch is the oldest continuously used bridge in Morristown, and is one of the oldest in the county. Built in 1822, it was widened with stone to the north ca. 1883 with the new portion at an angle to the original arches. The west sidewalk with its stone parapet is carried by the arch, while the 1928 east sidewalk is carried on steel stringers resting on random stone supports that obscure the arches. The original span has been so altered that is has little design integrity.

INFOR MATION

PHOTO: 501:18-19,517:29-32A (05/91) REVISED BY (DATE): QUAD: Morristown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1400119 **CO** MORRIS **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CENTER STREET OVER WHIPPANY RIVER **FACILITY** CENTER STREET

TOWNSHIP MORRISTOWN TOWN

TYPE DECK GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 46 ft **WIDTH** 30.5 ft

CONSTRUCTION DT 1930 **ALTERATION DT** 1970ca **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge is behind the Morristown central business district and is bounded by three parking lots and a late-20th century church. The structure carries three lanes of traffic and two sidewalks over a major watercourse in a former industrial area that was redeveloped as part of 1970s urban renewal activities.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 03/12/01

SUMMARY While the bridge is one of the shortest deck girders in the county, it is not particularly innovative or technologically distinguished. Gunited stone abutments attest to an earlier structure at the is crossing. The modern railing is composed of welded I-sections with mesh screens. The industrial buildings that surrounded the bridge were removed in the 1970s.

INFOR MATION

PHOTO: 501:20-21 (05/91 JPH (5/96)) REVISED BY (DATE): QUAD: Morristown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1400121 **CO** MORRIS **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED RIDGEDALE AVENUE OVER WHIPPANY RIVER **FACILITY** RIDGEDALE AVENUE

TOWNSHIP MORRISTOWN TOWN

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 95 ft **WIDTH** 46 ft

CONSTRUCTION DT 1920 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is in a commercial area consisting of undistinguished mid- to late-20th century business structures, including a motor vehicle inspection station. It carries four lanes of traffic of a heavily traveled connector road over a major county watercourse.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The elliptical reinforced concrete arch deck bridge has a concrete balustrade with lancet-shaped piercing. One of nine similar structures in the county, it is a representative example of its type, and it has no distinguishing features. Although well proportioned, the bridge is neither an early example of its type nor is it technologically innovative.

INFOR MATION

PHOTO: 501:22-23 (05/91) REVISED BY (DATE): QUAD: Morristown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1400136 **CO** MORRIS **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED HIGH STREET OVER STONE HOUSE BROOK **FACILITY** HIGH STREET

TOWNSHIP BUTLER BOROUGH

TYPE STRINGER **DESIGN** JACK ARCH (BRICK) **MATERIAL** Steel

 # SPANS 1 **LENGTH** 31 ft **WIDTH** 38.3 ft

CONSTRUCTION DT 1885ca **ALTERATION DT** 1991 **SOURCE** NEWSPAPER

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in the center of Butler across from the ca. 1880 American Hard Rubber Company factory, converted to office use. The south side of the bridge is a mixed use commercial/residential area while the north end is located in the casually landscaped Butler Park which serves as a town green. Butler developed around the rubber industry, and it may have historic district potential. The bridge was built within the period of significance, but it is largely altered.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Potential Historic District. Noncontributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The ca. 1885 skewed stringer bridge with brick jack arches and an ashlar substructure is the only example of its type in the county, but it is one of at least 20 in northern New Jersey. It is has also been drastically altered, including ca. 1970 metal railings and gunite added to the underside in 1991. It does not retain its original/early appearance and thus does not contribute to the historic character of the potential historic district. Better examples of the bridge type remain in the region.

INFOR MATION

Bibliography:
Sanborn Insurance Atlas, Butler, N.J. 1901-1941.
Beers, F.W., Ellis, A.D., & Soule, G.G.. Atlas of Morris County, 1868.
Robinson, E. Robinson's Atlas of Morris County, 1887.
Salvini, E. Historic Bloomingdale. 1984.
"Board of Freeholders," The Jerseyman. June 10, 1887.

Physical Description: The steel stringer bridge with brick jack arches carries a wide roadway over a narrow brook with stone-lined banks. The bridge is on a large skew. The stone abutments are continuous with the stone-lined retaining walls which stretch for several hundred feet in both directions along the brook. Modern heavy gauge steel railings and a concrete brush curb are incompatible replacements for the original decorative lattice rail. The intrados was gunited in the summer of 1991.

Historical and Technological Significance: While date of construction remains undocumented, the bridge dates stylistically from the last quarter of the 19th century. It is likely the bridge at Butler near the rubber works mentioned in the minutes of the Board of Freeholders in June 1887 is this span. Sanborn Insurance maps of the town are conflicting and indicate that the bridge was never thoroughly surveyed by the company. The bridge dates from the growth years of the former American Hard Rubber Company and its predecessors, around which the village grew. The ca. 1880 brick factory building has been adapted for office use and is identified by a Morris County Historic Commission plaque. The development of the town to the east of Stone House Brook, including the establishment of schools, churches, a borough hall and firehouse, and substantial residential areas, occurred in the last quarter of the 19th century. The Butler Park, contiguous to the bridge is from this period.

The bridge is not a rare type, it has been altered significantly in recent years, and it does not retain integrity of original design. Nor does it contribute to the historic character of Butler. Although it lies in a potential historic district that includes the mill and other buildings in the village center, it is not a contributing resources because of its alterations and resulting modern appearance.

PHOTO: 503:35-38 (05/91) REVISED BY (DATE): QUAD: Wanaque

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1400140 **CO** MORRIS **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED HAMBURG TURNPIKE (CR 694) OVER PEQUANNOCK RIVER **FACILITY** HAMBURG TURNPIKE (CR 694)

TOWNSHIP BUTLER BOROUGH

TYPE THRU GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 80 ft **WIDTH** 18.9 ft

CONSTRUCTION DT 1925 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is in Smiths Mills, an early-19th-century hamlet along the Paterson-Hamburg Turnpike, incorporated in 1806. The recently reactivated New York, Susquehanna & Western Railroad crosses at grade west of the bridge while a late-20th century home is located at the east end of the bridge. The bridge was part of the state highway project of the 1920s which utilized the Turnpike for part of Route 8. It carries a 2-lane rural road over a minor river.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The thru girder with floor beams bridge is supported on ashlar abutments with wingwalls that appear to date to 1875. The superstructure was constructed in 1925, by which time it was a common bridge type. This example is not technologically innovative or distinctive. The bridge is one of ten thru girder spans in the county.

INFOR MATION

PHOTO: 503:28-29 (05/91) REVISED BY (DATE): QUAD: Wanaque

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1400143 **CO** MORRIS **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MAIN STREET OVER PEQUANNOCK RIVER **FACILITY** MAIN STREET

TOWNSHIP BUTLER BOROUGH

TYPE BOX BEAM **DESIGN** **MATERIAL** Prestressed Concrete

 # SPANS 2 **LENGTH** 81 ft **WIDTH** 39.5 ft

CONSTRUCTION DT 1929 **ALTERATION DT** 1982 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge is located at the end of the north end of the Butler business district where light industry has replaced the Pequannock Rubber Company mill which was destroyed by fire in the 1950s. The bridge crosses into Passaic County where Main Street forms a T-junction with the Paterson-Hamburg Turnpike (CR 694), lined with small commercial structures, some adapted from 20th century residences. it carries a wide 2-lane road and sidewalks over a minor river.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The box beam superstructure constructed in 1982 replaced the 1929 structure. Portions of the old concrete abutments and the center cutwater pier were reused. On the bridge, the steel balustrade consisting of three rails and posts is modern. However, the reinforced concrete balustrade on the south approaches dates from 1929. Because the span is primarily modern, it is evaluated as not historic based on its age and bridge type.

INFOR MATION

PHOTO: 503:39-40 (05/91) REVISED BY (DATE): QUAD: Wanaque

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1400150 **CO** MORRIS **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED NEWARK-POMPTON TURNPIKE (CR 504) OVER POMPTON RIVER **FACILITY** NEWARK POMPTON TURNPIKE (CR 504)

TOWNSHIP PEQUANNOCK TOWNSHIP

TYPE THRU GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 191 ft **WIDTH** 30 ft

CONSTRUCTION DT 1925 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in a wooded residential area of predominantly mid-20th-century dwellings. The area is the flood plain of the Pompton River. The bridge carries two lanes of traffic and one sidewalk over the river that serves as the boundary between Morris and Passaic counties.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The simply supported 2-span encased thru girder with floor beams bridge is supported on a concrete substructure and is representative of the other 5 similar spans in the county. The bridge type was used by both the state and the county in the 1920s & 1930s. The steel railing used at the cantilevered sidewalk is a design found on similar bridges from the same period, and while attractive, it is not unusual or unique. The span is not technologically innovative or historically noteworthy.

INFOR MATION

PHOTO: 505:25-26 (05/91) REVISED BY (DATE): QUAD: Pompton Plains

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1400156 **CO** MORRIS **OWNER** COUNTY **MILEPOINT**

NAME & FEATURE INTERSECTED LAKE DRIVE OVER CANAL (TRIBUTARY TROY BROOK) **FACILITY** LAKE DRIVE

TOWNSHIP MOUNTAIN LAKES BOROUGH

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 22 ft **WIDTH** No Data

CONSTRUCTION DT 1936 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in a wooded, low-density residential area started on a 1,000-acre tract in 1909. A series of seven spring-fed lakes are connected by a canal, over which the bridge carries two lanes of traffic and two sidewalks. The surrounding area is a well-preserved upper middle class planned pre-1930 neighborhood with architecturally significant houses, a school, church, and recreational buildings in a casually landscaped setting with common green spaces.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Not Individually Eligible. Potential Mountain Lakes Historic District. Contributing.

CONSULT DOCUMENTS SHPO Letter 03/12/01

SUMMARY Finished with an arched-opening fieldstone spandrel wall, the skewed span is really a concrete slab designed to imitate an elliptical arch. It is one of 2 similar 1938 bridges built as amenities in Mountain Lakes, a 1909 subdivision developed as an exclusive residential enclave dominated by large, architecturally significant pre-World War I houses and related buildings, all in a park-like setting. The bridge contributes to a potential NR-eligible historic district. The bridge does not have the age, size, or distinctive detailing to be an individually eligible resource. While not individually eligible for listing in the National Register of Historic Places, the bridge would be a contributing element of a potential Mountain Lakes Historic District under Criteria A and C.

INFOR MATION

Bibliography:

The League of Women Voters of Mountain Lakes. This is Mountain Lakes. 1961-1989.
The Landmarks Committee Borough of Mountain Lakes, NJ. The Hapgood Houses of Mountain Lakes. 1983.

Physical Description:

Historical and Technological Significance: The slab bridge finished with cobblestone spandrel walls and parapets is a contributing feature in maintaining the original intent and historic development of Mountain Lakes, a planned suburb dating from 1911 (Criterion A). Masterminded and planned as an exclusive residential park by developer Herbert J. Hapgood, Mountain Lakes was laid out and improved to take advantage of the rustic natural beauty of the property. The subdivision plan included two manmade lakes interconnected by waterways that were adorned with bridges and stone work. The homes were to be placed on generous lots within the natural contours of the land, and they were to be in the Arts & Crafts mode. Key to the success of Hapgood's scheme was the rail link to New York City provided by the Erie-Lackawanna Railroad. The development was immensely popular, and by 1923, 600 homes and many amenities like a social club, community church, and stone walls and culverts had been built. Mountain Lakes became an independent borough in 1924. Remarkably, the original character of the community envisioned by Hapgood has been preserved making Mountain Lakes one of the best examples of a planned early-20th century upper class suburban community in the state.

While the bridge that carries Lake Drive over one of the interlake canals was not built in the initial phase of development (Hapgood went bankrupt in 1922), it was done in the original spirit of the development. It also reflects the intense desire and effort on the part of the community to continue the original development plan well after Hapgood's departure from the scene. The dedication to perpetuating and maintaining the original intent and thus the character of the development has marked the history of the community since the mid-1920s. The 1936 bridge reflects the original style and theme of the potential historic district in which it is located. While not individually distinguished from the technological perspective, the span is of historical significance to the community and the region.

Boundary Description and Justification: The bridge is a contributing resource in a historic district. Thus the span and its surroundings are evaluated as eligible. Defining the exact boundaries of the potential Mountain Lakes Historic District is beyond the scope of this survey.

PHOTO: 514:39-41, 128:8-10 (07/91) REVISED BY (DATE): QUAD: Boonton

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1400183 **CO** MORRIS **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED KINNELON ROAD OVER BEAVER BROOK **FACILITY** KINNELON ROAD

TOWNSHIP BOONTON TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 26 ft **WIDTH** 37.2 ft

CONSTRUCTION DT 1929 **ALTERATION DT** 1988 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is in a wooded, sparsely developed section of the municipality. It carries two lanes of traffic and two sidewalks over a minor watercourse.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The short concrete-encased stringer bridge is supported on concrete abutments. The concrete encasing provides protection to the steel stringers. Any original railings were replaced by a modern beam guard railings in 1988. The bridge is not historically or technologically significant. It is a representative example of the most common pre-World War II bridge type in the state and is one of over 50 stringer bridges in Morris County alone.

INFOR MATION

PHOTO: 505:40-41 (05/91) REVISED BY (DATE): QUAD: Boonton

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1400210 **CO** MORRIS **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED US 202 OVER BRANCH OF ROCKAWAY RIVER **FACILITY** US 202

TOWNSHIP MONTVILLE TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 23 ft **WIDTH** 28.6 ft

CONSTRUCTION DT 1924 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT CORNELIUS VERMEULE **BUILDER** HYDE-MCFARLIN CONSTRUCT.

SETTING / CONTEXT The bridge is located in a wooded, mixed-use area at the end of the small Montville business district. It carries two lanes of traffic over a brook that flowed into the lower Montville inclined plane of the Morris Canal, the R-O-W of which is listed in the National Register. The bridge is part of the Morris Canal abandonment project of 1924-1927 where the state replaced timber truss bridges over the canal at locations where natural watercourses intersected the manmade waterway.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed encased stringer bridge has a concrete substructure and paneled parapets. The 23'-long span was built as part of the 1924 Morris Canal abandonment agreement between the State and the Lehigh Valley RR. Other more complicated bridges associated with the abandonment, completed under the direction of civil engineer Cornelius Vermeule, have been evaluated as historic because of their association with the project. This span was not based on its size and undistinguished technology.

INFOR MATION

PHOTO: 504:29-30 (05/91) REVISED BY (DATE): QUAD: Boonton

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1400243 **CO** MORRIS **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED COMLY ROAD (CR 511 ALT) OVER BEAVER BROOK **FACILITY** COMLY ROAD (CR 511 ALT)

TOWNSHIP LINCOLN PARK BOROUGH

TYPE GIRDER **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 48 ft **WIDTH** 30.2 ft

CONSTRUCTION DT 1925 **ALTERATION DT** 1974 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is on the tangent approach for a grade crossing elimination on the Boonton Line. To the northeast is a modern garden apartment complex and to the south is the Morris Canal (R-O-W, National Register) now filled and used as a local road. The bridge carries two lanes of traffic and two sidewalks over a minor watercourse.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed bridge is composed of reinforced concrete fascia girders with a 2-way slab spanning between the girders and the abutments. It was modified after 1972 when a steel bent was added under each girder at the south abutment and a concrete parapet was installed replacing any original railing. Although the span is not a common type, it is not technologically innovative. It has also been altered.

INFOR MATION

PHOTO: 505:21-22,128:11 (05/91) REVISED BY (DATE): QUAD: Pompton Plains

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1400261 **CO** MORRIS **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CHANGE BRIDGE ROAD OVER TRIBUTARY ROCKAWAY RIVER **FACILITY** CHANGE BRIDGE ROAD

TOWNSHIP MONTVILLE TOWNSHIP

TYPE T BEAM **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 27 ft **WIDTH** 52.3 ft

CONSTRUCTION DT 1925 **ALTERATION DT** 1970 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in a wooded mixed-use area where structures date primarily from the late 20th century. The bridge has been widened to accommodate four lanes of traffic across a minor tributary of the Rockaway River.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 1925 T-beam bridge was widened to the north with steel stringers in 1970 when the road was realigned and the width of the bridge doubled. A pipe railing with knuckles from the original structure survives on the south side and provides the only distinguishing feature. Alterations have reduced the integrity of the bridge, and it is not historically or technologically significant.

INFOR MATION

PHOTO: 504:21-22 (05/91) REVISED BY (DATE): QUAD: Caldwell

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1400267 **CO** MORRIS **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED RIVER ROAD OVER CROOKED BROOK **FACILITY** RIVER ROAD

TOWNSHIP MONTVILLE TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 38 ft **WIDTH** 33.8 ft

CONSTRUCTION DT 1925 **ALTERATION DT** 1991 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in a wooded, mixed-use area on a connector road. It carries two lanes of traffic and two sidewalks over a minor watercourse.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The short stringer bridge on concrete abutments is a representative example of the most common pre-World War II bridge type in the state. The high white railing of angles and channel appears to be a modern replacement for an earlier railing. Cover plates were welded to the bottom flanges in 1991. With no distinguishing characteristics, the bridge is neither technologically nor historically significant.

INFOR MATION

PHOTO: 504:25-26 (05/91) REVISED BY (DATE): QUAD: Pompton Plains

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1400273 **CO** MORRIS **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED TWO BRIDGES ROAD OVER POMPTON RIVER **FACILITY** TWO BRIDGES ROAD

TOWNSHIP LINCOLN PARK BOROUGH

TYPE PONY TRUSS **DESIGN** DOUBLE INTERSECTION WARREN **MATERIAL** Steel

 # SPANS 2 **LENGTH** 172 ft **WIDTH** 17.4 ft

CONSTRUCTION DT 1887 **ALTERATION DT** 1978 **SOURCE** PLAQUE

DESIGNER/PATENT **BUILDER** J. P. BARTLEY & CO.

SETTING / CONTEXT The narrow two-lane bridge is located in a flood plain of the Pompton and Passaic Rivers, with undeveloped, lightly wooded land contiguous. It carries a busy feeder road into Passaic County, over the Pompton River, just before its confluence with the Passaic River. An encased stringer bridge (ca. 1930) over the Passaic River is at right angles just southeast of the structure.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS DOE 05/09/80

SUMMARY The riveted pony truss is significant as the only surviving two-span truss and the only double-intersection Warren truss within the county. Further, it is an example by a small local fabricator, J.P. Bartley & Co., of Morris County. Alterations to the bridge include the addition of steel guiderails and concrete buttresses at the bearings. The floor system was replaced in 1978. Bartley-built bridges are also found in other counties.

INFOR MATION

PHOTO: 505:27-29 (06/91) REVISED BY (DATE): QUAD: Pompton Plains

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1400323 **CO** MORRIS **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED COZY LAKE ROAD OVER PEQUANNOCK RIVER **FACILITY** COZY LAKE ROAD

TOWNSHIP JEFFERSON TOWNSHIP

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 60 ft **WIDTH** 18.1 ft

CONSTRUCTION DT 1911 **ALTERATION DT** 1987 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located on the Pequannock Watershed of the City of Newark, a mix of wooded hills and open fields. The New York, Susquehanna & Western Railroad crosses at grade just north of the bridge. The structure carries a two-lane local road over the river.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The reinforced concrete deck arch is one of over nine similar bridges in the county. While it is the earliest, it is also the most altered. The channel welded channel rail and steel guiderail are 1987 replacements, and the entire arch was gunited in 1991, reducing its significance historically. A better example of a concrete deck arch is Summit Avenue in Chatham Borough (1400514).

INFOR MATION

PHOTO: 509:27-28 (06/91) REVISED BY (DATE): QUAD: Newfoundland

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1400351 **CO** MORRIS **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED ROCKAWAY VALLEY ROAD OVER STONEY BROOK **FACILITY** ROCKAWAY VALLEY ROAD

TOWNSHIP BOONTON TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 23 ft **WIDTH** 25 ft

CONSTRUCTION DT 1933 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in a rural setting, contiguous to the Dixon Farm (National Register, 8/29/77). A ca. 1760 Dutch stone farmhouse on the Dixon property sits close to the road near the bridge which carries two lanes of traffic plus two sidewalks over the outflow of Dixon's Pond.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY A representative example of the most common mid-20th century type in the state, the stringer bridge is not historically or technologically distinguished. The pipe railings with knuckles are original and in keeping with the rural setting. Ornamentation is limited to paneled fascia stringers. Although located next to a National Register-listed property, the bridge is outside the period of significance of Dixon Farm.

INFOR MATION

PHOTO: 505:36-37 (05/91) REVISED BY (DATE): QUAD: Boonton

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1400356 **CO** MORRIS **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BUSH ROAD (CR 603) OVER ROCKAWAY RIVER **FACILITY** BUSH ROAD (CR 603)

TOWNSHIP DENVILLE TOWNSHIP

TYPE PONY TRUSS **DESIGN** PRATT **MATERIAL** Steel

 # SPANS 1 **LENGTH** 76 ft **WIDTH** 17.1 ft

CONSTRUCTION DT 1894 **ALTERATION DT** 1951, 1988 **SOURCE** PLAQUE

DESIGNER/PATENT **BUILDER** CANTON BRIDGE COMPANY

SETTING / CONTEXT The bridge is located in a wooded, sparsely developed residential area within the flood plain of the Rockaway River. The one-lane bridge carries a county road over a major watercourse. It is inventoried in the Morris County Heritage Commission's Historic Sites Survey.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The heavily altered pin-connected half-hip Pratt pony truss retains little of its original character. Four pairs of vertical hangers, installed in 1988, support the floor beams. Welded repairs from the 1950s include outriggers, and gusset plates with steel bars to reinforce the diagonals and lower chord. Steel plate has been welded to form a peak on the top chord to discourage diving. Repairs have reduced the integrity of the bridge, which is one of over 8 Pratt pony trusses in the county.

INFOR MATION

PHOTO: 505:42-43 (05/91) REVISED BY (DATE): QUAD: Boonton

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1400385 **CO** MORRIS **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MOUNT PLEASANT AVENUE OVER MALAPARDIS BROOK **FACILITY** MOUNT PLEASANT AVENUE

TOWNSHIP HANOVER TOWNSHIP

TYPE STONE ARCH **DESIGN** BARREL **MATERIAL** Stone

 # SPANS 1 **LENGTH** 20 ft **WIDTH** 24.8 ft

CONSTRUCTION DT 1880ca **ALTERATION DT** Unknown **SOURCE** STYLE

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane street over a minor stream on the east edge of Whippany center. Mt. Pleasant Rd. was a turnpike incorporated in 1806 and used to transport iron from Rockaway Township to Newark. Much of the turnpike was improved as part of the 1930s NJ 10 project. This section was bypassed and remains a quiet road lined with altered 19th and 20th-century houses and modern commercial buildings. The area does not have historic district potential.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The rubble-coursed stone arch bridge is finished with ringstones and Green Pond conglomerate (puddingstone)-topped parapets. The east end of the north spandrel has concrete repairs, and a concrete toe wall has been added. The intrados has been gunited, and the pointing is modern. The 20' stone arch exhibits no fine stonework, is not original in appearance due to repointings, and is a small example of what is a common bridge type in the region. It is technologically undistinguished.

INFOR MATION

PHOTO: 511:11-12A,192: (06/91) REVISED BY (DATE): QUAD: Morristown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1400386 **CO** MORRIS **OWNER** COUNTY **MILEPOINT**

NAME & FEATURE INTERSECTED WHIPPANY ROAD (CR 622) OVER WHIPPANY RIVER **FACILITY** WHIPPANY ROAD (CR 622)

TOWNSHIP HANOVER TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 70 ft **WIDTH** 50.8 ft

CONSTRUCTION DT 1941 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in a commercial setting at the junction of a county road and NJ 10. The former Whippany Paper Board mill, contiguous to the bridge, has been adapted to modern office space. At one corner of the bridge is a Morris County Heritage Commission marker for the non-extant Ford/Budd Iron Works. The bridge carries four lanes of traffic and two sidewalks across a major watercourse.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased stringer is representative of state highway bridges built between the 1920s and 1940s. Concrete is used for the substructure as well as the pierced balustrade with square pylons, a common design detail on state bridges built prior to World War II. The skewed bridge is neither technologically distinctive nor historically significant.

INFOR MATION

PHOTO: 511:15A-16A (06/91) REVISED BY (DATE): QUAD: Morristown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1400387 **CO** MORRIS **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PARSIPPANY ROAD OVER MALAPARDIS BROOK **FACILITY** PARSIPPANY ROAD

TOWNSHIP HANOVER TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 4 **LENGTH** 61 ft **WIDTH** 40.3 ft

CONSTRUCTION DT Unknown **ALTERATION DT** 1963 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in the business district of Whippany, a village that developed in support of the paper industry, especially the Whippany Paper Board Company. The mills have closed, and, while some have been adapted to offices, most have disappeared. The bridge is between small businesses and a disused railroad.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY Rubble-coursed stone abutments indicate that a bridge was here prior to the present 4-span continuous slab superstructure, but its type and date are not documented in the County Engineer's records. The bridge was widened to the east in 1963, but plans only document the addition, not what was in place in 1963. The cantilevered sidewalks are carried on encased stringers, and they are enclosed by a metal fence-like railing. The slab bridge is historically and technologically undistinguished.

INFOR MATION

PHOTO: 511:9A-10A (06/91) REVISED BY (DATE): QUAD: Morristown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1400407 **CO** MORRIS **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED SMITH ROAD OVER EASTMANS BROOK **FACILITY** SMITH ROAD

TOWNSHIP PARSIPPANY-TROY HILLS TOWNSHIP

TYPE STONE ARCH **DESIGN** ELLIPTICAL **MATERIAL** Stone

 # SPANS 2 **LENGTH** 27 ft **WIDTH** 41.5 ft

CONSTRUCTION DT 1891 **ALTERATION DT** 1965 **SOURCE** PLAQUE

DESIGNER/PATENT UNKNOWN **BUILDER** ANDREW JACKSON TUERS

SETTING / CONTEXT The bridge is located in a mixed-use area of mid- to late- 20th century housing developments. Adjacent to the bridge is a modern firehouse. The structure is inventoried in the Morris County Historical Commission's Historic Sites Survey of1986-1987. It carries two lanes of traffic and two sidewalks over a minor watercourse.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span random ashlar stone bridge was widened on both sides with concrete slabs in 1965. While the stone parapets have been rebuilt and the original builder's plaque included in the west parapet, concrete replaces the original cap stones, and the stonework has been insensitively repointed. The bridge has little integrity and is not in a potential historic district. Other stone arches in Morristown and Mt. Arlington (1400855) are better technical examples and more historically important.

INFOR MATION

PHOTO: 504:31-33 (05/91) REVISED BY (DATE): QUAD: Morristown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1400414 **CO** MORRIS **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED TROY ROAD OVER TROY BROOK **FACILITY** TROY ROAD

TOWNSHIP PARSIPPANY-TROY HILLS TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 48 ft **WIDTH** 27.7 ft

CONSTRUCTION DT 1929 **ALTERATION DT** 1989 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in a wooded residential area with scattered single-family dwellings. The bridge carries two lanes of traffic over a minor watercourse. Once a quiet farm road, Troy Road is now a collector for two interstate highways within the township.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased stringer bridge on concrete abutments has been reinforced with Bailey trusses and two floor beams, a 1989 alteration made to accommodate heavier vehicles. While the bridge still retains its pipe railings, they are now behind the trusses which also occupy the sidewalks. The alterations have significantly reduced the integrity of the bridge. Neither span is technologically or historically significant.

INFOR MATION

PHOTO: 505:15-16 (05/91) REVISED BY (DATE): QUAD: Morristown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1400417 **CO** MORRIS **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED SOUTH BEVERWYCK ROAD (CR 637) OVER TROY BROOK **FACILITY** SOUTH BEVERWYCK ROAD (CR 637)

TOWNSHIP PARSIPPANY-TROY HILLS TOWNSHIP

TYPE STRINGER **DESIGN** JACK ARCH (CONCRETE) **MATERIAL** Steel

 # SPANS 1 **LENGTH** 36 ft **WIDTH** 28.6 ft

CONSTRUCTION DT 1919 **ALTERATION DT** 1980ca **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in a wooded residential area on a collector road. Adjacent to the bridge are well-maintained 18th- and 19th-century houses that are part of the hamlet of Old Troy that developed around the water-powered mills, none of which are still standing. The bridge, located at a bend in the road, carries two lanes of traffic over a minor watercourse.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The concrete jack arches between encased steel stringers bridge is a late example of the bridge type. There is no evidence of alteration to the substructure or the span, but modern guide rails have been added. One of two identified concrete jack arch bridges in the county, but it is not historically or technologically significant because of its age and size. Concrete jack arches from the 1900s and 1910s are not uncommon in New Jersey.

INFOR MATION

PHOTO: 505:17-18,128:12 (05/91) REVISED BY (DATE): QUAD: Morristown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1400431 **CO** MORRIS **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BLOOMFIELD AVENUE OVER ROCKAWAY RIVER **FACILITY** BLOOMFIELD AVENUE

TOWNSHIP PARSIPPANY-TROY HILLS TOWNSHIP

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 55 ft **WIDTH** 30.8 ft

CONSTRUCTION DT 1922 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in the wooded flood plain of the Rockaway River, known historically as Rockaway Neck, where scattered commercial structures with frontage on US 46 are accessed from Bloomfield Avenue. Part of the NJ 12 highway project, it carries two lanes of traffic and two sidewalks over a major watercourse.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The concrete deck arch bridge with a standard-design concrete parapet is one of over 9 similar structures in the county, of which this is the only one built as part of a state highway project. It is detailed with incised end posts like most other state bridges from before World War II. In good condition and largely unaltered, the bridge is not as elaborately detailed as Summit Avenue (1400514). The bridge is a representative example of its type and is not technologically noteworthy.

INFOR MATION

PHOTO: 503:3,504:4 (05/91) REVISED BY (DATE): QUAD: Caldwell

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1400432 **CO** MORRIS **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BLOOMFIELD AVENUE OVER ROCKAWAY RIVER **FACILITY** BLOOMFIELD AVENUE

TOWNSHIP PARSIPPANY-TROY HILLS TOWNSHIP

TYPE THRU GIRDER **DESIGN** PARTIALLY ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 80 ft **WIDTH** 30 ft

CONSTRUCTION DT 1921 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in a commercial area along the former NJ 12, one of the original 15 New Jersey highways created in 1917. Running parallel to US 46, the road now serves as a connector and accommodates vehicular access for businesses with frontage on US 46. The bridge is one of a pair that carry Bloomfield Avenue across the Rockaway River where it is divided by a small, narrow island in the flood plain of Rockaway Neck.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed built-up thru girder bridge with encased floor beams is supported on a concrete substructure. Concrete end posts incised with the date and highway number protect the ends of the girders. Survey data indicates that thru girders were frequently used on the original state highways for span greater then 50' prior to about 1925. This span is neither historically or technologically distinguished.

INFOR MATION

PHOTO: 604:5-6 (05/91) REVISED BY (DATE): QUAD: Caldwell

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1400451 **CO** MORRIS **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED COLUMBIA TURNPIKE (CR 510) OVER BLACK BROOK **FACILITY** COLUMBIA TURNPIKE (CR 510)

TOWNSHIP FLORHAM PARK BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 35 ft **WIDTH** 46 ft

CONSTRUCTION DT 1929 **ALTERATION DT** 1960 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a four-lane county road across a slow-moving stream in the Black Meadows, a wetland area. One small commercial establishment is adjacent to the bridge. The crossing dates from about 1817 when the Newark & Morris Turnpike was completed.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased steel stringer bridge on concrete abutments was widened to the south in 1960 with non-encased stringers. The modern concrete parapets with heavy gauge pipe railing appears to have been added to both sides at the same time. The bridge has lost its integrity of original design. It is one of over 50 stringer spans in Morris County, and it is not historically or technologically distinguished.

INFOR MATION

PHOTO: 511:31A-32A (06/91) REVISED BY (DATE): QUAD: Morristown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1400458 **CO** MORRIS **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED EAST MADISON AVENUE OVER SPRING GARDEN BROOK **FACILITY** EAST MADISON AVENUE

TOWNSHIP FLORHAM PARK BOROUGH

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 26 ft **WIDTH** 31.9 ft

CONSTRUCTION DT 1936 **ALTERATION DT** 1962 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in a wooded low-density residential area. A golf course is contiguous to the bridge, which carries two lanes of traffic and two walkways over a stream.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The stringer bridge supported on stone masonry abutments from an earlier bridge was widened with steel stringer in 1962. The abutments were also widened with concrete. The channel railings date from the 1962 work, and it is representative of the design used throughout the county since about 1960. The altered bridge is neither historically nor technologically distinguished.

INFOR MATION

PHOTO: 511:29A-30A (06/91) REVISED BY (DATE): QUAD: Morristown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1400467 **CO** MORRIS **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BROOKLAKE ROAD OVER SPRING GARDEN BROOK **FACILITY** BROOKLAKE ROAD

TOWNSHIP FLORHAM PARK BOROUGH

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 26 ft **WIDTH** 25.2 ft

CONSTRUCTION DT 1928 **ALTERATION DT** 1977 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is contiguous to a private golf course, a housing development under construction, and a wooded wetland area. The bridge carries two lanes of traffic across a minor watercourse.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The steel stringer bridge is similar to other short spans found throughout the state. Stone masonry abutments from an earlier span have been gunited and stone wingwalls have been repaired with concrete. The heavy gauge pipe railing and concrete parapets are modern replacements. Overall the bridge is undistinguishable from other rural bridges.

INFOR MATION

PHOTO: 511:27A-28A (06/91) REVISED BY (DATE): QUAD: Morristown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1400488 **CO** MORRIS **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BLUE MILL ROAD OVER SILVER BROOK **FACILITY** BLUE MILL ROAD

TOWNSHIP HARDING TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 2 **LENGTH** 31 ft **WIDTH** 21.4 ft

CONSTRUCTION DT 1919 **ALTERATION DT** 1950, 1985 **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in a picturesque setting below Silver Lake dam. The area is sparsely developed residential with late-18th and early 19th century dwellings. The grist mill that stood between the dam and bridge during the 19th century is no longer extant, while the miller's house, contiguous to the bridge, is in good repair. There is potential for a historic district that includes the lake with its stone dam, the miller's house, and other structures in the area.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 1919 portion of the stringer bridge is supported on rubble-coursed stone abutments. It was widened on the upstream side with stringers on concrete abutments in 1950. It was widened again in 1985 by anchoring ties in the upstream fascia beam and using those ties as the reinforcing for a slab extension. Anchor plates for the rods are exposed. A modern steel bent has also been added. The bridge has been too altered to be evaluated as significant.

INFOR MATION

PHOTO: 502:34-35,128:1-2 (05/91) REVISED BY (DATE): QUAD: Chatham

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1400506 **CO** MORRIS **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED GREEN VILLAGE ROAD OVER LOANTAKA BROOK **FACILITY** GREEN VILLAGE ROAD

TOWNSHIP CHATHAM TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 38 ft **WIDTH** 34.5 ft

CONSTRUCTION DT 1936 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is in a wooded residential setting east of Green Village center. Adjacent to the bridge is a well restored 18th century dwelling, while a mixture of 18th- and 19th-century single-family homes comprises the rest of the village. The bridge is part of a 1930s road alignment to eliminate a sharp curve, but is unrelated to development of the village. It does, however, contribute to the streetscape, giving a broad entrance to the village.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge is a good example of the concrete-encased steel stringer span with a concrete substructure. It has survived unaltered. Despite its condition, it is merely a representative and late example of the most common pre-World War II bridge type in the county, which has over 50 stringer bridges. It is not historically or technologically distinctive.

INFOR MATION

PHOTO: 502:23-24 (05/91) REVISED BY (DATE): QUAD: Chatham

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1400507 **CO** MORRIS **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED VILLAGE ROAD (CR 646) OVER SILVER BROOK **FACILITY** VILLAGE ROAD (CR 646)

TOWNSHIP HARDING TOWNSHIP

TYPE PONY TRUSS **DESIGN** PRATT **MATERIAL** Steel

 # SPANS 1 **LENGTH** 28 ft **WIDTH** 21.2 ft

CONSTRUCTION DT 1900 **ALTERATION DT** 1981 **SOURCE** STYLE

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The small pony truss is located in a picturesque, sparsely developed, residential area. The busy connector road crosses a minor watercourse on the two-lane bridge. A separate stringer span carries the sidewalk. The bridge is a non-contributing resource in the Green Village Historic District, recognized by the Morris County Heritage Commission and Planning Board. The county engineer has no data on the fabricator of the span.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Potential Historic District. Noncontributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 2-panel pin-connected half-hip Pratt pony truss has been altered with welded repairs. The cover plates, gusset plates, bars over the tension rods and bottom chord, outriggers, and channel railing and curbs date from 1981 and 1983. The stone abutments were built up with concrete in 1969 and 1983, shortening the span. The bridge has been so extensively altered that it has little integrity of original design. It is one of 9 Pratt pony trusses in the county. 9050001 is a more complete example.

INFOR MATION

PHOTO: 502:28-30 (05/91) REVISED BY (DATE): QUAD: Chatham

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1400514 **CO** MORRIS **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED SUMMIT AVENUE OVER PASSAIC RIVER **FACILITY** SUMMIT AVENUE

TOWNSHIP CHATHAM BOROUGH

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 75 ft **WIDTH** 24.1 ft

CONSTRUCTION DT 1916 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT SMITH(MORRIS), BAUER(PASSAIC) **BUILDER** FOSTER CONSTRUCTION CO.

SETTING / CONTEXT The bridge carries a 2-lane street and sidewalks over a river at the line between Morris and Passaic counties. The Morris side is a mix of modern industrial and late-19th century residential while the Passaic side is industrial and wooded. The river banks is known to have been the site of a paper board mill during the 19th century, but no above-ground mill buildings remain.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The handsome elliptical arch with attenuated proportions is the best example of its type in the county. Neither the earliest nor the longest, the bridge is the most architectonic and ambitious of the eight similar concrete arches. Built as a joint-county project, the well-detailed span is an excellent example of the City Beautiful movement. The unaltered bridge is highlighted by urn-shaped balustrades. It is significant as a fine example of the well-detailed joint-county spans in the area.

INFOR MATION

Bibliography:
Robinson, E. Robinson's Atlas of Morris County. 1887.
"Bridge Notice," The Jerseyman, July 9, 1886.
Cunningham, J. Chatham at the Crossing of the Fishawack.

Physical Description: The handsome and well-proportioned elliptical concrete deck arch bridge is a well-preserved example of its type and style. The arch springs from near the water line in a low elliptical curve. The closed spandrel panels are picked out with incising. Balustrades of reinforced concrete with classically-inspired urn-shaped balusters between paneled rectangular posts continue into the splayed approaches. The balustrade design is one of the most decorative and least altered found on any of the nine concrete deck arches in the county built between 1907 and 1944.

Historical and Technological Significance: Historically known as Edwards Mill Bridge because it is located at the crossing adjacent to the non-extant 19th-century mill, the bridge is the most significant local example of the handsome reinforced concrete deck arch bridges that were frequently used on county boundaries in the 1910s and 1920s. With its elegant balustrades and attenuated proportions, the bridge is more architectonic than most other concrete deck arches in the county. It is also a well-preserved example of a bridge type that was immensely popular during the same period, and it represents the application of aesthetic considerations to civic improvements that is the hallmark of the City Beautiful movement (Criterion C). Plaques on both ends of the bridge document that it was funded by both Union and Morris Counties and was designed by Frederick S, Smith, the Morris County Engineer and Jacob Bauer, the Union County Engineer.

Boundary Description & Justification: Because the bridge is evaluated as individually distinguished, the boundary is limited to the structure itself. The surrounding area does not appear to have historic district potential.

PHOTO: 501:30-33 (05/91) REVISED BY (DATE): QUAD: Chatham

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1400515 **CO** MORRIS **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WATCHUNG AVENUE (CR 646) OVER PASSAIC RIVER **FACILITY** WATCHUNG AVENUE (CR 646)

TOWNSHIP CHATHAM BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 82 ft **WIDTH** 25 ft

CONSTRUCTION DT 1925 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** JOHN W. HELLER COMPANY

SETTING / CONTEXT The bridge is in a mid-20th century industrial/commercial area. Historically, the crossing is known as Bonnel's Bridge due to the strong presence of the family in the immediate area since the mid-18th century and the Bonnel Dam which powered several mills, not of which are extant. The bridge carries two lanes of traffic and two sidewalks across a major watercourse that separates Morris County from Union County.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased stringer bridge with paneled parapets is representative of period technology. It utilizes concrete for the substructure and has a paneled parapet set with paneled posts. There is some deterioration of the concrete. The bridge is neither historically nor technologically distinctive, and it is one of over 50 stringer spans in the county.

INFOR MATION

PHOTO: 501:34-35 (05/91) REVISED BY (DATE): QUAD: Chatham

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1400516 **CO** MORRIS **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED STANLEY AVENUE OVER PASSAIC RIVER **FACILITY** STANLEY AVENUE

TOWNSHIP CHATHAM BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 88 ft **WIDTH** 36.3 ft

CONSTRUCTION DT 1929 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** CARTER H. HARRISON

SETTING / CONTEXT The Page Mill Bridge carries an unpaved road and two wide sidewalks across the Passaic River in a non-extant industrial hamlet known as Stanley, now a wooded area on the south end of the bridge and casually landscaped as a park on the north. While no above-ground resources of the roofing felt mill remain, the bridge was undoubtedly built to handle heavy traffic generated by that industry.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased stringer bridge with a concrete substructure is an example of a common type used throughout the state prior to World War II. Raised-panel parapets, splayed at the north approach, give the impression of a gateway to the span. The bridge is in good condition, but it is otherwise a representative example of the type. It is one of over 50 stringer bridges in the county. It is not historically or technologically distinguished.

INFOR MATION

PHOTO: 502:5-6 (05/91) REVISED BY (DATE): QUAD: Chatham

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1400520 **CO** MORRIS **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MOUNT VERNON AVENUE OVER PASSAIC RIVER **FACILITY** MOUNT VERNON AVENUE

TOWNSHIP CHATHAM TOWNSHIP

TYPE THRU GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 2 **LENGTH** 110 ft **WIDTH** 18.2 ft

CONSTRUCTION DT 1906 **ALTERATION DT** 1974, 1989 **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located within the Passaic River Park at the boundary of Union and Morris Counties. The park is used for hiking and fishing on the Union County side while the Morris County side is wooded, with a 1980 condominium complex abutting the river.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 03/12/01

SUMMARY The steel thru girder bridge is supported on stone masonry abutments and caisson-like concrete piers with built-up metal jackets. The rolled section floor beams are replacements and are not located in the position of the originals. When they were installed is not known. Other alterations include an open grid deck (1974) (original was concrete) and gunited masonry (1989). Two other bridges in Morris County from the 1890s (1400976, 1401021) have the same caisson-like piers. Information on the bridge is scanty. The superstructure has been greatly altered. The piers alone, which are found on earlier county bridges with design integrity, do not make the spans significant.

INFOR MATION

PHOTO: 502:7-8 (05/91) REVISED BY (DATE): QUAD: Chatham

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1400540 **CO** MORRIS **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED STONE HOUSE ROAD OVER PASSAIC RIVER **FACILITY** STONE HOUSE ROAD

TOWNSHIP PASSAIC TOWNSHIP

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 72 ft **WIDTH** 24.5 ft

CONSTRUCTION DT 1923 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in a wooded low-density residential area with scattered homes from the 19th century to present. The bridge carries two lanes of traffic over a watercourse that is trout-stocked and posted for recreational use.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The elliptical reinforced concrete deck arch span is one of over 9 similar county bridges built between 1911 and 1944. Ornamentation is limited to incised panels in the spandrels. Although it retains a pipe railing, it is an undistinguished representative example of its bridge type. Examples, like 1400514, with more elaborate detailing exist in the county. This bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 502:9-10 (05/91) REVISED BY (DATE): QUAD: Bernardsville

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1400541 **CO** MORRIS **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BASKING RIDGE ROAD (CR 657) OVER PASSAIC RIVER **FACILITY** BASKING RIDGE ROAD (CR 657)

TOWNSHIP PASSAIC TOWNSHIP

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 98 ft **WIDTH** 36.2 ft

CONSTRUCTION DT 1928 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT UNKNOWN **BUILDER** HENRY E. TERRILL

SETTING / CONTEXT The bridge is located in a sparsely developed, undistinguished, wooded residential area of the township. The bridge carries two lanes of vehicular traffic plus two wide sidewalks across the slow-moving river that serves as the boundary between Morris and Somerset counties.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The well-proportioned reinforced concrete deck arch bridge is finished with a distinctive lattice-panel concrete balustrade. It is a representative example of the well-detailed concrete deck arch spans built over the Passaic River by Morris, Passaic, Somerset, and Union counties in the 1910s and 1920s. The balustrade has numerous repairs. The bridge is not technologically distinctive, and more significant examples are 1400514 and 122B135.

INFOR MATION

PHOTO: 502:13-14 (05/91) REVISED BY (DATE): QUAD: Bernardsville

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1400561 **CO** MORRIS **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PLEASANT PLAINS ROAD OVER BLACK BROOK **FACILITY** PLEASANT PLAINS ROAD

TOWNSHIP PASSAIC TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 35 ft **WIDTH** 20.1 ft

CONSTRUCTION DT 1922 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is adjacent to the Great Swamp National Wildlife Refuge, a 7,200-acre wetland area. Once a through road, it has been closed to through traffic in the center of the refuge. The bridge carries two lanes of traffic over a slow-moving stream.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY Although standing in unaltered condition with its original pipe railing, the low-clearance encased stringer bridge is a representative example of the most common type of bridge in the state. It is not technologically or historically distinctive. The bridge is nicely finished with contrasting flat panels of exposed aggregate on the fascias.

INFOR MATION

PHOTO: 502:19-20 (05/91) REVISED BY (DATE): QUAD: Bernardsville

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1400563 **CO** MORRIS **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WHITEBRIDGE ROAD OVER PASSAIC RIVER **FACILITY** WHITEBRIDGE ROAD

TOWNSHIP PASSAIC TOWNSHIP

TYPE PONY TRUSS **DESIGN** WARREN **MATERIAL** Steel

 # SPANS 1 **LENGTH** 62 ft **WIDTH** 14.5 ft

CONSTRUCTION DT 1890ca **ALTERATION DT** 1952 **SOURCE** STYLISTICALLY

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located at the southwest corner of the Great Swamp National Wildlife Refuge, a 7,200 acre wetland area. It is also contiguous to the Lord Sterling Park, a rural park maintained by the Somerset County Park Commission. An 18th-century farmhouse with outbuildings is to the southeast of the bridge, which carries one lane of traffic and a sidewalk over a major watercourse. The bridge is casually mentioned but not inventoried in the Morris County Historic Sites Survey.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The Warren pony truss constructed of riveted back-to-back angles received a major rehabilitation in 1952 consisting of the addition of 15" channel welded to the top chord, welded angles added to various diagonals, outriggers, and a cantilevered sidewalk. The bridge is supported by steel columns welded to the bottom chord at all four bearing locations. The alterations compromise the design integrity of the structure and make it an undistinguished example of its type.

INFOR MATION

PHOTO: 502:15-18 (05/91) REVISED BY (DATE): QUAD: Bernardsville

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1400630 **CO** MORRIS **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED NJ 24 OVER BURNETT BROOK **FACILITY** NJ 24

TOWNSHIP MENDHAM TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 30 ft **WIDTH** 31.2 ft

CONSTRUCTION DT 1928 **ALTERATION DT** 1980ca **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in the sparsely developed Ralston area where structures are predominantly 18th to mid-19th century. The current state road carried on the bridge was incorporated as the Washington Turnpike in 1806 and has served as an east-west thoroughfare in the county since that time. On property contiguous to the bridge is the ca. 1848 Nesbit Mill, noted by a Morris County Historical Commission marker. The span carries a 2-lane state route over a minor watercourse.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The steel stringer bridge supported on stone abutments was widened with encased stringers on concrete abutment extensions. In addition to the replacement of the original railing with modern beam guide rails, 3 steel columns and a cap beam has been added to support the deteriorated stringers toward the north end of the original span. The bridge is not technologically innovative and is outside the period of significance of nearby Nesbitt Mill.

INFOR MATION

PHOTO: 506:17-18 (06/91) REVISED BY (DATE): QUAD: Chester

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1400639 **CO** MORRIS **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED ROXITICUS ROAD OVER NORTH BRANCH RARITAN RIVER **FACILITY** ROXITICUS ROAD

TOWNSHIP MENDHAM TOWNSHIP

TYPE PONY TRUSS **DESIGN** PRATT **MATERIAL** Steel

 # SPANS 1 **LENGTH** 56 ft **WIDTH** 19.8 ft

CONSTRUCTION DT 1934 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge is located next to the picturesque Pleasant Valley Farm with an 18th-century farmhouse, barns, and outbuildings adjacent to the bridge. The Morris County Historic Sites Survey notes the "beautiful views and pastoral setting" and casually mentions the bridge. Throughout the first half of the 20th century the farm was owned by former state senator Arthur Whitney.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible. Listed. Ralston Historic District. 02/20/1975. Contributing.

CONSULT DOCUMENTS SHPO Technical Assistance Letter 12/15/93.

SUMMARY The welded Pratt pony truss bridge is constructed of steel I-beams and channels with gusset plates at the connections. County records indicate that it was built for this crossing in 1934, but the stone substructure is earlier. It is well preserved with the only repair being replacement of one stringer in 1984. The bridge is technologically significant as an early example of a new technology; welding for all shop and field connections. It is one of the earliest all welded bridges in the state.

INFORMATION

Bibliography:
Green, W.K. and Wixom, C.W. "Welded Highway Bridge, Burlington County, New Jersey." The Welding Journal. Vol. 15 (April 1936). 12-16.
Grover, LaMotte. "Foreign Countries Lead U.S. in Welded Bridges." Engineering News-Record. 116 (May 14, 1936). 703-709.
Morgan, Nathan W. "Development of Welded Bridge Construction." Welding Journal. 32 (October 1953). 12-16.
Hess, Jeffrey. Benton Street Bridge (Iowa City, Iowa). HAER Report IA-30; 1989.

Physical Description: The 5-panel, 56'-long Pratt-type pony truss span is composed of rolled I- and channel-sections, and it is distinguished by the fact that it is totally welded. It is supported on rubble-coursed fieldstone abutments that predate this superstructure. Knee braces or outriggers are set on the outside of each truss, and the inner face is protected by plain metal railings welded to the trusses. The bridge appears to be unaltered with repairs being inkind rather than modifications to the original design.

Historical and Technological Significance: The 1934 truss bridge on Roxiticus Road ranks as one of the earliest all-welded pony truss spans in the state. It is technologically noteworthy because it is an early example of its type and represents the transition from riveted to welded connections in the bridge building (Criterion C). Because of its date of erection and state of preservation, the Roxiticus Road span was evaluated as the noteworthy example of the approximately one dozen welded pony truss bridges from the 1930s in the state.

Welded bridges appeared in the United States in the 1920s, but welding was not widely advocated for new bridge construction until immediately after World War II. Electric arch welding began in Europe in the 1880s. The first commercial welding in this country is thought to have been done by Baldwin Locomotive in 1902. It was used successfully during World War I to quickly repair and return confiscated German ships to war service, and after the war welding became a common fabrication practice in heavy industry. The building industry, however, was more cautious in embracing welding. General Electric and Westinghouse Electric both built welded structures in the 1920s. Westinghouse, in particular, was interested in showcasing any new technology allied with electricity, so the company was a leading proponent of electric-arc welding.

The first all-welded highway bridge was a traditional camelback pony truss bridge built in Poland in 1929. Its designer heralded the span as a great saver of material because the design required less steel to produce rigid joints than a riveted truss. Although welding became a common repair technique for bridges during the 1930s, its application to new construction was quite limited, especially in the United States. Of the approximately 1,000 pre-World War II welded bridges in the world, very few were of them were located in this country. But, rather than following Europeans' lead and experimenting with welded bridge designs, Americans tended to follow "the beaten path of riveted construction, the thought being that welding was replacing riveting." The Riverside bridge reflects well the pre-war thinking about all-welded bridges in this country.

During World War II welding came into its own as anything that could be welded together was. By 1945, it was the most important method of joining steel, and after the war all-welded bridges became the norm rather than the exception. Thus, the Riverside bridge stands as a record of the cautious American transition from riveted to welded bridges. Its technological and historical significance is enhanced by the fact that the bridge and its operating mechanism survive in a remarkably complete state of preservation.

Boundary Description and Justification: The bridge is individually significant on its own merits, and the boundary is limited to the bridge itself (superstructure and substructure including any wingwalls).

PHOTO: 506:21-23 (06/91 JPH (5/96)) REVISED BY (DATE): QUAD: Chester

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1400669 **CO** MORRIS **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED TINGLEY ROAD OVER WHIPPANY RIVER **FACILITY** TINGLEY ROAD

TOWNSHIP MENDHAM TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 39 ft **WIDTH** 20.2 ft

CONSTRUCTION DT 1931 **ALTERATION DT** 1985 **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is contiguous to the Lewis Morris Park of the Morris County Park System, a wooded recreational area developed only for trail use in this section. The road dates from the 18th century and the tail race of the 19th-century Connet mill passes through a culvert immediately to the north. Two 19th-century dwellings are adjacent to the bridge which carries a 2-lane road over a river. The bridge is within a large historic district noted for its country retreat estates.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Listed. Washington Valley Historic District 11/12/1992. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The steel stringer bridge is supported on earlier stone abutments. The modern replacement pipe railings date from 1985 when the deck was replaced. The altered bridge is neither historically not technologically distinguished. It is undated and undocumented in the nomination, and although it was built one year before the end of the era of the great estates in the valley, and the period of significance of the district, it does not contribute to a developed theme or area of significance.

INFOR MATION

PHOTO: 506:10-11 (06/91) REVISED BY (DATE): QUAD: Mendham

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1400681 **CO** MORRIS **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WHITEHEAD ROAD OVER WHIPPANY RIVER **FACILITY** WHITEHEAD ROAD

TOWNSHIP MORRIS TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 24 ft **WIDTH** 19.5 ft

CONSTRUCTION DT 1928 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in a rural, wooded area with scattered farms in the Washington Valley Historic District, recognized by the Morris County Heritage Commission. The one-lane bridge carries the road across a trout-stocked stream. In the nomination, which is based in large part of the development of the area for estates between 1881 and 1932. the bridge is incorrectly identified as "late-19th century" and is rated as contributing. Transportation themes are not in the nomination.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Listed. Washington Valley Historic District 11/12/1992. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The steel stringer bridge is supported on earlier stone abutments and wingwalls that were gunited in 1990. While the metal picket railing survives, it shows numerous welded repairs and modern replacement posts. Modern beam guard rail also has been attached it. The bridge is neither historically nor technologically distinguished. While it was built within the period of significance of the historic district, it does not contribute to the district themes or areas of significance.

INFOR MATION

PHOTO: 506:8-9 (06/91) REVISED BY (DATE): QUAD: Mendham

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1400684 **CO** MORRIS **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WASHINGTON VALLEY ROAD OVER WHIPPANY RIVER **FACILITY** WASHINGTON VALLEY ROAD

TOWNSHIP MORRIS TOWNSHIP

TYPE PONY TRUSS **DESIGN** PRATT **MATERIAL** Steel

 # SPANS 1 **LENGTH** 33 ft **WIDTH** 19.4 ft

CONSTRUCTION DT 1895ca **ALTERATION DT** Demolished **SOURCE** STLYE

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is in a rural area of the township. Although there are no existing historical resources in the immediate vicinity of the bridge, the area is part of the Washington Valley Historic District which is distinguished by its country estates developed between 1881 and 1932. The bridge contributes to the turn-of-the-century, rural character of the large historic district.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Bridge was Not Individually Eligible. Listed. Washington Valley Historic District 11/12/1992. Contributed.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed pin-connected Pratt half hip pony truss bridge rests on stone abutments. The built-up floor beams appear to be original, but the span has significant alterations, including a channel welded to the top chord and plate welded to the end posts. The railings welded to the verticals are also replacement. Because of the alterations the span is not individually significant, and its does contribute to the rural character of the district because of its type and date of construction.

INFOR MATION

PHOTO: 505:2-3.507:12 (06/91 JPH (5/96)) REVISED BY (DATE): QUAD: Mendham

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1400724 **CO** MORRIS **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED OLD MILL ROAD OVER BURNETT BROOK **FACILITY** OLD MILL ROAD

TOWNSHIP CHESTER TOWNSHIP

TYPE PONY TRUSS **DESIGN** PRATT **MATERIAL** Steel

 # SPANS 2 **LENGTH** 54 ft **WIDTH** 17.4 ft

CONSTRUCTION DT 1910 **ALTERATION DT** 1975 **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge is located in a wooded area at the boundary of Mendham and Chester Townships. The Morris County Heritage Commission Historic Sites Survey shows a photograph of the bridge, but discusses it only in the context of the Cramer saw mill site, an archaeological site to the southeast, and the miller's house to the north of the bridge. The bridge carries one lane of traffic across a wide brook.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY Originally a one-span pin-connected Pratt pony truss, the bridge has been altered. Welded repairs include gusset plates, reinforcements at all diagonals and the lower chords, and adding outriggers and cover plates. Most of the work dates from 1951. The concrete columns making it a 2-span bridge were added in 1975 when the floor beams and stringers were replaced. The bridge no longer performs as truss span. That and the numerous alterations compromise the technological and historical value.

INFOR MATION

PHOTO: 506:19-20 (06/91) REVISED BY (DATE): QUAD: Chester

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1400742 **CO** MORRIS **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED IRONIA ROAD OVER BLACK RIVER **FACILITY** IRONIA ROAD

TOWNSHIP CHESTER TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 29 ft **WIDTH** 18 ft

CONSTRUCTION DT 1925 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in a rural semi-wooded wetland. The watercourse is stocked for trout fishing and a gravel parking lot is adjacent to the bridge.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased steel stringer bridge with a concrete substructure and what appears to be an early if not original pipe railing is a representative example of the over 50 pre-World War II stringer spans that survive in the county. The short bridge is not historically or technologically significant. Pipe railings were once a common bridge railing.

INFOR MATION

PHOTO: 508:14A-15A (06/91) REVISED BY (DATE): QUAD: Chester

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1400765 **CO** MORRIS **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MILLBROOK AVENUE OVER MILL BROOK **FACILITY** MILLBROOK AVENUE

TOWNSHIP RANDOLPH TOWNSHIP

TYPE STONE ARCH **DESIGN** ELLIPTICAL **MATERIAL** Stone

 # SPANS 1 **LENGTH** 20 ft **WIDTH** 24.5 ft

CONSTRUCTION DT 1891 **ALTERATION DT** 1973 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located on a busy connector road in a wooded, residential area. Adjacent to the bridge is the 1884 Millbrook District School No. 6, a one-and-a-half story frame structure adapted as a residence. Inscribed in the capstones on the northeast approach are "WC 1906" and "WD 1917." The bridge carries two lanes of traffic over a brook.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 20'-long rubble-coursed elliptical stone arch bridge with its long stone approaches and parapets contains some Green Pond conglomerate (puddingstone). The intrados has been gunited (1973; 1990) and the approaches/parapets have been repaired and repointed several times. One of 10 stone arch bridges in the county, this one, which never exhibited fine stonework, is not a significant example because of its small size, date, and alterations, which include gunite and repointing.

INFOR MATION

PHOTO: 510:8-11 (06/91) REVISED BY (DATE): QUAD: Mendham

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1400779 **CO** MORRIS **OWNER** COUNTY **MILEPOINT** 0.0
NAME & FEATURE INTERSECTED OPENAKI ROAD OVER DEN BROOK **FACILITY** OPENAKI ROAD
TOWNSHIP DENVILLE TOWNSHIP
TYPE PONY TRUSS **DESIGN** PRATT **MATERIAL** Steel
 # SPANS 5 **LENGTH** 55 ft **WIDTH** 15.2 ft

CONSTRUCTION DT 1903 **ALTERATION DT** 1951 **SOURCE** PLAQUE
DESIGNER/PATENT UNKNOWN **BUILDER** DOVER BOILER WORKS

SETTING / CONTEXT The one-lane bridge is located in a wooded section on a county road that serves as a by-pass for a state highway. It is approximately ten feet below the stepped ashlar stone dam of Lake Openaki, a small private lake. Adjacent to the bridge is a well-maintained 18th-century dwelling. The southbound traffic that approaches the bridge on a bad curve has the right-of-way over the bridge.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes
CONSULT STATUS Individually Eligible.
CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY One of 10 pin-connected truss bridges in Morris county, the 3-panel half-hip Pratt pony truss bridge is the only county example of the Dover Boiler Works, a local fabricator active in the early 20th century. The fact that it is a locally made bridge is significant. While the span has been strengthened with pier bents on concrete pads, it has few welded repairs and retains its integrity. It also has all four maker plates, two cast-iron ball finials, and the bridge committee plaque.

INFORMATION

SOURCES:
Morris County Engineer's Office. Bridge File.
Darnell, Victor C. Directory of American Bridge-Building Companies 1840-1900. 1984.
Platt, Charles D. Dover Dates. 1922.
Morris County Freeholders Minutes, 1903-1907, 1934.
Kelly, Robert. Telephone conversation with B. Riley. 24 November 1991. (201-361-6026).

Physical Description: The 3-panel pin-connected half hip Pratt pony truss is a relatively complete example of its type. The top chord and inclined end posts are composed of channels with riveted cover plates while verticals are toe-in angles joined by lattice. Diagonals are pairs of 2" round bars with loop forged eyes, and turnbuckles are used in the middle panel only. The bottom chord is made up of drop-forged eye rods. Welded gusset plates have been added at the top and bottom panel points. The built-up riveted floor beams appear to be original, but they are strengthened by rolled I-beams placed below the original floor beams. Both beams are connected to the panel point by U-bolts. Strengthening knee braces were welded on the north verticals but not to the ones on the south end. Steel bents on a continuous concrete footing were added near the abutments and at the interior panel point in 1951, changing the bridge from a one-span to a 5-span structure. The 1975 asphalt-filled corrugated metal deck is a replacement for a plank floor. While a channel curb has been added to protect the truss members, the riveted lattice rail is apparently original to the structure.

Cast-iron plates are at each of the four corners identify the fabricator, with two on the west side retaining the ball finials. On the west side is a cast plaque bearing the date and names of the bridge committee members.

Abutments and wingwalls are stone, presumably built for the current bridge, as in most Morris County metal bridges. Gabions were added on the north end of the bridge in 1980.

Historical and Technological Significance: The Pratt half-hip pony truss bridge is significant in that it is the only Morris County example of a truss bridge by a local fabricator, the Dover Boiler Works. Dover Boiler Works was started in 1874 as a small repair shop doing hand repair work. It grow "into the largest and best equipped contract Plate Work Shop in the New York District and possibly the entire east" (Platt, p. 233). They manufactured a general line of steel plate work such as tanks, stand pipes, stills, dryers, bins, and steel shapes and plate like angles, channels, rivets, blots, and castings. The products were fabricated from materials secured from major steel mills in Pennsylvania and marketed for industrial use worldwide.

The company was established in 1874 by the Foster F. Birch who was succeeded by his son William F. Birch, who was active in national politics. It went into receivership in 1934 and the plant was destroyed by fire in 1935. While it is uncertain how important bridge fabrication was to the company, Dover Boiler Works was a major contractor for bridge repairs in Morris County from the early 1900s the company's end in the 1930s. The company also constructed stringer bridges throughout the county during this period.

Bridges fabricated by Dover Boiler Works have been identified in Somerset and Hunterdon Counties. Their 1903 Griggstown Causeway (18F0302) in Somerset County has numerous welded reinforcements that have compromised its integrity, but noteworthy examples of the work of the company that date to as late as 1919 are in place in Hunterdon County.

PHOTO: 509:5-6,510:4 (06/91) REVISED BY (DATE): QUAD: Mendham

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1400800 **CO** MORRIS **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED LAKE VALLEY ROAD OVER WHIPPANY RIVER **FACILITY** LAKE VALLEY ROAD

TOWNSHIP MORRIS TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 27 ft **WIDTH** 21.5 ft

CONSTRUCTION DT 1944 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is in a wooded setting in an undeveloped section of the township. The Patriot's Path, a public footpath maintained by the Morris County Park Commission and traversing the southern part of Morris County, is adjacent to the bridge. The crossing predates the current bridge as evidenced by the stone wingwalls and abutments. The bridge carries two lanes of traffic over the meandering Whippany River.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The short steel stringer bridge is supported on stone abutments with wingwalls that predate the superstructure. The bridge seats are concrete, and they were added when the stringers were installed in 1944. The simple railing is composed of channels, and it contributes to maintaining the rural character of the area. Overall, the bridge is a representative example of the over 50 stringer spans in the county, and it is not historically or technologically distinguished.

INFOR MATION

PHOTO: 501:11-12 (05/91) REVISED BY (DATE): QUAD: Morristown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1400801 **CO** MORRIS **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED LAKE ROAD OVER WHIPPANY RIVER **FACILITY** LAKE ROAD

TOWNSHIP MORRISTOWN TOWN

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 80 ft **WIDTH** 20.2 ft

CONSTRUCTION DT 1944 **ALTERATION DT** Demolished **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in a wooded setting and crosses the headwaters of Speedwell Lake. It is situated between the former right-of-way of the Rockaway Valley (Rockabye Baby) Railroad and a second bridge over the lake. The Patriot's Path, a public footpath maintained by the Morris County Park Commission, crosses the lake on the bridge. The structure is within the Historic Speedwell Historic District boundaries, but is a non-contributing structure based on its date of construction.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Bridge was Not Individually Eligible. Listed. Historic Speedwell Historic District. 11/13/1986. Noncontributed.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The elliptical concrete deck arch bridge built in 1944 incorporates the stone wing walls from previous span at what has been a crossing since at least the mid-19th century. The arch, with a pipe railing, is the latest of the 10 deck arches built in the county between 1911 and 1944. It has been altered by the addition of a sidewalk. The span is outside the period of significance of the historic district and is evaluated as not having historical or technological significance.

INFOR MATION

PHOTO: 501:3-4 (05/91) REVISED BY (DATE): QUAD: Morristown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1400802 **CO** MORRIS **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED LAKE ROAD OVER WHIPPANY RIVER **FACILITY** LAKE ROAD

TOWNSHIP MORRISTOWN TOWN

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 29 ft **WIDTH** 20.6 ft

CONSTRUCTION DT 1944 **ALTERATION DT** Demolished **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is in a wooded area at the head of Speedwell Lake, within the Historic Speedwell Historic District (National Register), a 19-th century industrial complex which used the lake as a power source. To the south is a 1944 concrete arch bridge and to the north is a nondescript 1950s residence and the former town dump, now used as a recycling center. With two lanes of traffic the bridge also carries a sidewalk for the Patriot's Path, a footpath maintained by the county.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Bridge was Not Individually Eligible. Listed. Historic Speedwell Historic District. 11/13/1986. Noncontributed.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The short bridge is constructed of rolled steel stringers with steel angles riveted to the to web. The bridge was built during World War II with stringers apparently reused from a another structure. Stone masonry abutments and wingwalls predate the superstructure. The white pipe railing is common among rural bridges. The superstructure is technologically undistinguished, and it was built after the period of significance of the Historic Speedwell Historic District so is thus non-contributing.

INFOR MATION

PHOTO: 501:5-6 (05/91) REVISED BY (DATE): QUAD: Morristown

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1400819 **CO** MORRIS **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED ESPANONG ROAD OVER LAKE HOPATCONG **FACILITY** ESPANONG ROAD

TOWNSHIP JEFFERSON TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 39 ft **WIDTH** 24 ft

CONSTRUCTION DT 1925 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located on a causeway over a cove at the northeast end of Lake Hopatcong, the largest lake in the state. Marinas are at both ends of the bridge, and substantial recreational marine traffic passes under the span. The two-lane road carried by the bridge is a connector for residents to shopping areas.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The simple steel stringer bridge is a representative example of the most common pre-World War II bridge type in the state. Concrete abutments and splayed wingwalls are painted to caution boaters of the restricted waterway. Recent alterations include replacing the original railing with welded channel railings with metal mesh. The structure is neither technologically innovative nor historically significant. It is one of over 50 stringer bridges in Morris County.

INFOR MATION

PHOTO: 509:39-40 (06/91) REVISED BY (DATE): QUAD: Dover

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1400855 **CO** MORRIS **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WINDEMERE AVENUE (CR 616) OVER GLEN BROOK **FACILITY** WINDEMERE AVENUE (CR 616)

TOWNSHIP MOUNT ARLINGTON BOROUGH

TYPE STONE ARCH **DESIGN** BARREL **MATERIAL** Stone

 # SPANS 1 **LENGTH** 36 ft **WIDTH** 32 ft

CONSTRUCTION DT 1893 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT UNKNOWN **BUILDER** THOMAS J. ALLEN

SETTING / CONTEXT The Glen Bridge is located in a wooded residential area on a busy connector road. Contiguous to the bridge is Tanglewood Glen Park, a wooded parkland created in the late 1880s when Mt. Arlington was being developed as a summer resort. While well outside the Mt. Arlington Historic District (National Register), the bridge is listed in the MCHC Historic Sites Survey, with comment on the late-19th-century combination of the picturesque and utility.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY Construction of the handsome barrel arch with stepped wingwalls was one of first public works projects in the newly formed borough of Mt. Arlington. The rusticated stonework and date in the keystone are similar to the Speedwell Bridge (1416152), by the same contractor. However, the setting, unique wingwalls, and relationship to the park and community, make the bridge historic in its own right. It is one of the few bridges in the county with an elevation in clear view from a public road.

INFOR MATION

Bibliography:
Robinson, E. Robinson's Atlas of Morris County. 1887.
Guter, R. Morris County Historic Sites Survey. 1986.

Physical Description: A well-proportioned barrel stone arch bridge that spans a small glen at the lower edge of a wooded public park, the span is virtually unnoticeable from the roadway. However, from a lower branch road there is an unobstructed view of the north elevation through a private land where the small stream of Windermere Brook flows. The random-coursed, rusticated stone barrel arch bridge with square voussoirs has flared stepped wingwalls. Both the span and the wingwalls are capped with large, rusticated granite slabs. On the inside faces of the parapets are stone tablets documenting the incorporation of the borough and the bridge commissioners. The date of construction is also cut into the keystones.

HISTORICAL AND TECHNOLOGICAL SIGNIFICANCE: The well-proportioned span is one of the aesthetically most pleasing examples of a stone arch bridge technology in the county. It was built as a civic amenity in an area of the county developed in the postbellum period as a summer resort for the wealthy, who arrived mainly by train and lake steamer. The bridge location, at the bottom of Tanglewood Glen Park, was between the North Park with its two hotels and large private residences, and the South Park, being developed as private residences. Tanglewood Glen Park, a wooded park with footpaths, served as a recreation area between the two major residential areas and continues to remain a public park.

With no alterations, the bridge is significant as an example of local stonework combining the picturesque with the functional purpose of spanning a small ravine. It is also representative the grand era of Lake Hopatcong resort hotels and the development of Mt. Arlington as a planned community that catered to the wealthy New York seasonal trade. While none of the hotels are have survived, a section of the single family houses remains, and it comprised the National Register-listed Mount Arlington North Park Historic District. The bridge is not within on the boundaries of the district.

Boundary Description and Justification: Because the bridge is individually significant, it is the span itself and its wingwalls that define the limits of the eligible resource.

PHOTO: 509:19-21 (06/91) REVISED BY (DATE): QUAD: Stanhope

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1400877 **CO** MORRIS **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED GREEN POND ROAD (CR 513) OVER HIBERNIA BROOK **FACILITY** GREEN POND ROAD (CR 513)

TOWNSHIP ROCKAWAY TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 26 ft **WIDTH** 47 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in a wooded, sparsely developed area of the township. The scattered houses are undistinguished 19th and 20th century structures. The bridge carries two lanes of traffic and two shoulders over the fast-moving brook.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The short skewed bridge is a reinforced concrete slab on a concrete substructure. The pipe railing with knuckles appears to be original. The bridge is not technologically or historically significant. The pipe railing is the most interesting feature of an otherwise undistinguished bridge.

INFOR MATION

PHOTO: 500:3A-4A (05/91) REVISED BY (DATE): QUAD: Boonton

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1400907 **CO** MORRIS **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED FORD ROAD OVER BEAVER BROOK **FACILITY** FORD ROAD

TOWNSHIP DENVILLE TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 27 ft **WIDTH** 16.5 ft

CONSTRUCTION DT 1900 **ALTERATION DT** 1980 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is in a wooded location at the edge of a commercial district of modern, one-story offices. It carries one lane of light traffic over a stream.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The ca. 1900 stringer bridge was widened in 1980 by adding five I-beams to the original six and installing a new deck and modern guiderails of heavy gauge steel pipe mounted in I-section posts set in a low concrete curb. The stone abutments have also been widened, and the substructure was partially gunited. While the original stringers remain, recent alterations have reduced the integrity and thus the historical and technological significance of the structure. It is an undistinguished span.

INFOR MATION

PHOTO: 505:44,1 (05/91) REVISED BY (DATE): QUAD: Boonton

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1400910 **CO** MORRIS **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED DIAMOND SPRING ROAD OVER ROCKAWAY RIVER **FACILITY** DIAMOND SPRING ROAD

TOWNSHIP DENVILLE TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 103 ft **WIDTH** 36 ft

CONSTRUCTION DT 1929 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT UNKNOWN **BUILDER** KEEP CONSTRUCTION COMPANY

SETTING / CONTEXT The bridge is located in an undistinguished, mixed-use area two blocks from the central business district. Known as the Calvin L. Lawrence Memorial Bridge, it honors 20th-century freeholder and township committeeman. Adjacent to the bridge on the southeast is a Morris County Heritage Commission marker for the nonextant Job Allen Iron Works, ca. 1730. The bridge carries two lanes of traffic and two sidewalks across the Rockaway River.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased stringer bridge on a concrete substructure is a representative example of its type and is not technologically distinguished. The bridge, finished with a plain concrete parapet, was gunited in 1974 and 1980. It is named in honor of a freeholder, but structures that are primarily commemorative are not evaluated as NR-eligible unless they are of "exceptional importance." The gunited stringer bridge is not of exceptional historical or technological importance.

INFOR MATION

PHOTO: 505:32-33 (05/91) REVISED BY (DATE): QUAD: Boonton

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1400917 **CO** MORRIS **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MOUNT PLEASANT TURNPIKE OVER DEN BROOK **FACILITY** MOUNT PLEASANT TURNPIKE

TOWNSHIP DENVILLE TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 25 ft **WIDTH** 17.3 ft

CONSTRUCTION DT 1925 **ALTERATION DT** 1978 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The one-lane bridge is located in a wooded, residential and recreational area. A wooded park is to the southeast of the bridge while scattered residences dating from the 19th and 20th centuries are to the north. The crossing itself dates to at least 1806 when the Newark and Mount Pleasant Turnpike was incorporated for transporting iron from the Dover area to the major markets. No resources from the turnpike are contiguous to the bridge.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The narrow steel stringer bridge is a representative example of a common type. While parts of the substructure are stonework from an earlier span, these were expanded with concrete for the current superstructure. Parts of the substructure have been gunited. Other alterations include the channel curbs and railings welded to I-section posts which were added when the deck was replaced in 1978. The bridge is neither historically nor technologically distinguished.

INFOR MATION

PHOTO: 509:3-4 (06/91) REVISED BY (DATE): QUAD: Mendham

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1400937 **CO** MORRIS **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BLOOMFIELD AVENUE OVER DEN BROOK **FACILITY** BLOOMFIELD AVENUE

TOWNSHIP DENVILLE TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 36 ft **WIDTH** 21 ft

CONSTRUCTION DT 1921 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in a commercial highway setting on a road that now serves as a two-lane exit ramp from NJ 46 to the Denville business district. It was built as part of the original state highway system for NJ 12 which followed Bloomfield Avenue in this area. Mid- to late-20th century commercial structures are scattered along US 46, with none contiguous to the bridge.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased stringer bridge with concrete balustrades is supported on stone abutments from an earlier span that were widened with concrete in 1921 to accommodate this superstructure. The sidewalk carried on steel stringers is a later addition. The bridge, one of over fifty stringer bridges in Morris County, is neither historically significant nor technologically distinctive.

INFOR MATION

PHOTO: 510:35-36 (06/91) REVISED BY (DATE): QUAD: Boonton

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1400951 **CO** MORRIS **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED RIDGE ROAD OVER RUSSIA BROOK **FACILITY** RIDGE ROAD

TOWNSHIP JEFFERSON TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 39 ft **WIDTH** 41.5 ft

CONSTRUCTION DT 1941 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in a heavily wooded area that is largely undeveloped. An altered early 20th-century dwelling is contiguous to the bridge on the southwest corner. The bridge carries two lanes of traffic, one shoulder, and a sidewalk over a minor watercourse.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The heavily skewed bridge is composed of stringers perpendicular to the concrete abutments and variable length stringers at each end between the seat and concrete encased fascias. While the configuration is not common, it is not unusual on a heavily skewed structure. One original pipe railing remains behind a guiderail. The stone and concrete substructure is similar to other county bridges. The poorly preserved bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 509:29-30 (06/91) REVISED BY (DATE): QUAD: Franklin

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1400956 **CO** MORRIS **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BERKSHIRE VALLEY ROAD (CR 699) OVER PEQUANNOCK RIVER **FACILITY** BERKSHIRE VALLEY ROAD (CR 699)

TOWNSHIP JEFFERSON TOWNSHIP

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 60 ft **WIDTH** 31 ft

CONSTRUCTION DT 1923 **ALTERATION DT** 1987 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is just below the dam of the Oak Ridge Reservoir on the Pequannock Watershed of the City of Newark. Open fields bordered by heavily wooded hillsides surround the bridge which carries two lanes of a county road over the watercourse.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The reinforced concrete arch bridge is similar to nine other elliptical deck arches in the county. It was rehabilitated in 1987 when Jersey-style parapets with steel rails were installed. The south abutment is continuous with a stone retaining wall that extends to the dam and predates the bridge. The altered span is neither historically nor technologically distinguished. 1400514 is a more significant example of the type.

INFOR MATION

PHOTO: 509:25-26 (06/91) REVISED BY (DATE): QUAD: Franklin

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1400965 **CO** MORRIS **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED DEWEY AVENUE (CR 642) OVER ROCKAWAY RIVER **FACILITY** DEWEY AVENUE (CR 642)

TOWNSHIP ROXBURY TOWNSHIP

TYPE THRU GIRDER **DESIGN** PARTIALLY ENCASED **MATERIAL** Steel

 # SPANS **LENGTH** 59 ft **WIDTH** 29.3 ft

CONSTRUCTION DT 1928 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT Historically known as Baker's Mill Bridge, the structure is located in a wooded, mixed-use area of the township. Late 20th-century residences and undistinguished commercial structures are adjacent to the bridge. It carries two lanes of traffic and one sidewalk across a major county watercourse.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed built-up thru girder with floor beams bridge is supported on concrete abutments that have been gunited. Cover plate has been welded to the top flange to strengthen the span. The sidewalk on the east side is separate from the girders. The steel approach rail set between concrete posts on the west side adds architectonic detail to an otherwise utilitarian bridge, but the structure is not technologically innovative or historically significant.

INFOR MATION

PHOTO: 509:22-23 (06/91) REVISED BY (DATE): QUAD: Dover

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1400976 **CO** MORRIS **OWNER** COUNTY **MILEPOINT** 0.0
NAME & FEATURE INTERSECTED EAST MAIN STREET OVER ROCKAWAY RIVER **FACILITY** EAST MAIN STREET
TOWNSHIP ROCKAWAY BOROUGH
TYPE STONE ARCH **DESIGN** ELLIPTICAL **MATERIAL** Stone
 # SPANS 3 **LENGTH** 93 ft **WIDTH** 33.1 ft

CONSTRUCTION DT 1840ca **ALTERATION DT** 1890, 1905 **SOURCE** STYLE/FREEHLDR MIN.
DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT Located at the end of Main Street in Rockaway, the bridge is a transition from the commercial center to a residential neighborhood. The area has mainly 19th-century structures, but some modern intrusions exists at the west end of the bridge. Just upstream is the dam for the forge and grist mill, both nonextant, owned by the Jackson and Halsey families during most of the 19th century.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No
CONSULT STATUS Individually Eligible.
CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 1840 well-proportioned 3-span stone arch bridge is reasonably well preserved on the east side which is finished with voussoirs. The west side was widened with concrete in 1905, but it retains the lines of the arches. A steel stringer sidewalk on east side dates to 1890 and is supported on stone abutments and steel caissons. It is a significant detail as is the survival of the lattice railing with cast-iron posts. The bridge is significant as an early stone arch span and for the caissons.

INFORMATION

Bibliography:
Beers, F.W., Ellis, A.D., & Soule, G.G. Atlas of Morris County. 1868.
Robinson. Robinson's Atlas of Morris County. 1887.
L. Lowenthal and W. T. Greenberg, Jr. Morris County Traction Company. 1984.
Morris County Freeholders Minutes. July 9, 1890, October 11, 1905.
Rockaway Borough Bicentennial Committee. Rockaway Borough, A History. 1976.

Physical Description: The well-proportioned 3-span elliptical stone arch bridge is constructed of rubble-coursed local stone. The arches spring from near the water line and are finished with ring stones. The width of the span was nearly doubled in 1905 with a concrete extension on the west side. The intrados of the arches have been gunited. A sidewalk on separate, continuously supported stringers on the east side was constructed added by the Riverside Bridge Company in 1890. It is supported by caissons-like concrete piers with built-up metal jackets that are aligned with the arch spandrels. The lattice railings retain some nice cast iron posts. Date of their installation is not known, but stylistically it appears to also date to the 1890s or 1900s.

The bridge carries the former Newark and Mount Pleasant Turnpike, chartered in 1806, over the Rockaway River at a point between the upper and lower mill ponds. Both dams are still extant, while the iron mills have been adapted to lighter industrial uses. The area does not retain its 19th century character and thus does not have historic district potential. There are numerous 20th-century intrusions.

Historical and Technological Significance: Although the original date of construction and the contractor of the 3-span stone arch bridge are unknown, the span appears to date to ca. 1840, Rockaway's proto-industrial era that was dominated by water-powered forging and rolling industries. The ca. 1840 bridge is one of the more complete early stone arch bridges in the county. Two modifications to the span, the 1905 widened with a concrete extension to accommodate the Morris County Traction Company's operation and the 1890 installation of a sidewalk supported on caisson-type built-up metal jacket piers, are technologically significant details in their own right, and they contribute to the technological importance of the bridge (Criterion C).

The 1890 stringer sidewalk on supported on caissons-like concrete-filled piers with built-up metal jackets was built by the Riverside Bridge Company of Paterson, NJ. This sidewalk arrangement is one of two such surviving examples in Morris County. The other sidewalk supported on caisson-like piers is at the North Sussex Street bridge over the Rockaway River in Dover (1401021), and it to was built by the Riverside Bridge Company in 1886. Each sidewalk was built to provide safe pedestrian passage at a 3-span stone arch in a busy industrial center. The caisson-like piers supporting the stringer sidewalk contributes to the technological significance of the bridge.

The widening of the bridge in 1905 was one of early improvements made by the Morris County Traction Company, an electric street railway, in its 10-year (1904-1914) effort to complete its line between Elizabeth and Lake Hopatcong. The traction company was responsible for the design and expense of the widening, but plans were to be approved by the Morris County Engineer. The widening was accomplished with a concrete span, making it one of the earliest extant uses of the then-new material in the county. The trolley ran on the new, concrete portion on the west side of the bridge.

Boundary Justification and Description: Because the bridge is individually distinguished, the boundary is limited to the span itself. The surrounding area contains some significant structures, but it does not have the integrity to be evaluated as a historic district.

PHOTO: 500:25A-28A (05/91) REVISED BY (DATE): QUAD: Dover

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1401002 **CO** MORRIS **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED EMMANS ROAD OVER DRAKES BROOK **FACILITY** EMMANS ROAD

TOWNSHIP ROXBURY TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 2 **LENGTH** 29 ft **WIDTH** 34.6 ft

CONSTRUCTION DT 1925 **ALTERATION DT** 1966, 1977 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in a mixed residential and commercial area of the township. To the northwest is a row of attached shops and a new machine shop, all of which bridge the stream. At the northeast corner is a 19th-century dwelling with little integrity. The bridge carries two wide lanes of traffic and two sidewalks over a fast moving stream.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed steel stringer bridge built in 1925 on a concrete substructure has been heavily altered. It was widened in 1966, and then strengthened in 1977 when new I-beams were placed between the existing stringers. Modern heavy gauge pipe railings replace the original. The integrity of the original design has been lost as has its historical and technological significance. The bridge is one of over fifty stringer spans built before World War II that survive in Morris County.

INFOR MATION

PHOTO: 508:22A-23A (06/91) REVISED BY (DATE): QUAD: Stanhope

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1401016 **CO** MORRIS **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MERCER STREET OVER ROCKAWAY RIVER **FACILITY** MERCER STREET

TOWNSHIP DOVER TOWN

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 45 ft **WIDTH** 35.5 ft

CONSTRUCTION DT 1910 **ALTERATION DT** 1975 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located one-half block off the main business street and is situated between commercial warehouses and a late-19th church with a little design integrity. It carries a 2-lane street over the river, which is paralleled by a disused railroad right-of-way. The river is a main feature in Dover. The area does not have National Register historic district potential.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The elliptical concrete deck arch bridge is one of 11 in the county, and it is one of the most altered of the group. A modern steel pipe rail set in I-section posts in a low concrete parapet replaces the original railing, and the arch has been gunited. As a result of the modifications, the span has little design integrity. A more complete example of this bridge type is Summit Avenue in Chatham (1400514).

INFOR MATION

PHOTO: 516:32A-33A (12/91) REVISED BY (DATE): QUAD: Dover

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1401020 **CO** MORRIS **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MORRIS STREET (CR 656) OVER ROCKAWAY RIVER **FACILITY** MORRIS STREET (CR 656)

TOWNSHIP DOVER TOWN

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 48 ft **WIDTH** 39 ft

CONSTRUCTION DT 1936 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT UNKNOWN **BUILDER** WHIPPANY CONSTRUCTION CO.

SETTING / CONTEXT The bridge is located within the central business district and is one of a series of bridges that cross the Rockaway River in the Town of Dover. The Blackwell Street Historic District (National Register) of 19th-century commercial structures crosses the river adjacent to, but does not include the bridge. A disused railroad crosses at grade, after which are modern buildings and parking lots. The bridge carries two lanes of traffic, two parking lanes, and two wide sidewalks.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased steel stringer bridge with concrete balustrades is a good representative example of its type. Abutments are concrete, but an earlier stone wingwall remains on the north side. The bridge is one of the over fifty pre-World War II stringer spans in the county, and it not technologically distinguished. The 1936 bridge does not date from the period of significance of the adjacent NR-listed historic district that uses the Rockaway River as its boundary. The bridge is not included.

INFOR MATION

PHOTO: 500:37A-38A (05/91) REVISED BY (DATE): QUAD: Dover

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1401021 **CO** MORRIS **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED NORTH SUSSEX STREET OVER ROCKAWAY RIVER **FACILITY** NORTH SUSSEX SREET

TOWNSHIP DOVER TOWN

TYPE STONE ARCH **DESIGN** ELLIPTICAL **MATERIAL** Stone

 # SPANS 3 **LENGTH** 82 ft **WIDTH** 39.6 ft

CONSTRUCTION DT 1825 **ALTERATION DT** 1886, 1938 **SOURCE** PLATT 1914 HISTORY

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is the within Blackwell Street Historic District (National Register) where it is an undetermined resource. Adjacent to the bridge are late 19th- and early 20th-century commercial buildings. A one-story structure faced with eclectic-styled pressed metal siding is cantilevered over the northeast arch of the bridge. During the mid-19th century a steel furnace stood at this corner of the bridge and the Morris Canal crossed the Rockaway River just east of the bridge.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Individually Eligible. Listed. Blackwell Street Historic District. 05/21/1982. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The three-span stone arch bridge of coursed random ashlar and sandstone voussoirs dates to 1825, and it is historically associated with the Morris Canal & Banking Company. It is thus a contributing resource to the historic district. Although altered several times (west sidewalk carried on caissons added in 1886: east cantilevered sidewalk and concrete balustrades added in 1938), the original arches are discernible. The span appears to be the oldest documented stone arch bridge in the county.

INFOR MATION

Bibliography:
Platt, C. Dover History. 1914.
Beers, F.W., Ellis, A.D., & Soule, G.G.. Atlas of Morris County, 1868.
Robinson, E. Robinson's Atlas of Morris County, 1887.
Riley, B. and Sellmer, G. "The Jackson Letter," North Jersey Highlander, 1991.
Kalata, B.N., A Hundred Years a Hundred Miles, 1983.
Sanborn Insurance Map of Dover. 1886, 1890, 1896.

Physical Description: The 35'-wide three-span stone arch bridge of local, coursed ashlar stone with red sandstone voussoirs was originally constructed in 1825 to carry two lanes of traffic. The west sidewalk, a separate stringer structure supported on concrete-filled riveted metal caissons, was added in 1886. The sidewalk was built by the Riverside Bridge Company, and the caissons are aligned with the mid-stream arch spandrels. The east sidewalk, a single-span stringer, is a 1938 replacement for an earlier sidewalk from which stonework pads for piers remain on the downstream side at the intermediate bases of the arches. The stone arch bridge and the two wide sidewalks appear as a unified whole from the roadway because of the 1938 reinforced concrete balustrades with rectangular piercing and plain pylons which form matching barriers on both sidewalks.

Historical and Technological Significance: The three-span stone arch bridge on North Sussex Street, the oldest surviving bridge in Dover, is located within the National Register-listed Blackwell Street Historic District which is recognized as significant in the area of transportation. Dover is a commercial center that grew around the water power of the Rockaway River, the abundant iron in the surrounding hills, and the transportation base of the Morris Canal. The bridge was built in 1825 by local contractors for the Morris Canal & Banking Company, builder of the Morris Canal which was complete here in 1826. The bridge is unrated in the 1982 National Register nomination, but it is evaluated as a contributing resource to the district based on its historical associations, date of construction, and state of preservation (Criterion C).

The first stretch of the canal to open in 1826 was the four-mile stretch between Dover and Rockaway. That section used water from the Rockaway River. Just east of North Sussex Street, the canal crossed the Rockaway River, passing through guard locks at each side of the river. At this time the old turnpike bridge on what is now Warren Street, west of North Sussex Street, was abandoned and North Sussex Street became the only river crossing in Dover.

While the stone arch is not technologically innovative, being used for centuries prior, the significance of the North Sussex Street Bridge is that its construction coincides with the birth of Dover as an industrial and commercial center. Before the Morris Canal, Dover was a hamlet with less than a dozen houses. But with a sizeable iron industry built along the Rockaway River and using charcoal as fuel, by the middle of the 19th century, only twenty-five years after the opening of the canal, Dover had become one of the four largest towns in Morris County. It remains a major commercial and population center.

Also of significance is the 1886 stringer sidewalk, which was debated heavily by the Board of Freeholders for several months. Several members did not feel that the Board was responsible for providing and maintaining footbridges. However, due to the heavy industrial traffic on the bridge, the Board voted in favor of pedestrian safety. The sidewalk is supported on caisson-type concrete piles with built-up metal jackets, an unusual detail that is found on one other bridge from the same period in Morris County (1400976). At that bridge, which carries E. Main Street over the Rockaway River in Rockaway Township, the caisson-type pile are also used to support a sidewalk.

Boundary Description & Justification: The bridge is located within a National Register-listed historic district, so it is surrounded by contributing resources. The bridge too contributes to the historic character of the district.

PHOTO: 500:39A-42A (05/91) REVISED BY (DATE): QUAD: Dover

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1401107 **CO** MORRIS **OWNER** COUNTY **MILEPOINT**

NAME & FEATURE INTERSECTED FLANDERS-DRAKESTOWN ROAD OVER SOUTH BRANCH RARITAN RIVER **FACILITY** FLANDERS DRAKESTOWN ROAD

TOWNSHIP MOUNT OILVE TOWNSHIP

TYPE STONE ARCH **DESIGN** BARREL **MATERIAL** Stone

 # SPANS 2 **LENGTH** 30 ft **WIDTH** 18 ft

CONSTRUCTION DT 1880ca **ALTERATION DT** **SOURCE** MARKS ON BRIDGE

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT Located at a T-junction, the bridge is in a heavily wooded section of the township with no structures in the immediate vicinity. Throughout the second half of the 19th century, the home of Louis B. Stephens, now non-extant, stood next to the bridge. An enclave of Stephens families lived just downstream, and they used the stream's water power for saw and grist mills. Members of the family carved their names in the capstones, one leaving the date "July 13, 1883."

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 03/12/01

SUMMARY The rubble-coursed fieldstone arch bridge with ringstones and corresponding stone parapets is one of two 2-span stone arches spans in the county (1401250). It has not been widened, but the intrados of each span has been gunited. The original cap stones have been replaced with concrete on the west side. Major character defining features such as the arch forms, the stone parapets, and the stone wing walls retain integrity. The structure is individually eligible for listing in the National Register of Historic Places under Criterion C as a representative example of stone arch bridge technology.

INFOR MATION

PHOTO: 508:7A,515:23A (06/91) REVISED BY (DATE): QUAD: Hackettstown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1401115 **CO** MORRIS **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED DRAKESTOWN ROAD OVER TRIBUTARY OF RARITAN RIVER **FACILITY** DRAKESTOWN ROAD

TOWNSHIP MOUNT OLIVE TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 35 ft **WIDTH** 13.3 ft

CONSTRUCTION DT 1917 **ALTERATION DT** 1977 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in a rural wooded area of the township. Two well maintained dwellings dating from the late 18th- or early 19th-century are contiguous to the bridge. The river is trout stocked and posted for fishing. The single-lane bridge carries a country road over one channel of the river, which is split by a small island.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The stringer bridge was modified in 1977 by welding new stringers to the top flange of the original stringers. New fascia stringers were also added to widen the structure. The ashlar abutments were gunited and new concrete caps were added as were channel railings. The altered bridge is neither technologically innovative nor historically significant.

INFOR MATION

PHOTO: 515:27A-28A (07/91) REVISED BY (DATE): QUAD: Chester

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1401119 **CO** MORRIS **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED NORTH FOUR BRIDGES ROAD OVER SOUTH BRANCH RARITAN **FACILITY** NORTH FOUR BRIDGES ROAD

TOWNSHIP WASHINGTON TOWNSHIP

TYPE PONY TRUSS **DESIGN** PRATT HALF HIP **MATERIAL** Steel

 # SPANS 2 **LENGTH** 57 ft **WIDTH** 13.4 ft

CONSTRUCTION DT 1896 **ALTERATION DT** 1963 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT CANTON BRIDGE COMPANY **BUILDER** CANTON BRIDGE COMPANY

SETTING / CONTEXT The bridge is a contributing resource within the Four Bridges Historic District, recognized by the Morris County Planning Board. Contiguous to the bridge is Sharp's Mill, a working water powered grist mill when the bridge was built and well into the 20th century. The bridge is below the mill dam, while in the immediate area are four early 19th-century houses and a large barn, all of which are contributing resources in the district. The one-lane bridge carries a connector road.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Historic District Status Unresolved.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 4-panel pin-connected half-hip Pratt pony truss bridge, one of 9 in the county, has lost its integrity of design. It was shored up with a center steel pier bent (1963). Other major alterations include welded strengthening to the lower portion of the verticals and steel channel to the upper chord. These alterations change the characteristics of the bridge. The stone abutments have been gunited. The original lattice railings remain. Alterations make the span technologically undistinguished.

INFOR MATION

PHOTO: 507:15-17 (06/91) REVISED BY (DATE): QUAD: Chester

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1401136 **CO** MORRIS **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED NETCONG FLANDERS ROAD OVER DRAKES BROOK **FACILITY** NETCONG FLANDERS ROAD

TOWNSHIP MOUNT OLIVE TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 3 **LENGTH** 31 ft **WIDTH** 32.2 ft

CONSTRUCTION DT 1930 **ALTERATION DT** 1966 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located on the edge of the village of Flanders. The bridge is bounded by light industrial and commercial structures on the north and wooded land on the south. It carries two lanes of traffic and two sidewalks over a minor watercourse.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The heavily altered stringer bridge retains only a small portion of its original fabric. Built as a single span bridge on concrete abutments, it has been modified by the addition two concrete pile bents in 1966. The bridge is now a continuous 3-span structure. Of its 17 stringers, 14 date from 1966 when the bridge was widened. The pipe railing is new, as are the steel guiderails. The bridge lacks integrity due to the alterations, and it is not historically or technologically significant.

INFOR MATION

PHOTO: 508:9A-10A (06/91) REVISED BY (DATE): QUAD: Chester

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1401147 **CO** MORRIS **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED HILLSIDE ROAD OVER BLACK RIVER **FACILITY** HILLSIDE ROAD

TOWNSHIP CHESTER TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 46 ft **WIDTH** 18.1 ft

CONSTRUCTION DT 1924 **ALTERATION DT** 1976 **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located within the Black River Green Acres Project, a wildlife management area. Wooded wetlands surround the bridge which carries two lanes of vehicular traffic over the slow-moving Black River.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The steel stringer bridge on a concrete substructure has transverse tie rods anchored with square nuts. The tie rods are apparently original to the structure. Modern channel railings date from 1976, the year the deck was replaced. The bridge is a example of the over fifty pre-World War II stringer span in the county, and it has no distinguishing features. It is altered, and it is neither historically nor technologically distinguished.

INFOR MATION

PHOTO: 506:28-29 (06/91) REVISED BY (DATE): QUAD: Chester

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1401150 **CO** MORRIS **OWNER** NJDOT **MILEPOINT** 1.74

NAME & FEATURE INTERSECTED NJ 10 OVER BLACK RIVER **FACILITY** NJ 10

TOWNSHIP RANDOLPH TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 23 ft **WIDTH** 95 ft

CONSTRUCTION DT 1934 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located in a commercial area on a state highway at the bottom of ramps connecting with a county road. The scattered businesses are late 20th century. The bridge carries four lanes of highway traffic, two ramps, and a grass median over a minor watercourse.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The short slab bridge is supported on a concrete substructure and has standard-design concrete balustrades. The span is a representative example of a common 20th century bridge type, and it has no distinguishing features. It was constructed as part of the development of NJ 10, and the name of the route and the date of construction are inscribed on the end posts, a common feature of state designed and built bridges since the early 1920s. The bridge is not technologically distinguished.

INFOR MATION

PHOTO: 508:18A-19A (06/91) REVISED BY (DATE): QUAD: Chester

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1401151 **CO** MORRIS **OWNER** NJDOT **MILEPOINT** 1.87

NAME & FEATURE INTERSECTED NJ 10 OVER SUSSEX TURNPIKE RAMP **FACILITY** NJ 10

TOWNSHIP RANDOLPH TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 52 ft **WIDTH** 100 ft

CONSTRUCTION DT 1935 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located on a commercially developed section of a state highway at its junction with a county road. The immediate area of the bridge is wooded. Built as part of the development of NJ 10 in the early 1930s, the bridge carries four lanes of traffic and two shoulders with grass medians over a two-lane county road.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed encased stringer bridge is supported on a concrete substructure. The concrete balustrades are a standard 1920s-1930s design, and the end posts are incised with the route number and date of construction. The bridge is well preserved, but it has no distinguishing features and is neither technologically nor historically significant.

INFOR MATION

PHOTO: 508:20A-21A (06/91) REVISED BY (DATE): QUAD: Chester

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1401156 **CO** MORRIS **OWNER** NJDOT **MILEPOINT** 7.1

NAME & FEATURE INTERSECTED NJ 10 OVER MILL BROOK **FACILITY** NJ 10

TOWNSHIP RANDOLPH TOWNSHIP

TYPE T BEAM **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 31 ft **WIDTH** 100 ft

CONSTRUCTION DT 1932 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT Located in a mixed-use area along a state highway, the bridge is adjacent to mid- to late-20th-century commercial and residential structures. The location is also lightly wooded. The bridge carries four lanes of traffic, two wide shoulders and sidewalks, and a grass median over a minor watercourse. It is on NJ 10, a 4-lane road from Ledgewood Circle in Roxbury to Eisenhower Parkway in Livingston.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY A representative example of its type, the 100'-wide T beam bridge on a concrete substructure has a standard design concrete parapet with end posts incised with the original route designation and date of construction. The short bridge is not technologically innovative, and it has no distinguishing features. It is one of over six T-beam bridges built in the county between 1928 and 1943.

INFOR MATION

PHOTO: 509:1-2 (06/91) REVISED BY (DATE): QUAD: Mendham

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1401158 **CO** MORRIS **OWNER** NJDOT **MILEPOINT** 8.15

NAME & FEATURE INTERSECTED NJ 10 OVER DEN BROOK **FACILITY** NJ 10

TOWNSHIP DENVILLE TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 23 ft **WIDTH** 83 ft

CONSTRUCTION DT 1932 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge that carries a 6-lane divided highway and one sidewalk is located in a modern commercial setting. It crosses a minor watercourse that remains wooded.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The short bridge is an undistinguished example of slab bridge technology. Both sides have W-section guiderail. Interestingly the road has been widened but the 83-foot width of the bridge appears to be original, evidenced by the date inscription on both fascias. The bridge is neither historically nor technologically significant. It is one of over 15 pre-World War II slab bridges in Morris County.

INFOR MATION

PHOTO: 510:12-13 (06/91) REVISED BY (DATE): QUAD: Mendham

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1401161 **CO** MORRIS **OWNER** NJDOT **MILEPOINT** 10.48

NAME & FEATURE INTERSECTED NJ 10 OVER MORRISTOWN LINE **FACILITY** NJ 10

TOWNSHIP MORRIS PLAINS BOROUGH

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 3 **LENGTH** 99 ft **WIDTH** 80 ft

CONSTRUCTION DT 1933 **ALTERATION DT** 1985ca **SOURCE** PLAQUE

DESIGNER/PATENT UNKNOWN **BUILDER**

SETTING / CONTEXT Located in a state highway setting, the bridge is adjacent to a garden apartment complex dating from the 1960s. A short loop of the Mount Pleasant Turnpike rejoins NJ 10 just west of the bridge.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The stringer bridge with concrete parapets was built in 1985 when the road was widened to six lanes. The 1933 abutments from the previous span were reused to support the ca. 1985 superstructure. Due to the recent date of construction of the superstructure and its common structural type, the span is evaluated as not historic.

INFOR MATION

PHOTO: 128:6 (06/91) REVISED BY (DATE): QUAD: Morristown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1401163 **CO** MORRIS **OWNER** NJDOT **MILEPOINT** 10.63

NAME & FEATURE INTERSECTED NJ 10 OVER NJ 53 **FACILITY** NJ 10

TOWNSHIP MORRIS PLAINS BOROUGH

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 84 ft **WIDTH** 80 ft

CONSTRUCTION DT 1933 **ALTERATION DT** 1985 **SOURCE** PLAQUE

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located in a wooded area where a 6-lane state highway crosses a 2-lane state road. Scattered commercial structures are along the highway while a disused swim club and a 1970s condominium complex are adjacent to the bridge along the state road.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The original superstructure was replaced with steel stringers in 1985 as part of the widening of NJ 10. The lower two-thirds of the 1933 concrete abutments were retained and reconditioned with new concrete caps. Due to the age of the superstructure, the bridge is evaluated as not historic.

INFOR MATION

PHOTO: 128:5 (06/91) REVISED BY (DATE): QUAD: Morristown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1401191 **CO** MORRIS **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED STEPHENSBURG ROAD STEPHENSBURG BROOK **FACILITY** STEPHENSBURG ROAD

TOWNSHIP WASHINGTON TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 2 **LENGTH** 29 ft **WIDTH** 15.5 ft

CONSTRUCTION DT 1917 **ALTERATION DT** 1950ca **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in a wooded rural setting contiguous to a farm with an early 20th century farmhouse and scattered outbuildings in poor condition. It is itemized in the Stephensburg Historic District, recognized by the Morris County Heritage Commission and the county Planning Board. The district is a densely developed hamlet containing a mill, dwellings, barns, and outbuildings from the mid-19th century. The bridge carries one lane of traffic across a minor watercourse.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Historic District Status Unresolved.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY Originally a single-span stringer bridge on ashlar abutments, it was changed to a 2-span bridge by the mid-20th century addition of a mid-span pier composed of concrete columns and a steel cap beam. The stone abutments and wingwalls have been capped and gunited. The most distinguishing feature are the lattice railings with some of the original well-detailed cast-iron posts. While the railings are noteworthy, the span itself is not technologically innovative nor an early example of its type.

INFOR MATION

PHOTO: 507:23-24 (06/91) REVISED BY (DATE): QUAD: Hackettstown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1401229 **CO** MORRIS **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED SCHOOLEY'S MOUNTAIN ROAD (CR 517) OVER SOUTH BRANCH RARITAN RIVER **FACILITY** SCHOOLEY'S MOUNTAIN ROAD (CR 517)

TOWNSHIP WASHINGTON TOWNSHIP

TYPE STONE ARCH **DESIGN** ELLIPTICAL **MATERIAL** Stone

 # SPANS 4 **LENGTH** 106 ft **WIDTH** 23 ft

CONSTRUCTION DT 1876 **ALTERATION DT** **SOURCE** NATIONAL REG. NOMIN.

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge is located in the heart of the German Valley Historic District comprised of 76 residential, industrial, commercial, and public buildings dating from the late 18th through the early 20th centuries. The bridge is inventoried as a contributing structure to the district. It carries a narrow two-lane road over a major watercourse.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Not Individually Eligible. Listed. German Valley Historic District. 07/14/1983. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The random-coursed stone elliptical arch bridge with a slight vertical profile is characteristic of the stonework that is strongly associated with the German Valley area. It is the longest and only 4-span stone arch bridge in the county. The west side is the better preserved with its low parapet with capstones. Alterations to the east side include a concrete replacement parapet, steel guiderail, and a steel stringer sidewalk installed in 1976. However, the integrity of the bridge survives.

INFOR MATION

PHOTO: 507:18-19 (06/91) REVISED BY (DATE): QUAD: Hackettstown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1401250 **CO** MORRIS **OWNER** COUNTY **MILEPOINT**

NAME & FEATURE INTERSECTED HACKLEBARNEY ROAD OVER BLACK RIVER **FACILITY** HACKLEBARNEY ROAD

TOWNSHIP CHESTER TOWNSHIP

TYPE STONE ARCH **DESIGN** ELLIPTICAL **MATERIAL** Stone

 # SPANS 2 **LENGTH** 21 ft **WIDTH** No Data

CONSTRUCTION DT 1885 **ALTERATION DT** **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in a bucolic 19th-century village setting on an unpaved road bordering Black River Park, an undeveloped county park. A 3 1/2-story stone grist mill is at the northwest corner of the bridge and the mill's tail race passes under one of its spans. The bridge is a contributing structure in the Lower Hacklebarney Historic District, recognized by the Morris County Heritage Commission. The district has National Register potential.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Individually Eligible. Potential Historic District. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 2-span stone arch bridge with arches of unequal dimensions is the only surviving bridge in the county built to accommodate a tail race. The ca. 1830 stone grist mill abuts the northwest wingwall of the bridge. The bridge is well preserved, save for gunited intrados. The original 4" slate capstones with "iron staples" finish the parapets. The mill and bridge are individually distinguished because of their age and condition, and they are significant elements in a potential historic district.

INFOR MATION

Bibliography:
Guter, R. Morris County Historic Sites Survey. 1986.
Greenidge, F. Chester, New Jersey, A Scrapbook of History. 1974.

Physical Description: The 2-span rubble-coursed with ring stones stone arch bridge is part of a picturesque 19th-century hamlet that grew around the water power provided by the Black River. The 21'-long main span of the bridge accommodates the river while a smaller span of approximately 10' crosses the mill tail race. The ca. 1830 rubble-coursed stone mill forms the northwest wingwall of the bridge. The parapets are of linearly varying height, to a maximum of 3' in the center and diminishing to grade level at the ends. Capstones of 4" slate are connected with iron staples. The southwest parapet is tied into a retaining wall at right angles to the bridge along the west bank of the river.

The intrados of each arch was gunited in 1981.

The integrity of setting that the bridge enjoys is remarkable, and it contributes greatly to the significance of the structure.

Historical and Technological Significance: The undocumented ca. 1830 2-span stone arch bridge is an integral part of the bucolic hamlet of Lower Hacklebarney with its early 19th-century houses, ca. 1830 stone grist mill to which the bridge is contiguous, stone dam, and mill pond. While the mill and bridge are individually significant as well-preserved examples of their structural types, made all the more significant because they were, it is believed, built and worked in tandem, they are also contributing structures in a larger context; the well-preserved nuclear village (Criterion C). The settlement, composed of seven (7) structures, is a good representative example of the small population centers that developed around water-powered mills in the early and middle 19th century. The type and style of buildings clearly reflect the economic basis for the settlement. The architectural significance of lower Hacklebarney is enhanced by the picturesque quality of its unspoiled setting.

While the technology reflected in the stone arch bridge is not innovative for ca. 1830, the incorporation of the a span into the grist mill structure is not common. The mill shows no alterations or additions, but the arches of the bridge were gunited, and the spandrel walls were repointed in a sensitive manner. The dirt road is paved over the deck of the bridge. The bridge ranks as one of the several historically significant stone arch span in Morris County, which has a strong stone arch bridge tradition. It is evaluated as a noteworthy example of the bridge type, in part, because of its physical and historical connection with the mill and the surrounding village.

Boundary Description and Justification: The bridge is one element in an architecturally significant setting that appears to meet the criteria for inclusion in the National Register as a historic district. Thus the bridge, its wingwalls, contiguous stone grist mill and surrounding land are evaluated as significant. Defining the boundaries of the potential historic district are beyond the scope of this survey.

PHOTO: 515:5A-7A (07/91) REVISED BY (DATE): QUAD: Chester

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1401268 **CO** MORRIS **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WEST VALLEY BROOK ROAD OVER SOUTH BRANCH RARITAN RIVER **FACILITY** WEST VALLEY BROOK ROAD

TOWNSHIP WASHINGTON TOWNSHIP

TYPE PONY TRUSS **DESIGN** PRATT HALF HIP **MATERIAL** Ferrous

 # SPANS 1 **LENGTH** 49 ft **WIDTH** 16 ft

CONSTRUCTION DT 1897 **ALTERATION DT** 1950ca **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT WROUGHT IRON BRIDGE CO. **BUILDER** WROUGHT IRON BRIDGE CO.

SETTING / CONTEXT The bridge is located in a wooded area of overgrown farmland. Adjacent to the bridge is a one-and-a-half story early- to mid-19th-century farmhouse reworked to appear Victorian. The bridge carries a single lane of a rural road over a trout-stocked river which forms the boundary of Morris and Somerset Counties.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The three-panel pin-connected half-hip Pratt pony truss bridge, one of over 10 in the county, has been altered significantly by welded members added mid-century to strengthen the trusses. They include diagonals, gusset plates at the panel points, and cover plate welded to the verticals and top chords. The span no longer functions as a pin-connected bridge and has lost its design integrity. It is neither historically nor technologically significant due to the alterations.

INFOR MATION

PHOTO: 507:20-22 (06/91) REVISED BY (DATE): QUAD: Califon

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1402150 **CO** MORRIS **OWNER** NJDOT **MILEPOINT** 13.85

NAME & FEATURE INTERSECTED NJ 10 OVER MALAPARDIS BROOK **FACILITY** NJ 10

TOWNSHIP HANOVER TOWNSHIP

TYPE RIGID FRAME **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 25 ft **WIDTH** 69 ft

CONSTRUCTION DT 1932 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located in a wooded section between commercial areas on a state highway. It carries four lanes of traffic separated by a Jersey-type barrier plus two shoulders and a narrow grass band across a minor watercourse. The bridge was part of a new alignment in 1932 when the state highway, which generally followed the old Newark and Mt. Pleasant Turnpike, bypassed the business district of Whippany.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed bridge consisting of a reinforced concrete slab on concrete abutments is representative of short bridge in the state highway projects of the 1930s. The concrete balustrade with continuous piercing set between plain posts, incised with the highway route number and date are also common to the period. The bridge is neither technologically nor historically significant. It is one of over 15 slab bridges in Morris County.

INFOR MATION

PHOTO: 511:13A-14A (06/91) REVISED BY (DATE): QUAD: Morristown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1402151 **CO** MORRIS **OWNER** NJDOT **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PARSIPPANY ROAD (CR 511) OVER NJ 10 **FACILITY** PARSIPPANY ROAD (CR 511)

TOWNSHIP HANOVER TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 83 ft **WIDTH** 30 ft

CONSTRUCTION DT 1931 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located in a wooded section where a county road crosses a state highway with limited access. Properties along the highway are commercial. The 19th- and 20th-century structures along the county road are either residential or offices of residential character, enhanced by the tree-lined road. The bridge is part of the Whippany bypass of the NJ 10 project of the 1930s and carries two lanes of traffic plus two sidewalks over a four-lane highway.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed encased stringer bridge is supported on a concrete substructure. The paneled concrete abutments are incised with the date and highway number, while posts with Moderne detailing unite the sub- and superstructure which is finished with concrete balustrades. The bridge is a representative example of the handsome spans the state was building during its ambitious 1920-1930s highway expansion programs. Although well preserved, the bridge is not technologically distinctive.

INFOR MATION

PHOTO: 511:7A-8A (06/91) REVISED BY (DATE): QUAD: Morristown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1402152 **CO** MORRIS **OWNER** NJDOT **MILEPOINT** 15.7

NAME & FEATURE INTERSECTED NJ 10 OVER WHIPPANY RIVER **FACILITY** NJ 10

TOWNSHIP HANOVER TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 91 ft **WIDTH** 50 ft

CONSTRUCTION DT 1931 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located in a commercial area of a heavily travelled state highway at the junction with a major county road. A large corporate headquarters at the intersection and a golf driving range is along the river. The early 1930s highway follows the route of the Newark and Mount Pleasant Turnpike, incorporated in 1806, and one of the early improved roads in the county. The bridge carries a 4-lane divided highway plus two sidewalks over a major watercourse.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span encased stringer bridge is supported on a concrete substructure with horizontal scoring, a common detail found on other NJ 10 and US 46 bridges from ca. 1930, as is the reinforced concrete balustrade. Paneled concrete end posts are incised with the highway number and date, also a standard state highway design. The bridge is not significant technologically or historically. It is one of over 50 Pre-World war II stringer bridges in the county.

INFOR MATION

PHOTO: 511:17A-20A (06/91) REVISED BY (DATE): QUAD: Morristown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1402153 **CO** MORRIS **OWNER** NJDOT **MILEPOINT** 17.71

NAME & FEATURE INTERSECTED NJ 10 OVER PASSAIC RIVER **FACILITY** NJ 10

TOWNSHIP EAST HANOVER TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 108 ft **WIDTH** 50 ft

CONSTRUCTION DT 1931 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located on a heavily travelled state highway lined with commercial establishments, predominantly from the late 20th century. Built as part of the NJ 10 highway project of the 1930s, the bridge is on a section of road that bypassed the village of Hanover. It carries a divided 4-lane highway and two sidewalks over a major watercourse that forms the eastern boundary of Morris County. NJ 10 was 4-laned from Ledgewood Circle in Roxbury to Eisenhower Parkway in Livingston.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The three-span encased stringer bridge has scored concrete abutments and piers and concrete balustrades set between plain posts incised with the date and route number. The structure is similar in style and type to others on the route, and it is not technologically innovative or historically significant. It is one of over 50 pre-World War II stringer bridges in the county.

INFOR MATION

PHOTO: 511:25A-26A (06/91) REVISED BY (DATE): QUAD: Caldwell

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1404151 **CO** MORRIS **OWNER** NJDOT **MILEPOINT** 2.43

NAME & FEATURE INTERSECTED NJ 15 SB OVER UNION TURNPIKE (MAIN STREET) **FACILITY** NJ 15 SOUTHBOUND

TOWNSHIP WHARTON BOROUGH

TYPE T BEAM **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 54 ft **WIDTH** 44 ft

CONSTRUCTION DT 1943 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located on a state highway at a T-junction with a local road. It carries four lanes of NJ 15 Southbound over a two-lane access ramp at a wooded intersection. At the upper level are scattered residences while commercial structures are at the lower level. The bridge was built as part of the NJ 15 highway project during the 1940s.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed T beam bridge is supported on a concrete substructure and has the same style concrete balustrades as other NJ 15 spans. The end posts have Moderne detailing. Although the bridge is well preserved, it is not historically or technologically significant. It is one of 8 T-beam bridges identified as being built as part of state highways in Morris County between 1926 and 1943.

INFOR MATION

PHOTO: 509:43-44 (05/91) REVISED BY (DATE): QUAD: Dover

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1404154 **CO** MORRIS **OWNER** NJDOT **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED GOVERNMENT ROAD OVER NJ 15 NB **FACILITY** GOVERNMENT ROAD

TOWNSHIP WHARTON BOROUGH

TYPE T BEAM **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 3 **LENGTH** 82 ft **WIDTH** 26 ft

CONSTRUCTION DT 1943 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located at the exit of the U.S. Army Armament Research, Development and Engineering Center (Picatinny Arsenal). It carries a two-lane exit road and two sidewalks from the arsenal over the two northbound lanes and two sidewalks of NJ 15 North. Although dating from War II, is was built to maintain the right-of-way to the Government Road over the newly constructed northbound lanes of NJ 15. Its history is therefore independent of the war effort.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The well-detailed skewed continuous T beam bridge on a concrete substructure has piers with Moderne detailing uniting the sub- and superstructure. The concrete balustrade is a standard design of the period. T beams are a well represented bridge type with over 8 pre-World War II examples in Morris County alone. The well-preserved bridge is not technologically significant, nor is there any historical association with wartime national security.

INFOR MATION

PHOTO: 500:5A-7A (05/91) REVISED BY (DATE): QUAD: Dover

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1404155 **CO** MORRIS **OWNER** NJDOT **MILEPOINT** 2.6

NAME & FEATURE INTERSECTED GOVERNMENT ROAD OVER GREEN POND BROOK **FACILITY** GOVERNMENT ROAD

TOWNSHIP WHARTON BOROUGH

TYPE ARCH **DESIGN** BARREL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 36 ft **WIDTH** No Data

CONSTRUCTION DT 1943 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is 300 yards west of the junction of the Picatinny Arsenal exit road with the southbound lanes of a state highway. Formerly a grade-level crossing, the bridge was built as part of the NJ 15 project to preserve the arsenal right-of-way to the Union Turnpike, now NJ 15 SB. It is just east of 1404154, also built in 1943. The bridge figured in a 1970 boundary dispute between Rockaway Township and Wharton Borough, due to a boundary stone being buried when the bridge was built.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The well-proportioned barrel concrete arch bridge with the spring line well above the water line has flared wing walls. The sidewalks are enclosed by the same design concrete balustrades as nearby 1404154 built at the same time. Although the only example of a barrel-shaped concrete arch bridge in the county, the span is not historically or technologically distinguished. The high spring line and high spandrels were necessary because the bridge maintains the grade of an overpass.

INFOR MATION

PHOTO: 501:1,44 (05/91) REVISED BY (DATE): QUAD: Dover

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1404156 **CO** MORRIS **OWNER** NJDOT **MILEPOINT** 2.8

NAME & FEATURE INTERSECTED NJ 15 NB OVER GREEN POND BROOK **FACILITY** NJ 15 NORTHBOUND

TOWNSHIP ROCKAWAY TOWNSHIP

TYPE T BEAM **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 45 ft **WIDTH** 44 ft

CONSTRUCTION DT 1943 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge is located in a wooded section of a divided state highway contiguous to the U.S. Army Armament Research, Development, and Engineering Center (Picatinny Arsenal). Built as part of the state highway project, the bridge carries the brook into a rerouted channel between in the center median.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The concrete T beam span is similar to others in the county built between 1926 and 1943 on state highways. The use of concrete for all structural and ornamental parts of the bridge is seen in many others in the state. The balustrades and incised end posts with Moderne detailing are similar to other spans on the route. The bridge has no historical or technological distinction. It is one of 8 identified T-beam span built between 1926 and 1943 on state routes in the county.

INFOR MATION

PHOTO: 500:8A,516:36A (05/91) REVISED BY (DATE): QUAD: Dover

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1405153 **CO** MORRIS **OWNER** NJDOT **MILEPOINT** 15.18

NAME & FEATURE INTERSECTED NJ 23 OVER STONE HOUSE BROOK **FACILITY** NJ 23

TOWNSHIP BUTLER BOROUGH

TYPE RIGID FRAME **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 2 **LENGTH** 23 ft **WIDTH** No Data

CONSTRUCTION DT 1934 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT Located in an area of mixed commercial and residential use, the bridge is on a heavily travelled state highway. To the north of the bridge is woodland of the Yungborn Sanitorium, a former summer health community with no integrity. Land from this community was purchased by the state for the highway. The bridge carries four lanes of traffic, wide shoulders, and a grass median over a brook.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The reinforcing of the side walls extends into the deck slab making the skewed, 2-span bridge a rigid frame span. It has flared wing walls. The western span has a gravel floor that carries the brook while the eastern span has an invert slab floor at a higher level for overflow. The bridge is not a common type in New Jersey, but it is not historically or technologically significant. The design is one type of 2-cell culvert. More significant rigid frame bridges are in Hudson County.

INFOR MATION

PHOTO: 503:34-44,1 (05/91) REVISED BY (DATE): QUAD: Pompton Plains

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1405154 **CO** MORRIS **OWNER** NJDOT **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MAPLE LAKE ROAD (MILLER ROAD) OVER NJ 23 **FACILITY** MAPLE LAKE ROAD (MILLER ROAD)

TOWNSHIP BUTLER BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 117 ft **WIDTH** 20 ft

CONSTRUCTION DT 1934 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries a two-lane local road over a four-lane state highway. A residential area of 20th-century single and multiple units are along the two-lane road while undistinguished commercial properties surrounded by woodland border NJ 23.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span encased stringer bridge with its concrete substructure is representative of the type and style frequently used by the New Jersey State Highway Department during the era before World War II. The bridge is finished with a standard-design balustrade with a modern pedestrian fence added. It is one of over 50 stringer bridges in Morris County and is not technologically or historically distinguished.

INFOR MATION

PHOTO: 503:26-27 (05/91) REVISED BY (DATE): QUAD: Wanaque

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1405156 **CO** MORRIS **OWNER** NJDOT **MILEPOINT** 16.95

NAME & FEATURE INTERSECTED NJ 23 OVER PEQUANNOCK RIVER, HAMBURG TPK & NYS&W RR **FACILITY** NJ 23

TOWNSHIP KINNELON BORO

TYPE THRU GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 6 **LENGTH** 513 ft **WIDTH** 53.8 ft

CONSTRUCTION DT 1934 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The viaduct carries a heavily traveled divided 4-lane state highway through a wooded area. There are no sidewalks on the bridge and a Jersey-type barrier separates the opposing lanes. At the western end of the bridge, NJ 23 picks up the route of the Paterson-Hamburg Turnpike as it progresses northwest towards High Point. The structure carries NJ 23 state highway over an exit ramp, a major watercourse, and the New York Susquehanna & Western Railroad.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed viaduct utilizes encased thru girders with floor beams for the main span and deck girders on concrete columns for the approaches. The Moderne detailing on the posts and balustrades of the approach spans is a common 1930s state design. Although well-preserved, the span is representative in type and style of viaducts built by the state as grade crossing elimination in the 1930s and 1940s. It is not technologically innovative or historically distinctive.

INFOR MATION

PHOTO: 503:30-32 (05/91) REVISED BY (DATE): QUAD: Wanaque

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1407150 **CO** MORRIS **OWNER** NJDOT **MILEPOINT** 21.87

NAME & FEATURE INTERSECTED US 46 OVER MILL RACE **FACILITY** US 46

TOWNSHIP WASHINGTON TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 26 ft **WIDTH** 30.8 ft

CONSTRUCTION DT 1921 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located on a state highway, just east of the boundary with Warren County. To the east is undeveloped woodland while undistinguished commercial structures are to the west. The bridge carries two lanes of traffic and one sidewalk over a minor watercourse that flows out of a penstock just north of the highway. The bridge was part of the state highway project of the 1920s, carrying Route 5 over a mill race. The mill is nonextant.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased stringer bridge with a concrete substructure and concrete balustrades set between plain posts incised with the date and route number is a representative example of its structural type. It is one of over 50 stringer spans in Morris County, and it has no distinguishing historical or technological features.

INFOR MATION

PHOTO: 507:27-28 (06/91) REVISED BY (DATE): QUAD: Hackettstown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1407151 **CO** MORRIS **OWNER** NJDOT **MILEPOINT** 22.45

NAME & FEATURE INTERSECTED US 46 EB OVER MINE BROOK **FACILITY** US 46 EASTBOUND

TOWNSHIP WASHINGTON TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 35 ft **WIDTH** 30 ft

CONSTRUCTION DT 1921 **ALTERATION DT** 1984 **SOURCE** PLAQUE

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located in a commercial area of a state highway. Carrying two lanes of eastbound traffic, it was built as part of the state highway project for Route 5. A new bridge separated by a grass median but on common abutments carries the westbound lanes.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The short stringer bridge with a concrete balustrade set between plain posts incised with the date and highway number has been altered. The south side balustrade was demolished when the roadway was expanded from two to four lanes and a parallel west-bound right of way with a median was built in 1984. The west-bound addition is listed as a separate bridge. The altered bridge is not historically or technologically noteworthy. It is one of over 50 stringer spans in the county.

INFOR MATION

PHOTO: 508:2,515:10A (06/91) REVISED BY (DATE): QUAD: Hackettstown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1407153 **CO** MORRIS **OWNER** NJDOT **MILEPOINT** 22.68

NAME & FEATURE INTERSECTED US 46 EB OVER BRANCH OF MINE BROOK **FACILITY** US 46 EASTBOUND

TOWNSHIP WASHINGTON TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 38 ft **WIDTH** 30 ft

CONSTRUCTION DT 1921 **ALTERATION DT** 1988ca **SOURCE** NJDOT

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located in a sparsely developed section of a state highway where the eastbound and west bound lanes are separated by a wide wooded median. A modern veterinary clinic is located in the median east of the bridge and a single residential building is on the south side of the highway. The bridge carries two lanes of eastbound traffic over a minor watercourse.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed encased stringer bridge on a concrete substructure bears little resemblance to its original design. The Jersey-barrier like parapets on both sides with steel guiderail bolted to the inside face replace the original balustrade. The short bridge has lost its integrity of design. While the original encased stringers and substructure are intact, the modifications render the span, an example of a common pre-World War II bridge type, historically and technologically undistinguished.

INFOR MATION

PHOTO: 515:14A-15A (06/91) REVISED BY (DATE): QUAD: Hackettstown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1407154 **CO** MORRIS **OWNER** NJDOT **MILEPOINT** 22.77

NAME & FEATURE INTERSECTED US 46 EB OVER BRANCH OF MINE BROOK **FACILITY** US 46 EASTBOUND

TOWNSHIP WASHINGTON TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 37 ft **WIDTH** 31 ft

CONSTRUCTION DT 1921 **ALTERATION DT** 1988ca **SOURCE** NJDOT

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located in a mixed use section of a state highway. A wide wooded median is to the north while a small grouping of mid-20th century houses is to the south, adjacent to the bridge. The structure carries two lanes of eastbound traffic over a minor watercourse.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY One in a series of three bridges over this minor watercourse, like nearby 1407153, the skewed stringer bridge has ca. 1988 modifications that detract from its original character. Alterations include a new concrete deck and concrete Jersey-barrier parapets with steel guiderail approaches. While the original encased stringers and concrete substructure are intact, the modifications make the span historically and technologically undistinguished.

INFOR MATION

PHOTO: 508:5-5A (06/91) REVISED BY (DATE): QUAD: Hackettstown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1408150 **CO** MORRIS **OWNER** NJDOT **MILEPOINT** 30.19

NAME & FEATURE INTERSECTED US 46 WB OVER US 206 SB **FACILITY** US 46 WESTBOUND

TOWNSHIP NETCONG BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 57 ft **WIDTH** 25 ft

CONSTRUCTION DT 1937 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is two-level intersection of two major highway. Scattered commercial buildings are nearby, while the intersection is lightly wooded. The lower roadway, US 206, was constructed as part of the state highway project in the 1920s, and the road carried overhead was originally NJ 6, built in the late 1930s and early 1940s.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed encased stringer bridge supported on a concrete substructure has Moderne detailing on the concrete posts, balustrades, and back walls that is found on other late 1930s and early 1940s overpass bridges in the state. The attention to detailing is representative of the high design quality of the NJ State Highway Department's Bridge Division. While well-preserved, the bridge is a common type and design and is thus not technologically or historically distinctive.

INFOR MATION

PHOTO: 508:28A,30A (06/91) REVISED BY (DATE): QUAD: Stanhope

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1408153 **CO** MORRIS **OWNER** NJDOT **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED LANDING ROAD SB OVER US 46 WB **FACILITY** LANDING ROAD SOUTHBOUND

TOWNSHIP ROXBURY TOWNSHIP

TYPE THRU GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 94 ft **WIDTH** 24 ft

CONSTRUCTION DT 1934 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge is located in a commercial highway setting at the junction of a connector road with a major east-west divided highway. The bridge carries the two lanes of southbound traffic from a 20th century lake resort area and one sidewalk over the westbound lanes of US 46, originally built as NJ 6. The immediate area of the intersection is wooded due to highway plantings and landscaping.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed thru girder overpass is supported on a concrete substructure, and it is a representative example of the bridge type commonly used by the State Highway Department Bridge Division for grade crossing elimination in the 1930s and early 1940s. The cantilevered disused sidewalk is enclosed by a metal railing. The bridge has no distinguishing characteristics and is not historically or technologically distinctive.

INFOR MATION

PHOTO: 508:24A-25A (06/91) REVISED BY (DATE): QUAD: Stanhope

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1409155 **CO** MORRIS **OWNER** NJDOT **MILEPOINT** 37.95

NAME & FEATURE INTERSECTED US 46 OVER MORRISTOWN LINE, WEST BLACKWELL STREET & RIVER **FACILITY** US 46

TOWNSHIP DOVER TOWN

TYPE THRU GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 8 **LENGTH** 592 ft **WIDTH** 40 ft

CONSTRUCTION DT 1929 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER** T.J. FOLEY

SETTING / CONTEXT The Dover Viaduct or Cutoff was built as part of the state highway project in the 1920s, and it carries four lanes of traffic and two sidewalks over the river, railroad, and a road. It is at the edge of the Dover business district and is contiguous to a large, casually landscaped park.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed eight-span viaduct is composed of deck girders for the approach spans and thru girders for the main spans, all of which are concrete encased. The bridge is representative of multiple-span highway bridges of the 1920s and 1930s with a concrete substructure and open geometric concrete balustrades. It is similar in type and style to other viaducts designed by the state highway department in the 1930s, and it is not historically or technically significant.

INFOR MATION

PHOTO: 500:31A-32A (05/91) REVISED BY (DATE): QUAD: Dover

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1409156 **CO** MORRIS **OWNER** NJDOT **MILEPOINT** 38.16

NAME & FEATURE INTERSECTED US 46 OVER NJ 15 & DOVER & ROCKAWAY RAILROAD **FACILITY** US 46

TOWNSHIP DOVER TOWN

TYPE THRU GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 165 ft **WIDTH** 40 ft

CONSTRUCTION DT 1929 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge, known as the Dover Cutoff, is located in a lightly wooded, mixed-use area in a highway setting. Residences are late 19th century while commercial buildings are mainly mid-20th century. Four lanes of US 46 traffic are carried across 2 lanes of NJ 15 and a disused railroad. The Dover Cutoff of NJ 6, as the road was designated in 1927, bypassed the central business district with a new alignment for through traffic.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed encased thru girder with floor beams bridge is supported by a concrete substructure. Cantilevered sidewalks are enclosed by a metal railing set in concrete posts. The 165'-long 2-span structure is well preserved, but it is simply a representative example of its frequently used bridge type. It is not technologically innovative or distinctive and is one of over five thru girder spans built in the county in the late 1920s.

INFOR MATION

PHOTO: 500:29A-30A (05/91) REVISED BY (DATE): QUAD: Dover

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1409158 **CO** MORRIS **OWNER** NJDOT **MILEPOINT** 42.35

NAME & FEATURE INTERSECTED US 46 OVER ABANDONED BRANCH MORRISTOWN LINE **FACILITY** US 46

TOWNSHIP DENVILLE TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 84 ft **WIDTH** 320 ft

CONSTRUCTION DT 1928 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries a 4-lane state highway over the abandoned right-of-way of the DL&W RR. The road is the 1927 realignment of an 18th century road the state developed as Route 5. The historic 2-lane wide alignment is maintained through the center of old Denville approximately 400 yards east of the bridge. The area around the bridge is commercial. The most significant structure is a Art Moderne concrete factory on the southeast side.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The heavily skewed slab bridge was built in 1927 to accommodate road realignment. The span incorporates in its northeasterly abutment a portion of the stone retaining wall that lined the depresses railroad roadbed. Other abutments are concrete, as are the unmatched paneled parapets that mark the limits of the bridge. No plans for the 1927 bridge were located, but right-of-way plans indicate that the span was constructed at one time. It is not historically or technologically distinguished.

INFOR MATION

PHOTO: 510:18-19 (06/91) REVISED BY (DATE): QUAD: Boonton

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1410150 **CO** MORRIS **OWNER** NJDOT **MILEPOINT** 43.05

NAME & FEATURE INTERSECTED US 46 OVER NJ 53 **FACILITY** US 46

TOWNSHIP DENVILLE TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 2 **LENGTH** 94 ft **WIDTH** 61 ft

CONSTRUCTION DT 1941 **ALTERATION DT** 1987 **SOURCE** PLANS

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located on a state highway where it crosses a state road. The bridge is at the edge of the central business district and forms a boundary between the old business area and a newer "strip" shopping center. Along the highway is a wooded area immediately adjacent to the bridge, but modern commercial structures are just beyond the bridge.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed stringer superstructure installed in 1987 was set on a pilastered substructure built as part of the NJ 15 and NJ 6 highway projects of 1941. The concrete abutments are inscribed with a plaque noting the date and route number.

INFOR MATION

PHOTO: 510:20,23 (06/91) REVISED BY (DATE): QUAD: Boonton

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1410151 **CO** MORRIS **OWNER** NJDOT **MILEPOINT** 43.4

NAME & FEATURE INTERSECTED US 46 OVER DEN BROOK **FACILITY** US 46

TOWNSHIP DENVILLE TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 49 ft **WIDTH** 84 ft

CONSTRUCTION DT 1941 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located in a lightly wooded commercial area along a state highway. It carries four lanes of traffic, two shoulders, two sidewalks and a grass median across a brook. A mid-20th century service station and an unfinished commercial building are contiguous to the bridge on the south.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased stringer bridge is representative of the NJ 6 highway bridges built in the early 1940s. The concrete substructure and balustrades between plain posts are similar to other bridges on the highway. Faience tile letters in the end posts identify the route number and date, common to the other state-built bridges on the route. The bridge is simply representative of its type, and it is not technologically or historically significant.

INFOR MATION

PHOTO: 510:24,34 (06/91) REVISED BY (DATE): QUAD: Boonton

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1410157 **CO** MORRIS **OWNER** NJDOT **MILEPOINT** 50.35

NAME & FEATURE INTERSECTED US 46 OVER ROCKAWAY RIVER **FACILITY** US 46

TOWNSHIP MONTVILLE TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 129 ft **WIDTH** 80 ft

CONSTRUCTION DT 1940 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located in a commercial area of a busy state highway where structures are predominantly undistinguished mid- to late-20th century businesses. The bridge carries four lanes of traffic, two shoulders, and two sidewalks across a major watercourse, just downstream of a small island.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY Built as part of the NJ 6 highway project, the three-span encased stringer bridge has a concrete substructure and standard-design balustrades between plain posts. While the bridge is unaltered, it is a representative example of the most common pre-World War II bridge type in the state. It is not historically or technologically distinguished.

INFOR MATION

PHOTO: 503:2, 504:3 (05/91) REVISED BY (DATE): QUAD: Caldwell

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1410158 **CO** MORRIS **OWNER** NJDOT **MILEPOINT** 51.4

NAME & FEATURE INTERSECTED US 46 OVER BRANCH OF PASSAIC RIVER **FACILITY** US 46

TOWNSHIP MONTVILLE TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 114 ft **WIDTH** 65.5 ft

CONSTRUCTION DT 1940 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located in a commercial area on a busy highway just west of the junction with a NJ 159. It carries four lanes of traffic, two shoulders, two sidewalks, and a grass median across a minor branch of the Passaic River. The bridge is part of the NJ 6 highway project of the early 1940s that is now the heavily traveled US 46.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased stringer bridge is similar to others in the series of early-1940s spans on US 46. Common elements are the reinforced concrete balustrade between posts that bear the highway number and date in faience tile letters. There are no distinguishing features about the bridge. In good condition, it is one of over 50 stringer bridges in the county, and it has no historical or technological significance.

INFOR MATION

PHOTO: 504:7-8 (05/91) REVISED BY (DATE): QUAD: Caldwell

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1410159 **CO** MORRIS **OWNER** NJDOT **MILEPOINT** 51.82

NAME & FEATURE INTERSECTED US 46 OVER PASSAIC RIVER **FACILITY** US 46

TOWNSHIP MONTVILLE TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 4 **LENGTH** 284 ft **WIDTH** 65 ft

CONSTRUCTION DT 1940 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located in a wetlands area of the Great Piece Meadows, a Green Acres Project. It carries four lanes of traffic, a gravel median, two shoulders, and two sidewalks across a major watercourse that forms the boundary with Essex County. Built as part of the NJ 6 highway project, it is now incorporated into US 46, a major artery across the northern part of the state.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased stringer bridge on a concrete substructure is one of a series of similar bridges built in the early 1940s on NJ 6. While the concrete substructure is in good condition, the concrete balustrades have had numerous repairs. Steel guide rails inside the balustrade form the vehicular barrier. Of the similar bridges on the route, it has had the most alterations. It is one of over 50 stringer bridges in Morris County. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 504:19-20 (05/91) REVISED BY (DATE): QUAD: Caldwell

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1411152 **CO** MORRIS **OWNER** NJDOT **MILEPOINT** 4.54

NAME & FEATURE INTERSECTED NJ 53 OVER DEN BROOK **FACILITY** NJ 53

TOWNSHIP DENVILLE TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 25 ft **WIDTH** 70 ft

CONSTRUCTION DT 1941 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is on a heavily trafficked corner where entrance and exit ramps for US 46 meet the divided NJ 53. It is located between the overpasses of US 46 to the north and I-80 to the south. The bridge carries four lanes of traffic and two sidewalks over a brook. The land along the brook is heavily wooded.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The reinforced concrete slab bridge is a representative example of its type. Concrete was used exclusively for the substructure, balustrades and posts, where faience tile letters document the date and original route designation (5N). The bridge has curved wingwalls and balustrades at the north end to accommodate the US 46 ramps. It is not innovative or technologically distinguished and is one of 15 slab spans in Morris County.

INFOR MATION

PHOTO: 510:21-22 (06/91) REVISED BY (DATE): QUAD: Boonton

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1416150 **CO** MORRIS **OWNER** NJDOT **MILEPOINT** 40.8

NAME & FEATURE INTERSECTED US 202 OVER PRIMROSE BROOK **FACILITY** US 202

TOWNSHIP HARDING TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 27 ft **WIDTH** 30 ft

CONSTRUCTION DT 1923 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is in a wooded, undeveloped portion of the township, contiguous to the I-287 right-of-way. The bridge was part of the Route 16 state highway project of the 1920s and carries two lanes of traffic and two sidewalks across the stream. The road follows an 18th century route.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The slab bridge is a representative of its type where reinforced concrete was used extensively for both substructures and superstructures. Its incised pylons and pierced balustrades are nearly hidden by a modern beam guide rail. One of over 15 slab spans in Morris County, the bridge is neither technologically distinguished nor historically significant. It is a representative example of a common pre-WW II bridge type.

INFOR MATION

PHOTO: 512:9-10 (06/91) REVISED BY (DATE): QUAD: Bernardsville

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1416152 **CO** MORRIS **OWNER** NJDOT **MILEPOINT** 45.77
NAME & FEATURE INTERSECTED US 202 OVER WHIPPANY RIVER **FACILITY** US 202
TOWNSHIP MORRISTOWN TOWN
TYPE ARCH **DESIGN** ELLIPTICAL **MATERIAL** Brick
 # SPANS 1 **LENGTH** 52 ft **WIDTH** 56.7 ft
CONSTRUCTION DT 1891 **ALTERATION DT** 1922 **SOURCE** INSCRIPTION/PLANS
DESIGNER/PATENT UNKNOWN **BUILDER** T.J. ALLEN (1891)

SETTING / CONTEXT The bridge is located within the Speedwell Village Historic District that includes the nonextant Speedwell Ironworks (1808-1873), two 19th century houses, and the factory where the telegraph was invented. It carries a 2-lane highway, shoulders, and sidewalks over a river. It replaced a 3-span stone arch that remains upstream between this bridge and the Speedwell Lake dam. Construction of the present bridge required a major regrading to eliminate steep approaches and sharp bends.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes
CONSULT STATUS Individually Eligible. Listed. Speedwell Village Historic District. 11/20/1970. Contributing.
CONSULT DOCUMENTS SHPO Letter 03/12/01

SUMMARY The skewed brick arch bridge has handsome dressed ashlar spandrel walls and ring stones. The intrados was gunited, but much of it has spalled. The bridge was widened on the downstream side about 20' in 1922, but the concrete extension was finished with a matching ashlar spandrel wall. Despite the alteration, the original section is relatively well preserved and ranks as one of the largest and most impressive brick arch spans in the state. It is evaluated as technologically significant, and is individually eligible for listing in the National Register of Historic Places under Criterion C. It is also a contributing element to the National Register listed Speedwell Village Historic District.

INFOR MATION

Bibliography:
Minutes, Morris County Board of Chosen Freeholders; July 12, 1882; May 11, 1887; July 8, 1891; August 12, 1891.
Supplement to The True Democratic Banner. May 5, 1892.
"Stone Span in 64th Year." Morristown Daily Record, (undated clipping, ca. 1955, Morristown Library).
"Freeholders Advertising Bridge Work 114 Years Ago For Speedwell Job." Morristown Daily Record. Dec. 18, 1937.
"Early Days of Speedwell Dam and Park Recalled." Morristown Daily Record, Jan. 13, 1938.
ONJH. National Register File: Morristown Multiple Resource Nomination, 1983.

Physical Description: The handsome, well-proportioned skewed 52'-long single-span brick arch bridge has rusticated random-course ashlar spandrel walls finished with voussoirs and an inscribed keystone on the upstream side. It was widened with an approximately 20'-wide skewed reinforced concrete addition on the downstream side in 1922. The addition was also finished with a rusticated ashlar spandrel wall. Both sides have stone parapets capped with large rectangular blocks of rusticated granite. In the inside face of the downstream parapet is a stone tablet documenting the bridge committee. The intrados of the brick section of the span was gunited, but much of the coating has spalled off. The brick arch is separating from the stone spandrel wall.

Historical and Technological Significance: The large, impressive 1891 brick arch span, located just below an abandoned three-span stone arch bridge dating from 1824 and upstream from Speedwell Lake dam (rebuilt in 1938 as a W.P.A. project), ranks as one of the largest and most complete brick arch bridges in the state. The lake was once a power source for the Speedwell Iron Works, a major local industry owned by Stephen Vail, a prominent citizen and county judge. The bridge is an unrated resource located within the boundaries of the Speedwell Village Historic District that includes the lake, foundations of industrial structures, the extant Vail Mansion, and various out buildings (Criteria A, C).

The bridge was built in 1891 as part of the Speedwell grade improvement that eased the road grade at both ends of the bridge, a project that had been discussed by the Freeholders for nine years before the bridge contract was awarded. At the time of construction, the old bridge was still in service, but was subsequently damaged severely when the timber cribbing dam failed in a 1917 flood.

When the old road was incorporated into the state highway system, the 1891 bridge has been widened in 1922. The reinforced concrete extension was designed by the New Jersey State Highway Department Bridge Division, and it was finished to resemble the historic span. The historic alteration does not detract from the historical or technological significance of the original portion of the span, which is one of the largest brick arch bridges in the state.

The bridge is also important historically since it dates from the gilded age of Morristown, when wealthy New Yorkers vacationed in large mansions and the present commercial structures in town were built to accommodate the carriage trade. Included in this building boom are six large stone churches and the courthouse wall, also built by local stone masons.

Boundary Description and Justification: The bridge is located within a historic district that is listed in the National Register of Historic Places. Therefore, the span and its surroundings have been evaluated as eligible.

PHOTO: 501:13-15,128:3-4 (06/91) REVISED BY (DATE): QUAD: Morristown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1417152 **CO** MORRIS **OWNER** NJDOT **MILEPOINT** 88.29

NAME & FEATURE INTERSECTED US 206 OVER BLACK RIVER **FACILITY** US 206

TOWNSHIP CHESTER TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 3 **LENGTH** 68 ft **WIDTH** 40 ft

CONSTRUCTION DT 1928 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located in wetlands within the Black River Green Acres Project, a wildlife management area. It carries two lanes of a state highway and two shoulders across the slow-moving watercourse.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 3-span slab bridge where reinforced concrete is used for all parts of the substructure and superstructure including the balustrades is a representative example of its bridge type and is stylistically similar to other slab bridges in the state. A steel guide rail has been added along the inside of the balustrade. The bridge has some spalling, and it is not historically or technologically distinguished.

INFOR MATION

PHOTO: 506:26-27 (06/91) REVISED BY (DATE): QUAD: Chester

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1417153 **CO** MORRIS **OWNER** NJDOT **MILEPOINT** 89.92

NAME & FEATURE INTERSECTED US 206 OVER DRAKES BROOK **FACILITY** US 206

TOWNSHIP MOUNT OLIVE TOWNSHIP

TYPE T BEAM **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 56 ft **WIDTH** 40 ft

CONSTRUCTION DT 1928 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located along a commercial section of a two-lane highway. The land to the north is wooded and scattered businesses are to the south. The road was originally built as NJ 31 in the state highway project of the 1920s.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The T-beam superstructure is supported on a concrete substructure. The fascia beams are finished with flat panels, and concrete balustrades enclose the span. The fascia beams have large spalled sections. One of 8 identified T-beam bridges built in the county between 1926 and 1943, the bridge is not technologically innovative or historically distinguished.

INFOR MATION

PHOTO: 506:32-33 (06/91) REVISED BY (DATE): QUAD: Chester

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1417154 **CO** MORRIS **OWNER** RAILROAD **MILEPOINT** 16.61

NAME & FEATURE INTERSECTED HIGH BRIDGE BRANCH RAILROAD OVER US 206 **FACILITY** HIGH BRIDGE BRANCH

TOWNSHIP MOUNT OLIVE TOWNSHIP

TYPE THRU GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 88 ft **WIDTH** 16 ft

CONSTRUCTION DT 1929 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT CNJ RR OFFICE OF ENGINEER **BUILDER** PHOENIX BRIDGE COMPANY

SETTING / CONTEXT Located in a commercial section on a state highway, the bridge serves as a billboard. Late-20th-century "strip malls" and condominium offices are along the highway close to the bridge which carries the single-tracked, disused High Bridge Branch over US 206. Steel guiderails prohibit usage of the two sidewalks along US 206.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. High Bridge Division of Central RR of NJ Historic District, Eligible, May contribute.

CONSULT DOCUMENTS SHPO Opinion 06/29/89, Finding 06/29/92, Letter 6/30/95.

SUMMARY The skewed built-up riveted thru girder bridge has a ballasted concrete deck and knee-high brick curbing. The span is supported on concrete abutments. Overall, the bridge is a representative example of a common bridge type, and it is not technologically innovative or historically distinguished. Phoenix Bridge Company of Phoenixville, PA was a major 19th- and early-20th century manufacturer of thru girder as well as other types of spans.

INFOR MATION

PHOTO: 506:34-35 (06/91) REVISED BY (DATE): QUAD: Chester

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1417156 **CO** MORRIS **OWNER** NJDOT **MILEPOINT** 92.23

NAME & FEATURE INTERSECTED US 206 OVER TRIBUTARY OF DRAKES BROOK **FACILITY** US 206

TOWNSHIP MOUNT OLIVE TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 32 ft **WIDTH** 40 ft

CONSTRUCTION DT 1928 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located in a wooded section of the township. A garden apartment complex is adjacent to the bridge on the east, while the remnants of a mill dam are to the west. Also on the west is a mid-19th century stone grist mill, converted to a gift shop, and a lawn adjacent to the brook. The bridge carries two lanes of traffic and shoulders over a minor stream.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed slab span is one of four similar bridges that accommodate the stream as it winds downhill to Flanders. The use of concrete for all structural parts of the bridge is typical of the period. The steel guiderail is the only alteration to the structure. However, there are no signs of previous rails or parapets. The structure is typical of short spans used in the state highway projects of the 1920s and is not significant technologically or historically.

INFOR MATION

PHOTO: 507:10-11 (06/91) REVISED BY (DATE): QUAD: Chester

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1417157 **CO** MORRIS **OWNER** NJDOT **MILEPOINT** 92.4

NAME & FEATURE INTERSECTED US 206 OVER TRIBUTARY OF DRAKES BROOK **FACILITY** US 206

TOWNSHIP MOUNT OLIVE TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 24 ft **WIDTH** 41 ft

CONSTRUCTION DT 1928 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located in a wooded, undeveloped area of the township. On a long grade, the bridge carries two lanes and two shoulders of a highway over a minor stream. It was originally built as part of the NJ 31 highway project.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge is one of a series of four similar slab spans that carry US 206 over the winding brook. The heavily skewed bridge constructed entirely of reinforced concrete is a representative example of its type, and is not historically or technologically distinguished. The steel guiderail is the only apparent alteration in the original structure. It is one of over 15 slab bridges in Morris County.

INFOR MATION

PHOTO: 506:40-41 (06/91) REVISED BY (DATE): QUAD: Chester

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1417158 **CO** MORRIS **OWNER** NJDOT **MILEPOINT** 92.9

NAME & FEATURE INTERSECTED US 206 OVER TRIBUTARY OF DRAKES BROOK **FACILITY** US 206

TOWNSHIP MOUNT OLIVE TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 24 ft **WIDTH** 41 ft

CONSTRUCTION DT 1928 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located in a wooded, undeveloped area of a highway. It carries two lanes of traffic and two shoulders over a minor stream near Flanders.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge is one of four similar slab spans constructed on US 206 in the county. Steel guiderails anchored in the curb formed by the upper part of the fascias replace the original railings. The plain, unornamented bridge is a representative example of short pre-World War II state highway bridges in the state, and it has no historical or technological significance. It is one of over 15 slab bridges in Morris County.

INFOR MATION

PHOTO: 506:36-37,515:29-31A (06/91) REVISED BY (DATE): QUAD: Chester

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1417159 **CO** MORRIS **OWNER** NJDOT **MILEPOINT** 92.82

NAME & FEATURE INTERSECTED US 206 OVER TRIBUTARY OF DRAKES BROOK **FACILITY** US 206

TOWNSHIP MOUNT OLIVE TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 23 ft **WIDTH** 41.3 ft

CONSTRUCTION DT 1928 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located on a long grade on a highway, in a wooded, undeveloped section of the township. It carries two lanes of vehicular traffic and two shoulders over a small brook.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY One of a series of four short slab bridges spanning the stream in a two-mile section of US 206, the skewed structure is similar to the other three. The plain concrete bridge has no distinguishing features. Steel guiderails on posts mounted on the fascias replace the original railings. The bridge is not historically or technologically significant. It is one of over 15 slab bridges in Morris County.

INFOR MATION

PHOTO: 506:38;515:30A (06/91) REVISED BY (DATE): QUAD: Chester

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1426150 **CO** MORRIS **OWNER** NJDOT **MILEPOINT** 0.59

NAME & FEATURE INTERSECTED NJ 183 OVER MORRISTOWN LINE **FACILITY** NJ 183

TOWNSHIP NETCONG BOROUGH

TYPE T BEAM **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 56 ft **WIDTH** 40.3 ft

CONSTRUCTION DT 1931 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT Located between a mixed-use area and highway ramps, the bridge carries two wide lanes of traffic and two sidewalks over one active track and a disused siding. The scattered residences are mainly early to mid-20th century.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed T beam structure is representative of bridges built on state highway projects in the 1920s and 1930s. The use of reinforced concrete for all parts of the substructure and superstructure is common in this period as are the simple balustrades with rectangular piercing and plain posts incised with the route number and date. The bridge has no distinguishing features either historically or technologically.

INFOR MATION

PHOTO: 508:29A,31A (06/91) REVISED BY (DATE): QUAD: Stanhope

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1426151 **CO** MORRIS **OWNER** NJDOT **MILEPOINT** 0.93

NAME & FEATURE INTERSECTED NJ 183 OVER MUSCONETCONG RIVER **FACILITY** NJ 183

TOWNSHIP NETCONG BOROUGH

TYPE T BEAM **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 28 ft **WIDTH** 40.2 ft

CONSTRUCTION DT 1926 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT CORNELIUS VERMEULE,CNSLT.ENG. **BUILDER** JOHN W. HELLER CO.

SETTING / CONTEXT Located just below the concrete dam and spillway of Lake Musconetcong, the bridge is contiguous to a lake-front park on the Stanhope side. Both the bridge and dam were built by the state as part of the abandonment of the Morris Canal in the mid-1920s, when the canal was systematically dismantled after 100 years of service. The bridge carries two wide lanes of traffic and two sidewalks over a major watercourse. The area surrounding the lake is a public park.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Not Individually Eligible. Potentially eligible Historic District. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The reinforced concrete T beam bridge is finished on a unornamented, utilitarian style. The steel picket fence along the spillway of the Lake Musconetcong dam replaced a waist-high solid concrete parapet early in the life of the structure. The original parapet remains on the downstream side. While the bridge is technologically undistinguished, it is historically significant as one of the major structures built as part of the ambitious Morris Canal abandonment directed by engineer C. Vermeule.

INFOR MATION

Bibliography:
Vermeule, C. Jr. Morris Canal and Banking Company Final Report of Consulting and Directing Engineer. 1929.
Morris County Engineer; Bridge File.

Physical Description: The reinforced concrete T-beam bridge is one element in a larger reinforced concrete dam and spillway at the bottom of Lake Musconetcong, which forms the boundary between Morris and Sussex Counties. The dam has a straight spillway to a concrete floor, where the water flows west and then south under the short bridge located below the brick-faced gatehouse with concrete quoins. The long spillway also serves as an overflow. The 4' paneled parapet of reinforced concrete on the south side of the bridge is original. The long steel picket fence along the spillway is a replacement for a similar concrete parapet early in the history of the dam and bridge, to enhance the view of the lake from the roadway.

Historical and Technological Significance: Located at the bottom of Lake Musconetcong, the bridge, dam, gatehouse, and surrounding park were part of the ambitious 1924-1928 Morris Canal abandonment project. The project, which closed and disposed of the former canal 88-mile long right-of-way and all the structures there unto pertaining, was designed and directed by Cornelius C. Vermeule, a consulting engineer from East Orange, New Jersey, who was hired by the Morris Canal and Banking Company Board of Directors. The "Morris Canal Abandonment Acts" passed by the New Jersey legislature in 1924 specified that the canal reservoirs, like Lake Musconetcong, would be dedicated to public use, but that they had to be fitted with dams and sluice gates. Vermeule designed the new water retention facility of reinforced concrete to ensure its permanence.

Lake Musconetcong was created as a reservoir for the Morris Canal, whereas other water sources were already existing bodies that were dammed higher to provide more water. The canal crossed the lake and entered a lock about 50' west of the current gatehouse. Over the active life of the canal (1824-1924), summer cottages were built around the lake shore. When the canal was abandoned, the State felt an obligation to retain property values along the lake front.

While the bridge is not technologically innovative, it is significant as a Morris Canal abandonment structure. Plaques on the gatehouse give brief details of the dam and history of the Morris Canal. It is one of two bridges built in Morris County as part of the canal abandonment project 1924-1928.

Boundary Description and Justification: The bridge is one part of a larger water retention facility that includes, but is not limited to, a gatehouse, dam, spillway, and surrounding park. The structure and surrounding park are historically significant because of they were developed as part of a historic and important regional improvement campaign. Therefore, the entire water retention facility and the body of water and its shore are evaluated as eligible.

PHOTO: 508:32A-36A (06/91 JPH (5/96)) REVISED BY (DATE): QUAD: Stanhope

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1430150 **CO** MORRIS **OWNER** NJDOT **MILEPOINT** 0.001

NAME & FEATURE INTERSECTED BLOOMFIELD AVENUE (NJ 159) WB OVER US 46 EB **FACILITY** BLOOMFIELD AVENUE (NJ 159) WESTBOUND

TOWNSHIP MONTVILLE TOWNSHIP

TYPE THRU GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 98 ft **WIDTH** 26 ft

CONSTRUCTION DT 1940 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in a highway setting and carries two westbound lanes of Bloomfield Avenue (NJ 159) over the two east-bound lanes of US 46, at the junction of the two highways. It facilitates the merger of the Bloomfield Avenue traffic into US 46, originally built as NJ 6. Undistinguished commercial structures are scattered along both roads.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The well-detailed skewed encased thru girder bridge on a concrete substructure is a representative example of the designs the state highway department generated around 1940. It is stylistically similar to grade-crossing elimination overpasses in Middlesex and Somerset counties. The abutments are finished with low-relief Moderne pilasters and entablatures, and the girders have chevron decoration. The bridge is not an uncommon State design or innovative type.

INFOR MATION

PHOTO: 504:11-14 (05/91) REVISED BY (DATE): QUAD: Caldwell

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1430151 **CO** MORRIS **OWNER** NJDOT **MILEPOINT** 0.25

NAME & FEATURE INTERSECTED BLOOMFIELD AVENUE (NJ 159) OVER BRANCH OF PASSAIC **FACILITY** BLOOMFIELD AVENUE (NJ 159)

TOWNSHIP MONTVILLE TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 36 ft **WIDTH** 66 ft

CONSTRUCTION DT 1940 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located in a highway setting within the wetland area of the Great Piece Meadows, a Green Acres Project. The bridge carries four lanes of traffic, a grass median, and two sidewalks over a minor branch of the Passaic River.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased stringer bridge is representative of the bridges on NJ 6 built ca. 1940 which utilized concrete for all parts of the substructure as well as balustrades. Faience tile letters in the end posts bear the date and original route designation. The bridge has no distinguishing features and is a typical example of a common structural type. It is one of over 50 stringer spans in Morris County.

INFOR MATION

PHOTO: 504:17-18 (05/91) REVISED BY (DATE): QUAD: Caldwell

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1430153 **CO** MORRIS **OWNER** NJDOT **MILEPOINT** 0.32

NAME & FEATURE INTERSECTED BLOOMFIELD AVENUE (NJ 159) WB OVER PASSAIC RIVER **FACILITY** BLOOMFIELD AVENUE (NJ 159) WESTBOUND

TOWNSHIP MONTVILLE TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 4 **LENGTH** 224 ft **WIDTH** 32 ft

CONSTRUCTION DT 1940 **ALTERATION DT** 1981 **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located in a highway setting at the boundary of Morris and Essex Counties. It is within the Great Piece Meadows, a Green Acres Project of wetlands along the Passaic River. The bridge carries a shoulder and the two westbound lanes of Bloomfield Avenue (NJ 159) over a major watercourse.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased stringer bridge on a concrete substructure was altered in 1981 when the eastbound-portion of the superstructure was replaced by box beams. The eastbound section is listed as a separate structure. The concrete balustrade on the westbound span is original to 1940, but the steel guiderail attached to its inner face is a modern addition. The bridge, an example of a common bridge type, has lost its design integrity and is thus of little historical value.

INFOR MATION

PHOTO: 504:15-16 (05/91) REVISED BY (DATE): QUAD: Caldwell

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1450160 **CO** MORRIS **OWNER** RAILROAD **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED ROCKAWAY ROAD (CR 513) OVER DOVER & ROCKAWAY RR **FACILITY** ROCKAWAY ROAD (CR 513)

TOWNSHIP ROCKAWAY TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 23 ft **WIDTH** 33 ft

CONSTRUCTION DT 1916 **ALTERATION DT** **SOURCE** PLANS/INSCRIPTION

DESIGNER/PATENT CNJ RR OFF OF CHIEF ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge marks the transition from a wooded area of mid-20th-century homes to an undistinguished industrial area on the outskirts of Dover. It carries two lanes of traffic over a lightly used railroad. The abutments were built prior to 1916. The Morris County Traction County was involved with the improvement of this crossing at some point prior to 1916. Plans indicate that prior to 1916 a narrow stringer bridge was at this location.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed encased stringer overpass is carried on abutments of rusticated stone that were widened on both sides with concrete extensions in 1916, when the present stringers were installed. Curiously the westernmost two stringers are not encased, but there is not data to indicate that the 8-stringer bridge was widened. The 1916 metal fence-like railing survives on the west side while the east side railing is a replacement. The 1916 bridge is not technologically nor historically distinguished.

INFOR MATION

PHOTO: 516:25A-26A (12/91) REVISED BY (DATE): QUAD:

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1461150 **CO** SOMERSET **OWNER** STATE AGENCY **MILEPOINT** 30.47

NAME & FEATURE INTERSECTED GLADSTONE BRANCH (NJT) OVER PASSAIC RIVER **FACILITY** GLADSTONE BRANCH (NJT)

TOWNSHIP BERNARDS TOWNSHIP

TYPE DECK GIRDER **DESIGN** OPEN DECK **MATERIAL** Steel

 # SPANS 4 **LENGTH** 326 ft **WIDTH** 13 ft

CONSTRUCTION DT 1928 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT **BUILDER** PHOENIX BRIDGE COMPANY

SETTING / CONTEXT The bridge carries a single track of New Jersey Transit's Gladstone Branch (formerly the Delaware, Lackawanna, and Western RR) over the Passaic River, which forms the border between Somerset County and Morris County. The bridge passes approximately 70' above the riverbed. West of the bridge in Somerset County is a stone quarry. East in Morris County is a residential suburb.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS NJT HBS 03/12/91. SHPO Letter 6/30/95.

SUMMARY Built in 1928 by the Phoenix Bridge Co., the large, 4-span, open deck, steel deck girder bridge has ashlar abutments and massive concrete piers. A wood walkway is cantilevered from the north side. The bridge is not the first bridge at the site, the Gladstone Branch from Summit to Bernardsville was constructed by the West Line RR in the early 1870s. The bridge is not significant to the historical development of the railroad. It is historically and technologically undistinguished.

INFOR MATION

PHOTO: 110:21a-23a (01/18/92) REVISED BY (DATE): QUAD: Bernardsville

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1462150 **CO** MORRIS **OWNER** JOINT **MILEPOINT** 22.9

NAME & FEATURE INTERSECTED COMLY ROAD (CR 511 ALT) OVER BOONTON BRANCH & PARK AVE **FACILITY** COMLY ROAD (CR 511 ALT)

TOWNSHIP LINCOLN PARK BOROUGH

TYPE THRU GIRDER **DESIGN** PARTIALLY ENCASED **MATERIAL** Steel

 # SPANS 6 **LENGTH** 255 ft **WIDTH** 30 ft

CONSTRUCTION DT 1936 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT Located at the edge of the central business district, the bridge is adjacent to a one-story frame train station, which is stylistically older than the bridge. The structure carries two lanes of traffic and two sidewalks over two railroad tracks and a local road. The road is on the Morris Canal right-of-way, listed in the National Register. The bridge dates from 12 years after the abandonment of the canal and is not within the period of significance of the canal.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The six-span viaduct with a thru girder main span over the railroad and deck girder approach spans is supported on concrete abutments and columns. The paneled parapets are stylistically similar to the those used on other Boonton Line overpasses. The bridge is a representative example of its types and is neither technologically innovative nor historically significant. Thru and deck girders are commonly used in combination for viaducts and overpasses prior to 1945.

INFOR MATION

PHOTO: 505:19-20 (05/91) REVISED BY (DATE): QUAD: Pompton Plains

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1463151 **CO** MORRIS **OWNER** STATE AGENCY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MAIN STREET (CR 511) OVER BOONTON LINE **FACILITY** MAIN STREET (CR 511)

TOWNSHIP BOONTON TOWN

TYPE THRU GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 70 ft **WIDTH** 34.3 ft

CONSTRUCTION DT 1913ca **ALTERATION DT** 1927 **SOURCE** SANBORN MAPS/NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge is located at the end of the main business district. It is contiguous to an out-of-service 1904 station which is listed in the National Register, but the bridge is not included in the nomination. Built during the period of grade crossing elimination of the Boonton Line, the bridge replaced an earlier wooden span. It carries two lanes of traffic and two sidewalks over two active tracks.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The partially encased thru girder with floor beams bridge is supported on a concrete substructure and has concrete balustrades identical to those at 1464154 added in 1927 to the cantilevered sidewalks. Reproduction light standards have been added. A "steel bridge" is first identified at this crossing on the 1916 Sanborn map of Boonton, and the map is the source of the date. The bridge and its later balustrades are both representative examples of common types and are not noteworthy.

INFOR MATION

PHOTO: 505:31-31 (05/91) REVISED BY (DATE): QUAD: Boonton

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1463163 **CO** MORRIS **OWNER** STATE AGENCY **MILEPOINT** 29.6

NAME & FEATURE INTERSECTED MORRIS AVENUE OVER ABANDONED IRON WORKS SPUR **FACILITY** MORRIS AVENUE

TOWNSHIP BOONTON TOWN

TYPE STRINGER **DESIGN** JACK ARCH (CONCRETE) **MATERIAL** Steel

 # SPANS 1 **LENGTH** 40 ft **WIDTH** 21 ft

CONSTRUCTION DT 1905 **ALTERATION DT** **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** WEST VA. BRIDGE & CONST.

SETTING / CONTEXT The bridge is located in a wooded section of a formerly industrial town of Boonton. To the south is a low-density residential area and to north, adjacent to the bridge, is an abandoned freight yard and the 1909 Delaware, Lackawanna & Western RR station, currently used as a warehouse. The bridge carries two lanes of traffic and two sidewalks over the abandoned railroad right-of-way that was the main line to Boonton until the DL&W changed the route about 1909.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible. Potentially eligible DL&W Boonton Line Historic District. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The stringer bridge with concrete jack arches replaced an earlier structure, for which the high rusticated stone abutments and wingwalls were built ca. 1875. The bridge is associated with the DL&W RR as it crosses what was until about 1909 the mainline into Boonton. It is individually technologically significant as an early and complete example of a corrugated metal lined concrete jack arch. The pipe railings with unusual cast iron posts with ball finials are well preserved. The bridge was part of the ca. 1905-1910 realignment of the DL&W route into Boonton.

INFOR MATION

Bibliography:
Darnell, Victor. Directory of American Bridge-Building Companies 1840-1900. 1984.
Morris County Freeholders Minutes. June 14, 1905; Dec. 13, 1905.

Physical Description: The 1905 40'-long steel stringer and concrete jack arch superstructure is supported on earlier high ashlar abutments. The jack arches retain the corrugated pattern of the metal forms used in their construction. Tie rods pass through the arches and stringers and are connected to the fascia stringers by nuts. Utility pipes are carried under two bays of the bridge. As well preserved as the underside of the span is the upper level with its original three rail pipe railing with cast posts finished with ball finials. The concrete deck has been covered by an bituminous concrete wearing surface.

Historical and Technological Significance: One of two steel stringer bridges with concrete jack arches identified in Morris County, the 1905 one that carries Morris Avenue over the Delaware Lackawanna & Western Railroad's spur to its Boonton freight station, ranks as the earliest example of its type in the county and one of the most complete in the region (Criterion C). Jack arches, placed between the stringers, were a bridge construction detail introduced in the 1880s in brick to assist with distribution of live load and formed an integral part of the bridge deck. By about 1905 concrete, with both a smooth or corrugated surface, was replacing brick, and by about 1914, the use of jack arches declined. Stringer bridges with jack arches from the 1885-1915 era are relatively common in northern New Jersey. What distinguishes this example as being technologically noteworthy is its date of construction and complete state of preservation. With its original pipe railings, which are also typical of the period, it is a well-preserved example of a bridge building technology that was common in the early decades of this century (Criterion C).

The bridge was built for Morris County by the West Virginia Bridge & Construction Company at a cost of $450.00 (Morris County Freeholders Minutes, 6/14/1905). The bridge building company was incorporated in Wheeling West Virginia in 1894, and it is believed to have been active until about 1906. There are several examples of the firm's work throughout New Jersey.

Boundary Description and Justification: Because the bridge stands on its own technological merits, it the span alone (superstructure and substructure) that is evaluated as eligible.

PHOTO: 503:18-19, 561:23A (05/91 JPH (5/96)) REVISED BY (DATE): QUAD: Boonton

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1464151 **CO** MORRIS **OWNER** STATE AGENCY **MILEPOINT** 35.28

NAME & FEATURE INTERSECTED MORRISTOWN LINE OVER FRANKLIN ROAD **FACILITY** MORRISTOWN LINE

TOWNSHIP DENVILLE TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 2 **LENGTH** 54 ft **WIDTH** No Data

CONSTRUCTION DT 1927 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is in a wooded, undeveloped section of the township. Contiguous to the bridge on the southeast is the site of the Hill Organ Company, of which no buildings remain. It is just west of the junction of the Boonton Line with the Morristown Line and carries two active tracks over two lanes of traffic and two sidewalks.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The concrete slab bridge is a common bridge type used in the grade crossing elimination on the Boonton Line, and it is similar to several in the Towaco section of Montville Township. It is supported on concrete abutments and bents with arched struts. The upper portion is enclosed by paneled parapets. There are no distinguishing features about the bridge, and it is neither technologically nor historically significant.

INFOR MATION

PHOTO: 514:21-22 (07/91) REVISED BY (DATE): QUAD: Dover

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1464154 **CO** MORRIS **OWNER** STATE AGENCY **MILEPOINT** 36.86

NAME & FEATURE INTERSECTED ROCKAWAY ROAD OVER MORRISTOWN LINE RR & ROCKAWAY RIVER **FACILITY** ROCKAWAY ROAD

TOWNSHIP DENVILLE TOWNSHIP

TYPE THRU GIRDER **DESIGN** PARTIALLY ENCASED **MATERIAL** Steel

 # SPANS 7 **LENGTH** 315 ft **WIDTH** 28 ft

CONSTRUCTION DT 1927 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT UNKNOWN **BUILDER** AMERICAN BRIDGE COMPANY

SETTING / CONTEXT The bridge is in a lightly wooded industrial area at the boundary of three municipalities. The large area to the west of the bridge on the south side of the river was formerly occupied by the Dover Car Shops of the Delaware, Lackawanna & Western Railroad, a rail car fabrication facility. Modern industry is located in a portion of this area while the remainder is open space.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The main span of the 7-span viaduct is a thru girder with floor beams. Encased deck girders on concrete bents are used for the approach spans, and nicely detailed concrete balustrades enclose the cantilevered sidewalks. The same balustrade is found on 1463151. A high metal barrier was added to the section that crosses the active rail line in 1982. The bridge is a representative example of its common type, and it is neither historically nor technologically distinctive.

INFOR MATION

PHOTO: 500:45A-46A (05/91) REVISED BY (DATE): QUAD: Dover

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1464157 **CO** MORRIS **OWNER** STATE AGENCY **MILEPOINT** 38.45

NAME & FEATURE INTERSECTED PROSPECT STREET (CR 513) OVER MORRISTOWN LINE **FACILITY** PROSPECT STREET (CR 513)

TOWNSHIP DOVER TOWN

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 34 ft **WIDTH** 24.8 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located on a side street at the end of the central business district. On the south it is bounded by a small park and a 19th century commercial structure, remodeled for a current business. A parking lot and a rusticated stone wall are to the north. The bridge is just outside the western boundary of the Blackwell Street Historic District (National Register). It carries two lanes of traffic on a concrete roadway and two timber sidewalks.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The short stringer bridge is carried on earlier random coursed ashlar stone abutments that are continuous with a retaining wall for the depressed rail line. While a metal fence-like railing remains on both sides, steel guiderails have been added between the roadway and the sidewalks. The bridge is a representative example of the most common pre-World War II bridge type in the state, and it is not historically or technologically noteworthy. It is one of over 50 stringer spans in Morris Co.

INFOR MATION

PHOTO: 500:35A-36A (05/91) REVISED BY (DATE): QUAD: Dover

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1465164 **CO** MORRIS **OWNER** STATE AGENCY **MILEPOINT** 44.97

NAME & FEATURE INTERSECTED BOONTON LINE OVER SHIPPENPORT ROAD **FACILITY** BOONTON LINE

TOWNSHIP ROXBURY TOWNSHIP

TYPE THRU GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 40 ft **WIDTH** No Data

CONSTRUCTION DT 1910 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT DL&W RR ENGINEERING DIV **BUILDER** AMERICAN BRIDGE COMPANY

SETTING / CONTEXT The bridge is in a mixed-use area with scattered residential and light industrial structures. It carries two active tracks and a service road (formerly tracked) over a two-lane connector road with one sidewalk. The road links two lake communities and two major east-west highways. The railroad carries NJT's Boonton Line, a commuter rail line.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge was originally composed of five ballasted deck thru girders with floor beams and lateral bracing supported on concrete abutments. One bay or girder has been removed. The bridge is a representative example of a common overpass type, and it is not historically or technologically distinguished.

INFOR MATION

PHOTO: 515:3A-4A (07/91) REVISED BY (DATE): QUAD: Stanhope

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1468161 **CO** MORRIS **OWNER** STATE AGENCY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED UNION AVENUE OVER MORRISTOWN LINE **FACILITY** UNION AVENUE

TOWNSHIP MADISON BOROUGH

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 53 ft **WIDTH** 50.7 ft

CONSTRUCTION DT 1914 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is in a residential area with a heavily wooded band between the railroad and domestic properties. It is part of the Morristown Line grade crossing elimination project of the early 20th century, when the rail line was also straightened in this section of Madison to remove a sharp curve. The structure carries two lanes of traffic and two sidewalks over two electrified tracks of NJT's Morristown Line.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The well-proportioned concrete deck arch bridge with a standard-design balustrade and channeled base representative of the Morristown Line grade crossing elimination spans built in the 1910s. It is similar in design and type to others over the line in Madison and Morris Townships. The metal pedestrian barrier is a modern addition. The bridge is smaller and less detailed than other concrete arches on the line, like display memory. It is well preserved is not technologically innovative or distinct

INFOR MATION

PHOTO: 501:28-29,517:33-35A (05/91) REVISED BY (DATE): QUAD: Chatham

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1468171 **CO** MORRIS **OWNER** STATE AGENCY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED DANFORTH ROAD OVER MORRISTOWN LINE **FACILITY** DANFORTH ROAD

TOWNSHIP MADISON BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 138 ft **WIDTH** 30 ft

CONSTRUCTION DT 1941 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in a wooded area contiguous to the campuses of Bayley-Ellard High School and Fairleigh Dickinson University, both of which were private estates when the bridge was built. To the east are low-density single family homes. The high brick wall along the FDU campus was erected by former owner Florence Vanderbilt Trombley to obstruct the view of the trolley which ran parallel to the railroad.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The Moderne-detailed stringer span on a concrete substructure is later than other grade crossing elimination structures on the Morristown Line. In addition to the common Moderne banding on the columns and the shallow-paneled parapets, the fascia stringer are haunched. The detailing is representative of the early 1940s and is not unusual. Chain-link safety barriers atop the parapets are ca. 1982 alterations. The bridge is not technologically innovative nor historically significant.

INFOR MATION

PHOTO: 502:21-22 (05/91) REVISED BY (DATE): QUAD: Morristown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1501155 **CO** OCEAN **OWNER** NJDOT **MILEPOINT** 65.76

NAME & FEATURE INTERSECTED US 9 OVER WESTECUNK CREEK **FACILITY** US 9

TOWNSHIP EAGLESWOOD TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 2 **LENGTH** 49 ft **WIDTH** 40 ft

CONSTRUCTION DT 1925 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries two lanes of traffic and a sidewalk over a tidal creek on the northern edge of West Creek village. South of the bridge is a cedar-shingle covered bungalow. The center of West Creek village has some fine examples of 19th-century domestic architecture. The bridge, however, is not within the time period or geographical boundaries of a potential historic district.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 2-span concrete slab bridge has concrete balustrades and substructure with cutwater pier. Beam guide rails have been added. In 1925 the bridge was constructed as part of NJ State Highway Route 4, redesignated US 9 in the early 1950s. It is a representative example of a common NJ State Highway Dept. bridge type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 413:14-15 (06/28/92) REVISED BY (DATE): QUAD: West Creek

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1501159 **CO** OCEAN **OWNER** NJDOT **MILEPOINT** 70.45

NAME & FEATURE INTERSECTED US 9 OVER MILL CREEK **FACILITY** US 9

TOWNSHIP STAFFORD TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 49 ft **WIDTH** 53 ft

CONSTRUCTION DT 1924 **ALTERATION DT** 1968 **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The 4-lane bridge with median and 2 sidewalks spans a small creek at the busy interchange of US 9 and NJ 72. To the north of the bridge is a commercial district with modern shopping centers and some 19th-century buildings with modern additions.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 1924 single-span concrete slab bridge has been significantly altered. In 1968 the NJ 72/US 9 intersection was rebuilt as a modern cloverleaf interchange. The bridge was widened from 2 to 4 lanes with the addition of prestressed concrete beams on the upstream side, and the concrete balustrades were removed and replaced with modern concrete parapets. A chain link fence has been added to the upstream side. The bridge has no significant historical or technological associations.

INFOR MATION

PHOTO: 413:18-20 (06/28/92) REVISED BY (DATE): QUAD: West Creek

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1502152 **CO** OCEAN **OWNER** NJDOT **MILEPOINT** 78.16

NAME & FEATURE INTERSECTED US 9 OVER WARETOWN CREEK **FACILITY** US 9

TOWNSHIP OCEAN TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 2 **LENGTH** 26 ft **WIDTH** 40 ft

CONSTRUCTION DT 1925 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The two-lane bridge spans a small creek near the intersection of US 9 and CR 532. The surrounding area is mixed-use residential and commercial with undistinguished 20th-century structures. Adjacent to the bridge are wooded lots.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span concrete-slab bridge has concrete balustrades and substructure with cutwater pier. Beam guide rails and utilities have been added. In 1925 the bridge was constructed as part of NJ State Highway Route 4, redesignated US 9 in the 1950s. The bridge is a representative example of a common NJ State Highway Department bridge type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 413:22-23 (06/28/92) REVISED BY (DATE): QUAD: Forked River

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1502155 **CO** OCEAN **OWNER** NJDOT **MILEPOINT** 80.63

NAME & FEATURE INTERSECTED US 9 OVER MIDDLE BRANCH OF FORKED RIVER **FACILITY** US 9

TOWNSHIP LACEY TOWNSHIP

TYPE T BEAM **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 28 ft **WIDTH** 40 ft

CONSTRUCTION DT 1925 **ALTERATION DT** 1991 **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries 2-lanes of US 9 over a tidal creek north of the Oyster Creek Nuclear Generating Station. US 9 is a busy commercial strip with many restaurants and retail stores.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 11/14/91

SUMMARY The single-span reinforced-concrete T-beam bridge has concrete balustrades and substructure. A steel bent was added in 1991 to support the superstructure at the northern abutment, which is cracked and undermined. Beam guide rails have also been added. The bridge was constructed as part of NJ State Highway Route 4, redesignated US 9 in the 1950s. The bridge is a representative example of a common bridge type, and it is not historically or technologically distinguished.

INFOR MATION

PHOTO: 413:24-26 (06/28/92) REVISED BY (DATE): QUAD: Forked River

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1502156 **CO** OCEAN **OWNER** NJDOT **MILEPOINT** 81.13

NAME & FEATURE INTERSECTED US 9 OVER NORTH BRANCH OF FORKED RIVER **FACILITY** US 9

TOWNSHIP LACEY TOWNSHIP

TYPE T BEAM **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 28 ft **WIDTH** 30 ft

CONSTRUCTION DT 1925 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries two lanes of traffic and two sidewalks across a small tidal creek. It is adjacent the NJ Division of Parks and Forestry's Forked River State Marina, a facility with modern wharfs, office building, and visitors center. US 9 is a busy commercial strip with shopping centers, offices, and restaurants.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span reinforced-concrete T-beam bridge has concrete balustrades and substructure. In 1925 the bridge was built as part of NJ State Highway Route 4, redesignated US 9 in the 1950s. The bridge is a representative example of a common bridge type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 414:36-37 (06/28/92) REVISED BY (DATE): QUAD: Forked River

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1502157 **CO** OCEAN **OWNER** NJDOT **MILEPOINT** 83.87

NAME & FEATURE INTERSECTED US 9 OVER CEDAR CREEK **FACILITY** US 9

TOWNSHIP LACEY TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 85 ft **WIDTH** 30 ft

CONSTRUCTION DT 1923 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The 2-lane bridge spans Cedar Creek, which forms the border between Lacey and Berkeley Townships. North of the bridge is a wooded portion of Berkeley Township Park. South of the bridge in Lacey Township is a mixed-use commercial and residential area with mostly modern structures. A few 19th- and early 20th-century buildings with modern additions are interspersed, including the Lanoka Harbor United Methodist Church.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 2-span encased steel stringer bridge has concrete balustrades and horizontally-scored abutments and cutwater pier. The fascia stringers are spalling, and beam guide rails have been added. In 1923 the bridge was built as part of NJ State Highway Route 4, redesignated US 9 in the 1950s. The bridge is a representative example of a common NJ State Highway Department bridge type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 414:41-42 (06/28/92) REVISED BY (DATE): QUAD: Forked River

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1504150 **CO** OCEAN **OWNER** NJDOT **MILEPOINT** 98.41

NAME & FEATURE INTERSECTED US 9 OVER NJ 70 **FACILITY** US 9

TOWNSHIP DOVER TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 102 ft **WIDTH** 30 ft

CONSTRUCTION DT 1936 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries 2 lanes of traffic and 2 sidewalks over 4 lanes of traffic on NJ 70. The overpass is at a busy intersection with gas stations, convenience stores, and hotels.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed 2-span encased steel stringer bridge has concrete balustrades, and concrete abutments and pier with Moderne detailing on the pilasters. Beam guide rails have been added, and chain link fences have been attached to the balustrades. In 1936 the bridge was built as a grade elimination project during the widening of NJ 70. The bridge is a representative example of a NJ State Highway Dept. bridge type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 162:6a-8a (06/21/92) REVISED BY (DATE): QUAD: Lakewood

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1504151 **CO** OCEAN **OWNER** NJDOT **MILEPOINT** 101.1

NAME & FEATURE INTERSECTED US 9 OVER WATERING PLACE BROOK **FACILITY** US 9

TOWNSHIP LAKEWOOD TOWNSHIP

TYPE ARCH **DESIGN** BARREL **MATERIAL** Reinforced Concrete

 # SPANS 2 **LENGTH** 69 ft **WIDTH** 36.3 ft

CONSTRUCTION DT 1908 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries two lanes of traffic and a sidewalk over the spillway from Lake Manetta in downtown Lakewood. US 9 is a busy commercial strip with restaurants and gas stations. Lakewood developed in the late-19th and early-20th century as a health resort. The bridge is not contiguous to any of the surviving mansion houses and estates that are concentrated on the northern side of the lake.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 2-span reinforced-concrete arch bridge has paneled concrete parapets. On the upstream side extending between the abutments is a concrete spillway with reconstructed headgates. The bridge a representative example of an early 20th century reinforced concrete arch, and is not a historically or technologically distinguished.

INFOR MATION

PHOTO: 414:24-26 (06/28/92) REVISED BY (DATE): QUAD: Lakewood

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1506002 **CO** OCEAN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BEAVER DAM ROAD (CR 630) OVER BEAVER DAM CREEK **FACILITY** BEAVER DAM ROAD (CR 630)

TOWNSHIP BRICK TOWNSHIP

TYPE SWING SPAN **DESIGN** CENTER BEARING **MATERIAL** Steel

 # SPANS 7 **LENGTH** 277 ft **WIDTH** 20 ft

CONSTRUCTION DT 1933 **ALTERATION DT** 1955, 1975 **SOURCE** PLAQUE

DESIGNER/PATENT UNKNOWN **BUILDER** AMERICAN BRIDGE COMPANY

SETTING / CONTEXT The bridge carries two lanes of traffic and a sidewalk over Beaver Dam Creek near its confluence with the Metedeconk River. The surrounding area is heavily developed with marinas and modern residential structures. The swing span is operable, and is opened to navigation every half-hour during the busy summer boating season. The original operators' shanty is located at the southeast bridge approach.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 10/28/82

SUMMARY The bridge is a center-bearing thru girder and floorbeams swing span with 5 steel stringer approach spans. The operative moveable bridge is representative of swing span technology that was waning in the early 20th century. Earlier and better preserved examples survive (02000I1,1701399). In c.1955 the control panel was replaced, and in 1975 the original motor and open gear sets were replaced with modern equipment. The bridge is not historically or technologically distinguished.

INFOR MATION

SOURCES:
Ocean County Engineer, Bridge File.

PHYSICAL DESCRIPTION: The main span of the 7-span bridge is a built-up thru girder with floor beams center-bearing swing span of 62' in length. It is 20' wide and has a steel grid deck. The center pier is concrete. The moveable span is operated by an electric motor and enclosed reduction gears and sealed bevel gear that engages the rack and pinion drive. The present motor and sealed unites are 1975 replacements of the original motor and open gear sets.

The wood frame operators' shanty is located at the southeastern corner of the bridge. The span is open to navigation on a regular schedule during the summer months.

The five approach spans, 3 to the south and 2 to the north, are steel stringer spans. The substructure consists of timber pile bents. The bridge fenders are also timber piles. A timber sidewalk with chainlink fence is cantilevered off the bridge's eastern side.

HISTORICAL AND TECHNOLOGICAL SIGNIFICANCE. The 1933 Beaver Dam Road Bridge is one of less than one dozen center-bearing swing span bridges identified as surviving in the southern half of the state. Center-bearing swing span bridges were a common moveable bridge type in the second half of the 19th century, but they were increasingly replaced by bascule bridges in the 20th century. Bascules held several advantages over swing spans including opening and closing more quickly, requiring less waterfront area, and providing wider and clearer channels. The 1933 Beaver Dam Road Bridge was probably one of the last highway swing span bridges constructed in the state. It was not technologically innovative and was representative of earlier center bearing swing span construction. Older and more historically significant examples of center-bearing swing span technology exist including the 1896 Union Avenue over Passaic River (02000I1, Bergen County, Rutherford Borough), the 1904 Port Republic Road over Nacote Creek (01PR007, Atlantic County, Port Republic City), the 1905 New Bridge over Alloways Creek (1701399, Salem County, Lower Alloways Township), the 1908 Court Street over Hackensack River (020004A, Bergen County, Hackensack City), and the 1920 Main Street over Delaware and Raritan Canal (3000168, Somerset County, South Bound Brook Borough).

The Beaver Dam Road Bridge was built for the county by the American Bridge Company, which was formed in 1900 as a conglomerate of smaller fabricators. After its formation, American Bridge Company was responsible for over 50% of the bridge building capacity in the nation. The bridge retains its original superstructure, drive pinion and rack, and operators' shanty. The present control panel and lock mechanism dates to ca. 1955, and the sealed units and electric motor date to 1975. The original timber stringers in the approach spans were replaced with rolled steel I-section stringers ca. 1989, but the substructure remains timber.

PHOTO: 414:15-18 (06/28/92) REVISED BY (DATE): QUAD: Point Pleasant

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1506006 **CO** OCEAN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MANTOLOKING ROAD (CR 528) OVER BARNEGAT BAY **FACILITY** MANTOLOKING ROAD (CR 528)

TOWNSHIP BRICK TOWNSHIP

TYPE SINGLE LEAF BASCULE **DESIGN** TRUNNION **MATERIAL** Steel

 # SPANS 41 **LENGTH** 1120 ft **WIDTH** 28 ft

CONSTRUCTION DT 1938 **ALTERATION DT** 1975 **SOURCE** PLAQUE

DESIGNER/PATENT ASH, HOWARD, NEEDLES & TAMMEN **BUILDER** EASTERN ENGINEERING CO

SETTING / CONTEXT The two-lane bridge with sidewalk spans the northern tip of picturesque Barnegat Bay between Mantoloking Neck on the mainland, and Mantoloking Borough on Island Beach. Mantaloking Borough has many well-preserved early-20th century cedar-shingled bungalows next to and south of the bridge. On the mainland side of the bridge are numerous marinas. The bridge's two main spans cross the Intercoastal Waterway.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The main span of the 41-span bridge is a single leaf trunnion bascule haunched deck girder with floor beams. It is matched by a fixed haunched deck girder on the west approach, and the other approach spans are T-beams on timber pile bents. The operating mechanism with open gear sets and enclosed differential are original but worn. The bridge, one of the best examples of its type in the region, is historically and technologically significant.

INFOR MATION

SOURCES:
Brick Township Historical Society. Brick Township Changing Scenes. Brick Township, NJ: 1980.
Ocean County Engineer. Plans and Files. 1938.
Perkons, George. AGLAS. Personal File: Mantoloking Bridge.

PHYSICAL DESCRIPTION: The 1120'-long bridge over Barnegat Bay is composed of a single leaf trunnion bascule haunched deck girder main span, a matching haunched deck girder to the west, and 39 concrete T-beam approach spans, 15 to the west and 24 to the east. The T-beam spans are supported on timber pile bents and have concrete post-and-rail railings. The moveable span is 58' toe-to-trunnion, and is 28' wide with an open steel grate deck. The cantilevered sidewalk with a modern metal railing is on the south side. Modern crash gates have been installed and the fender system is timber.

The operating controls and drive mechanism are housed in a three-story hexagonal-shaped concrete tenders' house with a standing seam metal roof and double hung windows. The operating mechanism appears to be relatively unaltered. The original trolley-like controls were replaced with a modern panel in 1975, but the gearing, with an enclosed primary reducer and open gear sets for the secondary reducer and drive gear, is original as are the trunnions and built-up trunnion tower. The gears are worn, and the rack and pinion are thin. The concrete counterweight is fixed to the tail end of the moveable leaf.

HISTORICAL AND TECHNOLOGICAL SIGNIFICANCE: The Mantoloking Bascule Bridge is a historically and technologically distinguished as one of the most complete examples of the Ash, Howard, Needles & Tammen moveable bridge design that is common in the region. It is eligible under National Register Criterion C. With the expiration of the Strauss patents in the 1920s, other designs gained currency, especially the Ash, Howard, Needles & Tammen trunnion bridge with a counterweight fixed to the tail end and a span support that incorporated patented details (U.S. Patent No. 1633565, 1927). The technology used in the design, which is well represented in southern New Jersey where over 10 similar spans were built in the 1930s and early 1940s, is not innovative as the trunnion bridge was perfected in the 1910s. The Mantoloking Span is notable because, with the exception of the control panel and c.1955 steel grid deck on the moveable span, it is well-preserved and unaltered. It is more complete than other examples (i.e. 1511150, NJ 70 over Manasquan River, Point Pleasant Borough).

In 1938 the bridge was constructed to replace a 7-panel Warren truss swing span, probably built c.1915. The 1938 bascule was designed by the engineering firm of Ash, Howard, Needles, and Tammen, consulting engineers based in Kansas City. State Highway Engineer, Morris Goodkind, also acted as a consultant on the project. Eastern Engineering Corporation contracted to build the bridge and was paid in part by federal Depression-era work relief program funds, a common arrangement for 1930s bridges in the state.

BOUNDARY DESCRIPTION AND JUSTIFICATION: The bridge is individually eligible, in and of itself, including superstructure, substructure, operators' buildings, and right-of-way over the river.

PHOTO: 414:1-5,43-44 (06/28/92) REVISED BY (DATE): QUAD: Point Pleasant

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US
November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1507001 **CO** OCEAN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED LAKEHURST ROAD (CR 527) OVER TOMS RIVER **FACILITY** LAKEHURST ROAD (CR 527)

TOWNSHIP DOVER TOWNSHIP

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 72 ft **WIDTH** 40.6 ft

CONSTRUCTION DT 1913 **ALTERATION DT** 1970 **SOURCE** PLAQUE

DESIGNER/PATENT I. H. CRAMER, CO. ENG. **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries three lanes of traffic over a tree-lined river near the intersection of Lakehurst Road and the Garden State Parkway. Parallel to the river is a high-tension electric power line. East of the bridge is a mid-20th century residential community with single and multi-family dwellings.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span reinforced concrete arch with concrete parapet was originally constructed in 1913. In 1970 it was widened on the upstream side with the addition of prestressed concrete beams on a timber pile substructure with modern concrete parapet. It is not historically or technologically distinguished.

INFOR MATION

PHOTO: 162:3a-5a (06/21/92) REVISED BY (DATE): QUAD: Toms River

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1508002 **CO** OCEAN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BAY AVENUE OVER SOUTH CREEK **FACILITY** BAY AVENUE

TOWNSHIP EAGLESWOOD TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Wood

 # SPANS 3 **LENGTH** 33 ft **WIDTH** 28 ft

CONSTRUCTION DT 1925 **ALTERATION DT** 1990ca **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The 2-lane wide bridge spans a tidal tributary of Westecunk Creek near its confluence with Little Egg Harbor. Bay Avenue is a dead end road leading out to the tip of Long Point. The point is a broad tidal meadowlands crisscrossed with many small streams. Along the creeks are summer homes (c.1960-80) built on timber piles. There are numerous docks with small pleasure craft.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 7/9/90

SUMMARY The 3-span timber stringer bridge has timber pile bents, timber deck, and wood railing. County records give the bridge's original construction date as 1925, but the bridge has been rebuilt inkind (c.1990). Inspection shows that all of the timber structural elements are new material. The bridge is a representative example of a common bridge type, and is not historically or technologically distinguished

INFOR MATION

PHOTO: 413:12-13 (06/28/92) REVISED BY (DATE): QUAD: Tuckerton

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1509150 **CO** OCEAN **OWNER** NJDOT **MILEPOINT** 41.82

NAME & FEATURE INTERSECTED NJ 70 OVER HURRICANE BROOK **FACILITY** NJ 70

TOWNSHIP MANCHESTER TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 23 ft **WIDTH** 50 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The 2-lane bridge spans a small brook in an undeveloped area of the Pine Barrens west of Lakehurst.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span reinforced concrete slab bridge has low concrete parapets and concrete abutments with wingwalls. The bridge has beam guide rails, and a utility pipe is attached to the downstream side of the bridge. In 1930 the bridge was built as part of the NJ Highway Route 40 improvements. The route was later redesignated NJ 70. The bridge is a common type with no distinguishing features. It has no significant historical or technological associations.

INFOR MATION

PHOTO: 413:7-9 (06/21/92) REVISED BY (DATE): QUAD: Keswick Grove

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1509151 **CO** OCEAN **OWNER** NJDOT **MILEPOINT** 43.23

NAME & FEATURE INTERSECTED NJ 70 OVER BLACKS BRANCH **FACILITY** NJ 70

TOWNSHIP LAKEHURST BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 36 ft **WIDTH** 40 ft

CONSTRUCTION DT 1939 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The 2-lane bridge with a sidewalk spans a small brook on the western outskirts of Lakehurst Borough in the Pine Barrens. East of the bridge is a traffic circle with nearby shopping center and motel (c.1960). West of the bridge is a roadside picnic area.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed, single-span encased steel stringer bridge has concrete balustrades and concrete abutments with stepped wingwalls on the upstream side. In 1939 the bridge was constructed as part of the NJ Route 40 improvements. The highway was later redesignated NJ 70. The bridge is a representative example of a common NJ State Highway Department bridge type. It is not historically or technologically distinguished.

INFOR MATION

PHOTO: 430:44,1,2 (06/21/92) REVISED BY (DATE): QUAD: Lakehurst

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1509152 **CO** OCEAN **OWNER** NJDOT **MILEPOINT** 44.6

NAME & FEATURE INTERSECTED NJ 70 OVER CENTRAL RR OF NEW JERSEY (CONRAIL) **FACILITY** NJ 70

TOWNSHIP LAKEHURST BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 154 ft **WIDTH** 54 ft

CONSTRUCTION DT 1938 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The 4-lane bridge with median and two sidewalks spans three tracks of Conrail, the former Central Railroad of New Jersey, just north of the former location of Lakehurst Station. The railroad right-of-way was originally developed in 1862 by the Delaware and Raritan Bay Railroad. The bridge is immediately west of a traffic circle and the intersection of NJ 37 and NJ 70. To the west is a modern commercial strip with restaurants and retail stores.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed 3-span encased steel stringer bridge has a main span over the railroad tracks and two short approach spans. It has concrete balustrades, abutments, and piers. In 1938 the bridge was built as a New Deal era grade elimination project by the NJ State Highway Department. The bridge is a common overpass bridge type found throughout the state. It has no significant historical or technological associations.

INFOR MATION

PHOTO: 430:3-7 (06/21/92) REVISED BY (DATE): QUAD: Lakehurst

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1510151 **CO** OCEAN **OWNER** NJDOT **MILEPOINT** 45.62

NAME & FEATURE INTERSECTED NJ 70 OVER RIDGEWAY BRANCH **FACILITY** NJ 70

TOWNSHIP MANCHESTER TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 34 ft **WIDTH** 40 ft

CONSTRUCTION DT 1936 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries 2-lanes of traffic and shoulders over a small creek. Next to the bridge are undeveloped wooded lots, but the surrounding area is a moderately developed late 20th-century residential neighborhood. To the east is a shopping center.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span encased steel stringer bridge has concrete balustrades and abutments with stepped wingwalls on the upstream side. Beam guide rails have been added, and a utility pipe is attached to the downstream side. In 1936 the bridge was built as part of the NJ Highway Route 40 improvements. The road was later redesignated NJ 70. The bridge is a representative example of a common NJ State Highway Department bridge type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 413:1-2 (06/21/92) REVISED BY (DATE): QUAD: Lakehurst

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1510152 **CO** OCEAN **OWNER** NJDOT **MILEPOINT** 47.92

NAME & FEATURE INTERSECTED NJ 70 OVER TOMS RIVER **FACILITY** NJ 70

TOWNSHIP MANCHESTER TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 44 ft **WIDTH** 40 ft

CONSTRUCTION DT 1936 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The 2-lane bridge spans a small tree-lined creek. Adjacent to the bridge are undeveloped wood lots, but the surrounding area is a moderately-developed late-20th century residential community. To the east is a mobile home park.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span encased steel stringer bridge has concrete balustrades and abutments with stepped wingwalls on the upstream side. Beam guide rails have been added. In 1936 the bridge was constructed as part of the NJ Highway Route 40 improvements. Later the highway was redesignated NJ Route 70. The bridge is a common NJ State Highway Department bridge type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 162:9a-11a (06/21/92) REVISED BY (DATE): QUAD: Lakehurst

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1510155 **CO** OCEAN **OWNER** NJDOT **MILEPOINT** 54.65

NAME & FEATURE INTERSECTED NJ 70 OVER SOUTH BRANCH OF METEDECONK RIVER **FACILITY** NJ 70

TOWNSHIP BRICK TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 63 ft **WIDTH** 74.4 ft

CONSTRUCTION DT 1937 **ALTERATION DT** 1965 **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The 4-lane bridge with median and 2 sidewalks spans the South Branch of the Metedeconk River. The surrounding area is heavily developed with a marina to the east, and a car dealership and shopping center to the south.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 1937 skewed 2-span encased steel stringer bridge with concrete balustrade was widened in 1965 with a prestressed concrete beam with parapet addition. Both sections are supported on a concrete substructure. The addition was built to accommodate the expansion of NJ 70 into a divided 4-lane highway. The 1937 bridge is a representative example of a common NJ Highway Department designed bridge type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 414:21-22 (06/28/92) REVISED BY (DATE): QUAD: Lakewood

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1510156 **CO** OCEAN **OWNER** NJDOT **MILEPOINT** 54.75

NAME & FEATURE INTERSECTED NJ 70 OVER NORTH BRANCH OF METEDECONK RIVER **FACILITY** NJ 70

TOWNSHIP BRICK TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 48 ft **WIDTH** 87 ft

CONSTRUCTION DT 1937 **ALTERATION DT** 1965 **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The 4-lane bridge with grass median and 2 sidewalks spans the North Branch of the Metedeconk River south of the NJ 70/NJ 88 traffic circle. NJ 70 is a heavily developed commercial strip with shopping centers, car dealerships, and office buildings. Upstream from the bridge is a small wooded area popular with fishermen. A historic marker placed by the Brick Twp. Historic Society notes that the bridge is at or near the site of an early 19th-century iron works known as Butcher's Forge.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 1937 skewed, single-span encased steel stringer bridge with concrete balustrade was widened in 1965 by a prestressed concrete beam addition on the downstream side. Both sections are supported on a concrete substructure. The addition was built to accommodate the expansion of NJ 70 into a divided 4-lane highway. The 1937 bridge is a common NJ State Highway Department designed bridge type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 414:19-20,23 (06/28/92) REVISED BY (DATE): QUAD: Lakewood

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1511150 **CO** OCEAN **OWNER** NJDOT **MILEPOINT** 58.25

NAME & FEATURE INTERSECTED NJ 70 OVER MANASQUAN RIVER **FACILITY** NJ 70

TOWNSHIP POINT PLEASANT BOROUGH

TYPE SINGLE LEAF BASCULE **DESIGN** TRUNNION **MATERIAL** Steel

 # SPANS 18 **LENGTH** 625 ft **WIDTH** 48 ft

CONSTRUCTION DT 1936 **ALTERATION DT** 1991 **SOURCE** PLANS

DESIGNER/PATENT ASH, HOWARD, NEEDLES & TAMMEN **BUILDER**

SETTING / CONTEXT The bridge carries 4 lanes of traffic, a median, and 1 sidewalk over the Manasquan River, which forms the border between Monmouth and Ocean County. The river is navigable and the waterfront is developed with modern marinas and businesses. The surrounding area is mixed use with commercial establishments along NJ 70, and residential developments set back from the main thorofare. Most buildings are less than 50 years old.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge's main span is a 56'-long single-leaf trunnion with fixed counterweight and the approach spans are T-beams on concrete pile bents. The moveable span was designed by Ash, Howard, Needles & Tammen, consulting engineers, and incorporates a 1927 patented trunnion column detail. In 1991 the operators' houses and mechanism were irreversibly altered and replaced with modern components. The bridge is not historically distinguished. More complete examples survive in the region (1506006).

INFOR MATION

SOURCES:
New Jersey Department of Transportation. Bridge Plans. 1936, 1991.

PHYSICAL DESCRIPTION: The 625'-long bridge over the Manasquan River is composed of a single leaf trunnion bascule haunched deck girder main span, a matching haunched girder to the north, and 16 other T-beam approach spans supported on concrete pile bents and finished with concrete post-and-rail railings. The movable span is 56' toe-to-trunnion with a concrete counterweight attached to the tail end, steel grid deck and pipe railings. Modern beam guide rails and crash gates have been installed. The fender system is timber.

In 1991 the bascule operators' houses and operating mechanism were rehabilitated. Improvements included computerized operators' controls, installation of sealed unit speed reducer gears, modern motors and brakes, and automated gate systems. The two-story operators' houses received new metal roofs, windows, doors, and exterior stucco.

HISTORICAL AND TECHNOLOGICAL SIGNIFICANCE: The NJ 70 over Manasquan River bridge (1936) is one of over ten similar 1930s Ash-Howard-Needles and Tammen bascule spans in southern New Jersey. The NJ 70 span is one of the least well-preserved examples of the bridge type because of significant alterations to the operators' houses and operating mechanism. Other bridges, such as 1506006 (Mantoloking Road over Barnegat Bay, Brick Township, 1938) and 1300S31 (CR 8A over Navesink River, Monmouth County, Middletown Township, 1939), are more complete and thus better representative examples of the historically important movable bridge technology. The Ash-Howard-Needles and Tammen trunnion bascule design became popular in the late-1920s after the expiration of the Strauss bascule patents.

The NJ 70 bridge was constructed under the administration of the NJ State Highway Department and was funded in part by federal work-relief money, a common arrangement for 1930s bridges in the state. The original route designation of the bridge was NJ 34.

PHOTO: 160:17-29a (06/28/92) REVISED BY (DATE): QUAD: Point Pleasant

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1512003 **CO** OCEAN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BARNEGAT LAKE DRIVE OVER NORTH BRANCH OF FORKED RIVER **FACILITY** BARNEGAT LAKE DRIVE

TOWNSHIP LACEY TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 2 **LENGTH** 36 ft **WIDTH** 30 ft

CONSTRUCTION DT 1936 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The 2-lane bridge with sidewalk spans the circular concrete spillway from Barnegat Lake. North of the bridge is a beach owned by Lacey Township. The lake is surrounded by a residential community developed between c.1930-1970. Most of the residences have modern additions.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 2-span reinforced-concrete slab bridge has a concrete substructure with cutwater pier and pipe railings. A chain link fence has been attached to the railing on the upstream side. The bridge is a common 20th-century bridge type, and it is not historically or technologically distinguished.

INFOR MATION

PHOTO: 414:38-40 (06/28/92) REVISED BY (DATE): QUAD: Forked River

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1512152 **CO** OCEAN **OWNER** NJDOT **MILEPOINT** 21.4

NAME & FEATURE INTERSECTED NJ 72 OVER MILL CREEK **FACILITY** NJ 72

TOWNSHIP STAFFORD TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 44 ft **WIDTH** 105 ft

CONSTRUCTION DT 1930 **ALTERATION DT** 1968 **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The 4-lane bridge with median, shoulders and sidewalk spans a small creek about 1/4-mile west of the intersection of NJ 72 and the Garden State Parkway. The area is moderately developed, and a business park (c.1980) is located just south of the bridge.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 1930 skewed, single-span, encased steel stringer bridge with a concrete balustrade was widened in 1968 with prestressed concrete beams with parapet on the upstream side. The addition was built to accommodate the expansion of NJ 72 into a divided 4-lane highway. The 1930 bridge was originally built as part of NJ Route S40, later redesignated NJ 72. It is a common NJ State Highway Department bridge type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 413:10-11 (06/28/92) REVISED BY (DATE): QUAD: West Creek

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1512153 **CO** OCEAN **OWNER** NJDOT **MILEPOINT** 23.19

NAME & FEATURE INTERSECTED CR 680 OVER MILL CREEK **FACILITY** CR 680

TOWNSHIP STAFFORD TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 34 ft **WIDTH** 50 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The 3-lane bridge with 2 sidewalks spans Mill Creek at the intersection of US 9 and CR 680 in Manahawkin. The intersection is heavily developed with an office building and shopping center (c.1960-80). To the south and paralleling CR 680 is a section of NJ 72, a 4-lane divided highway bypass. To the west and between NJ 72 and CR 680 is the Stafford Township Historical Society's Old Stone Store (c.1838) and the relocated Manahawkin Station (c.1870).

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span encased steel stringer bridge has concrete balustrades and substructure. In 1930 the bridge was built as part of the NJ Route S.40 improvements. It is a representative example of a common NJ State Highway Department bridge type. In 1968 the bridge was placed on the county highway system with the construction of the NJ 72 bypass. The 1930 bridge has no significant association with the nearby 19th-century historic properties, and is not technologically distinguished.

INFOR MATION

PHOTO: 413:16-17 (06/28/92) REVISED BY (DATE): QUAD: West Creek

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1513001 **CO** OCEAN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WRANGLE BROOK ROAD OVER UNION BRANCH **FACILITY** WRANGLE BROOK ROAD

TOWNSHIP LAKEHURST BOROUGH

TYPE STRINGER **DESIGN** **MATERIAL** Wood

 # SPANS 2 **LENGTH** 32 ft **WIDTH** 14 ft

CONSTRUCTION DT 1940 **ALTERATION DT** **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The single-lane bridge spans Union Branch on the southeast side of Lakehurst. Wrangle Brook Road is a dead end road leading to a lightly developed 20th-century residential area.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 2-span timber stringer bridge has timber pile substructure, timber deck, and wood railing. According to county records, the 1940 bridge has never undergone major reconstruction, although most of the timber structural elements have been replaced or repaired inkind. The bridge is a common type, and it is not historically or technologically distinguished.

INFOR MATION

PHOTO: 413:3-4 (06/21/92) REVISED BY (DATE): QUAD: Lakehurst

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1514003 **CO** OCEAN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED SQUANKUM ROAD OVER NORTH BRANCH METEDECONK RIVER **FACILITY** SQUANKUM ROAD (CR 547)

TOWNSHIP LAKEWOOD TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 56 ft **WIDTH** 30 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The 2-lane bridge with sidewalk spans a small creek that forms the border between Monmouth and Ocean County. Southeast of the bridge is a junk yard, although the surrounding area is mostly modern residences on wooded lots.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed, single-span, encased steel stringer bridge has concrete balustrades, paneled fascia, and concrete substructure. Plaques on the joint-county bridge have been removed. The bridge is a representative example of a common bridge type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 176:8a-9a (06/28/92) REVISED BY (DATE): QUAD: Lakewood

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1515150 **CO** OCEAN **OWNER** NJDOT **MILEPOINT** 7.45

NAME & FEATURE INTERSECTED NJ 88 OVER BEAVER DAM CREEK **FACILITY** NJ 88

TOWNSHIP BRICK TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 29 ft **WIDTH** 30 ft

CONSTRUCTION DT 1923 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The two-lane bridge spans a small creek in a heavily developed area of Brick Township. Adjacent to the bridge is a shopping center and motel (c.1960-70).

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span encased steel stringer bridge has concrete balustrades and substructure. Beam guide rails have been added. In 1923 the bridge was constructed as part of NJ State Highway Route 4, later redesignated NJ Route 88. The bridge is a common NJ State Highway Department bridge type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 414:13-14 (06/28/92) REVISED BY (DATE): QUAD: Point Pleasant

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1516150 **CO** OCEAN **OWNER** NJDOT **MILEPOINT** 0.83

NAME & FEATURE INTERSECTED NJ 166 OVER JAKES BRANCH **FACILITY** NJ 166

TOWNSHIP SOUTH TOMS RIVER BOROUGH

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 2 **LENGTH** 40 ft **WIDTH** 40 ft

CONSTRUCTION DT 1927 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The two-lane bridge spans Jakes Branch near its confluence with Toms River. East of the bridge is a wide section of Toms River and a boat marina. NJ 166 is a heavily traveled modern commercial strip. Next to the bridge are a used-car dealership and an auto parts store. Paralleling NJ 166 west of the bridge is the abandoned right-of-way of the Central Railroad of New Jersey, and a deteriorated deck girder railroad bridge with timber pile substructure.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 7/9/90

SUMMARY The 2-span reinforced-concrete slab bridge has concrete balustrades, abutments, and cutwater pier. Beam guide rails have been added. Underneath the asphalt road surface on the eastern shoulder are stone pavers. In 1927 the bridge was built as part of NJ State Highway Route 4, later redesignated NJ 166. It is a representative example of a common NJ Highway Dept. bridge type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 162:1a-2a (06/21/92) REVISED BY (DATE): QUAD: Toms River

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1516151 **CO** OCEAN **OWNER** NJDOT **MILEPOINT** 1.05

NAME & FEATURE INTERSECTED NJ 166 OVER SOUTH CHANNEL OF TOMS RIVER **FACILITY** NJ 166

TOWNSHIP DOVER TOWNSHIP

TYPE THRU GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 151 ft **WIDTH** 40 ft

CONSTRUCTION DT 1928 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The two-lane bridge with cantilevered sidewalks spans the South Channel of Toms River between the south river bank and Huddy Park island municipal park. The park, a green space with modern gazebo, was established in 1931 on landfill adjacent the bridge and commemorates Toms River Revolutionary War hero Joshua Huddy. The bridge is located on a sharp curve on NJ 166 and is in a downtown area with numerous commercial establishments including a marina, hotel, convenience store, and warehouse.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 2-span encased steel thru girder with floor beams bridge has a concrete substructure and cantilevered sidewalks with pipe railing with concrete posts. The two spans are skewed at different angles to accommodate the curve in the roadway. Beam guide rails and highway lighting have been added. The bridge has no significant historical association with Huddy Park. It is a representative example of a common NJ State Highway Department bridge type, and is not technologically noteworthy.

INFOR MATION

PHOTO: 162:42a-44a (06/21/92) REVISED BY (DATE): QUAD: Toms River

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1516152 **CO** OCEAN **OWNER** NJDOT **MILEPOINT** 1.15

NAME & FEATURE INTERSECTED NJ 166 OVER NORTH CHANNEL OF TOMS RIVER **FACILITY** NJ 166 (SOUTH MAIN STREET)

TOWNSHIP DOVER TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 50 ft **WIDTH** 40.1 ft

CONSTRUCTION DT 1928 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The 2-lane bridge with 2 sidewalks spans the North Channel of Toms River between Huddy Island municipal park and downtown Toms River. The park, a green space with modern gazebo established in 1931 on landfill adjacent the bridge, commemorates Toms River Revolutionary War hero Joshua Huddy. A stairway leads from the bridge's southeast approach to the park. The downtown area has many modern intrusions including a motel and convenience store north of the bridge.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single span bridge is a steel stringer with end floorbeams, pipe railings, and concrete substructure. The northeast concrete wingwall has been rebuilt. The bridge was constructed in 1928 as part of the NJ Route 4 improvements, later redesignated NJ 166. The span has no significant historical association with Huddy Park or the events the park commemorates. It is a common NJ State Highway Department bridge type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 162:39a-41a (06/21/92) REVISED BY (DATE): QUAD: Toms River

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1529003 **CO** OCEAN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED SOUTH MAIN STREET OVER TOMS RIVER **FACILITY** SOUTH MAIN STREET

TOWNSHIP SOUTH TOMS RIVER BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 65 ft **WIDTH** 30 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The 2-lane bridge with 2 sidewalks spans Toms River between downtown Toms River and South Toms River. The northern approach intersects NJ 166 at Huddy Park island municipal park, a greenspace established on landfill in 1931 to commemorate Toms River Revolutionary War hero Joshua Huddy. Stairs lead from the bridge's eastern sidewalk into the park. Immediately east are the two NJ 166 bridges across the Toms River. The downtown setting is undistinguished with a warehouse and motel (c.1970).

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 2-span encased steel stringer bridge has concrete balustrades, abutments, and cutwater pier. The bridge balustrades continue over the approaches. Modern highway lighting has been added. The bridge has no significant historical association with Huddy Park and the events it commemorates. The span is a representative example of a common type and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 162:35a-38a (06/21/92) REVISED BY (DATE): QUAD: Toms River

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1560150 **CO** OCEAN **OWNER** STATE AGENCY **MILEPOINT** 36.38

NAME & FEATURE INTERSECTED NORTH JERSEY COAST LINE OVER LITTLE MANASQUAN RIVER **FACILITY** NORTH JERSEY COAST LINE (NJT)

TOWNSHIP POINT PLEASANT BOROUGH

TYPE STRINGER **DESIGN** **MATERIAL** Wood

 # SPANS 10 **LENGTH** 124 ft **WIDTH** No Data

CONSTRUCTION DT 1921 **ALTERATION DT** Unknown **SOURCE** NJDOT

DESIGNER/PATENT NEW YORK & LONG BRANCH RR **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries two tracks of New Jersey Transit's North Jersey Coast Line over the Little Manasquan River. The bridge is parallel to the NJ 35 bridges. Southeast of the bridge is Gill Island municipal park, a small fishing area with parking lot. Immediately south of the bridge is Broad Street, a 4-lane avenue. Nearby are several marinas.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 10-span open deck timber stringer is supported on timber pile bents. According to state records, in 1921 the bridge was built after a joint operating agreement by the Central RR of New Jersey and the Pennsylvania Railroad for the New York and Long Branch Railroad. The bridge has been rebuilt inkind several times. It is not historically or technologically distinguished.

INFOR MATION

PHOTO: 414:6-8 (06/28/92) REVISED BY (DATE): QUAD: Point Pleasant

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1600002 **CO** PASSAIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED GREGORY AVENUE OVER PASSAIC RIVER **FACILITY** GREGORY AVENUE

TOWNSHIP PASSAIC CITY

TYPE SWING SPAN **DESIGN** RIM BEARING **MATERIAL** Steel

 # SPANS 2 **LENGTH** 245 ft **WIDTH** 28.8 ft

CONSTRUCTION DT 1906 **ALTERATION DT** 1985 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT PASSAIC COUNTY HIGHWAY DEPT **BUILDER** OWEGO BRIDGE COMPANY

SETTING / CONTEXT The bridge carries a 2-lane street and sidewalks over the Passaic River at the boundary between Passaic and Bergen counties. It is located in an industrial section with car lots and an oil storage facility.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 03/12/01

SUMMARY The thru truss rim-bearing swing span bridge on an ashlar substructure was erected in 1906 by the Owego Bridge Co. It is of riveted construction with the exception of the center tower, which has pinned top chords composed of stamped eye bars. The bridge has been altered. In 1985 the operating machinery and operator's house located above the roadway were removed. The flooring system was replaced, and additional section was bolted onto some verticals and diagonals. However, the changes do not preclude the individual eligibility of this structure for listing in the National Register of Historic Places under Criterion C as a representative example of a through truss rim-bearing span. All of the key visual elements of the bridge - the trusses by the Owego Bridge Company, the center pier, the wheels that run on a track making it a rim - bearing span, and the ashlar abutments retain integrity.

INFOR MATION

PHOTO: 142:3-8 (04/92) REVISED BY (DATE): QUAD: Weehawken

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1600003 **CO** PASSAIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MARKET STREET OVER PASSAIC RIVER **FACILITY** MARKET STREET

TOWNSHIP PASSAIC CITY

TYPE DOUBLE LEAF BASCULE **DESIGN** **MATERIAL** Steel

 # SPANS 3 **LENGTH** 307 ft **WIDTH** 30 ft

CONSTRUCTION DT 1930 **ALTERATION DT** 1977ca **SOURCE** PLAQUE

DESIGNER/PATENT STRAUSS BASCULE BRIDGE COMPANY **BUILDER** F. W.SCHWIERS,JR. CO., NYC

SETTING / CONTEXT The bridge is located in a late-19th and early-20th century industrial area of Passaic. It carries a 2-lane street and sidewalks over the Passaic River at the boundary between Passaic and Bergen counties.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The main span of the 3-span bridge is a Strauss underneath counterweight double-leaf girder bascule. The approaches are encased deck girders with concrete balustrades while the movable leafs have metal railings. A fairly late example of what by 1930was a common type, the span was altered ca. 1977 when the motors and controls were removed and the bridge was fixed. The gearing and octagonal houses remain, but the span has been significantly altered which diminishes its technological significance.

INFOR MATION

PHOTO: 142:37-41 (04/92) REVISED BY (DATE): QUAD: Weehawken

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1600004 **CO** PASSAIC **OWNER** COUNTY **MILEPOINT** 0.0
NAME & FEATURE INTERSECTED EIGHTH STREET OVER PASSAIC RIVER **FACILITY** EIGHTH STREET
TOWNSHIP PASSAIC CITY
TYPE SINGLE LEAF BASCULE **DESIGN** STRAUSS OVERHEAD **MATERIAL** Steel
 # SPANS 3 **LENGTH** 292 ft **WIDTH** 32.1 ft

CONSTRUCTION DT 1915 **ALTERATION DT** 1977ca **SOURCE** COUNTY RECORDS
DESIGNER/PATENT STRAUSS BASCULE BRIDGE COMPANY **BUILDER** F. R.LONG-W.G.BROADHURST CO.

SETTING / CONTEXT The bridge carries a 2-lane road, 2 sidewalks, and a utility pipe over the Passaic River on the boundary between Passaic and Bergen counties in an industrial section of Passaic. It is one of 3 moveable spans in Passaic.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No
CONSULT STATUS Individually Eligible.
CONSULT DOCUMENTS SHPO Finding 11/23/94, Letter 6/30/95.

SUMMARY The main span of the 3-span riveted Warren pony truss bridge is an 86' Strauss overhead articulated counterweight bascule span. It is supported on a concrete substructure. While the superstructure is complete, the operating controls and equipment was removed ca. 1977. The operator's house was removed after that. The gearing remains. Although altered, the span retains enough of its original fabric to maintain its technological significance as a rare example of an important moveable type.

INFORMATION

Bibliography:
Passaic County Engineers Office. Bridge File: 4.
Waddell, J.A.L. Bridge Engineering. 1925.

Physical Description: The main span of the 229'-long riveted Warren pony truss bridge is 85'-long is a Strauss articulated overhead counterweight single leaf bascule span. The entire bridge is supported on a concrete substructure. The lift span is a rivet-connected Warren pony truss span with a 32' roadway. It is traditionally composed of built-up members as are the trunnion columns, braced counterweight tower, and counterweight linkages that permit the counterweight to pivot and move parallel to itself during operation of the bridge. The steel grid deck was installed in 1965 as part of an upgrading of the floor system. The most significant alteration to the bridge has been the demolition of the operators shanty and operating controls for the electric-motor powered span some time between 1976 and 1979. The bridge has been fixed in the closed position, but the gear sets and shafts are still in place as is the chain-operated manual operation. Plans for the original mechanical systems is preserved in the County Engineers office. The original metal sidewalk railings are still place.

Historical and Technological Significance: The 1915 Strauss overhead articulated counterweight bascule bridge designed by the Strauss Bascule and Concrete Bridge Company of Chicago, Illinois, is one of the few examples of the technologically important bridge type remaining in the state. Despite the fact that it was once the most popular moveable bridge type in the country in the early 20th century, about six built between 1907 and 1938 remain in the entire state. Because of the diminishing number, each example that retains the technologically innovative patented articulated counterweight detail are considered as technologically and historically important.

J. B. Strauss (1870-1938) invented the pivoting counterweight linkage used at the Eighth Street bridge, and he applied for a patent in 1905, the same year the first bridge of this type was built in Cleveland. That year he also founded the Strauss Bascule and Concrete Bridge Company in Chicago to market his bridge designs. Strauss went on to become the most widely respected moveable-span bridge engineer of the pre-World War II era.

Strauss reasoned that if, unlike the traditional trunnion bridge, which operates like a seesaw and moves in a vertical plane on a horizontal steel pivot, the entire weight of the counterweight could be concentrated at the end (tail) of the moveable leaf, it would then be possible to use a lighter counterweight. Such an arrangement also meant a shorter tail end to the leaf, thus saving on materials that the "counterweight could be made in such shape that no pit is required to receive it when the leaf is in the upright position'" (Waddell, p. 704). The patented linkage, or arms, ensures that the counterweight will always move in a series of parallel positions and thus maintain the position of the weight at the tail end of the leaf.

This example is altered, but not to the degree that the technologically significant elements have been lost. The span was fixed about 1976, and the operators house and controls were removed by 1979. Despite the loss of the operator's house, the superstructure survives in a remarkably complete state of preservation making this bridge one of the most important of its type in New Jersey. Much of the gearing and the counterweight linkage survive as does the uncommon chain-driven manual operation. A machinery plan for the bridge survives, so how the operating mechanism was arranged is well documented.

Boundary Description and Justification: The bridge is evaluated as significant on its own merits. The surroundings do not contribute to the significance of the span, so the boundary is the limits of the span itself. This includes the structure and the superstructure.

PHOTO: 142:42-2 (04/92) REVISED BY (DATE): QUAD: Weehawken

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1600009 **CO** PASSAIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED FAIR LAWN AVENUE OVER PASSAIC RIVER **FACILITY** FAIR LAWN AVENUE

TOWNSHIP PATERSON CITY

TYPE THRU TRUSS **DESIGN** PRATT HALF HIP **MATERIAL** Steel

 # SPANS 2 **LENGTH** 270 ft **WIDTH** 19.5 ft

CONSTRUCTION DT 1905 **ALTERATION DT** **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries two lanes over the Passaic River at the boundary between Bergen and Passaic counties at a T intersection. The Passaic County side is adjacent to a late-19th century industrial plant now used for chemical production while the Bergen County side is dominated by early-20th century detached homes in the suburban community of Fair Lawn.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 2-span pin-connected Pratt thru truss bridge supported on concrete abutments and a cutwater pier is a well-preserved example of its type. Aside from impact damage and the 1925 and mid-1960s replacement of the sidewalk brackets and stringers, the span is largely unaltered. The original lattice railings survive. The undocumented bridge was built after the disastrous 1903 flood that claimed most of the bridges in the Paterson area. It is one of 3 significant thru truss bridges in the county.

INFOR MATION

Bibliography:
Passaic County Engineer. Bridge File, 9.
Minutes Passaic County Board of Chosen Freeholders. 1903-1905.
"Flood Damage to Bridges at Paterson, N.J. Engineering News. Vol. L, No. 18 (October 29, 1903), pp. 377-378.

Physical Description: The skewed 2-span pin-connected and riveted Pratt thru truss bridge with a cantilevered sidewalk on the downstream side is supported on concrete abutments with wingwalls and a center cutwater pier. The top chords and inclined end posts are built-up box members with lacing on the underside. The verticals are laced toe-out channels, and the diagonals and bottom chords are stamped eye bars. The span marks the transition from pinned to riveted field connections. The upper panel points are pinned while the lower panel points have pins for the bottom chords and rivets for connecting the floor beams to the verticals. The floor beams are built up and set on the skew. The lattice portal brace has been strengthened by the addition of plate corner braces welded in place in the mid 1960s. One of the most significant features of the bridge is the survival of the handsome lattice railings set inside the truss lines. The railings are accented with rosette bosses. The deck is a modern steel grid deck placed in the mid 1960s.

Historical and Technological Significance: The well-preserved 2-span pin-connected and riveted Pratt thru truss bridge built in 1905 to replace a span lost in the October, 1903 flood, ranks as the only example of its type in the county. It is also significant in that it marks the transition from pinned to riveted field connections. Its location in an urban area makes its a remarkable survivor form an era when load and traffic needs were much different. Despite some impact damage, the bridge remains in service on a busy intercounty road appearing and functioning much as it did in 1905 when it was completed. It survives as a good representative example of its truss type and fabrication technology (criterion C).

The bridge is one of four thru truss spans in the county, and it is the only one that has pin connections. It is a late example of a pin-connected bridge. By 1905 most metal thru truss bridges had riveted field connections. No original plans survive, and the fabricator is not documented in the county engineer's records. The bridge is one of many in Passaic County that were built after the 1903 flood that carried away ten bridges on the section of the Passaic River between the Great Falls in Paterson and Dundee dam in Clifton, about two miles downstream from the falls.

Boundary Description and Justification The bridge is individually significant. No significant cultural resources are contiguous to the bridge. Therefore, the boundary is limited to the substructure and superstructure of the span itself.

PHOTO: 136:17-21 (04/92) REVISED BY (DATE): QUAD: Paterson

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1600010 **CO** PASSAIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MAPLE AVENUE (CR 507) OVER PASSAIC RIVER **FACILITY** MAPLE AVENUE (CR 507)

TOWNSHIP PATERSON CITY

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 3 **LENGTH** 325 ft **WIDTH** 26.6 ft

CONSTRUCTION DT 1907 **ALTERATION DT** 1992 **SOURCE** PLAQUE

DESIGNER/PATENT UNKNOWN **BUILDER** SCHWIERS & SUTTON COMPANY

SETTING / CONTEXT The bridge carries a 2-lane road, a utility pipe under the south side sidewalk, and sidewalks over the Passaic River in an late-19th & early-20th century industrial section of Paterson that is dominated by brick buildings. The river serves as the boundary between Passaic and Bergen counties. Utility poles have been added along the south fascia.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 1907 3-span elliptical reinforced concrete deck arch bridge is a large example of its type, but it is not early nor is it well preserved. Significant detailing has been lost through deterioration and impact damage. What remained of the pipe railings with cylindrical cast iron posts was removed in 1993. Large sections of the stepped cap have been lost. The span was rehabed in 1993. More complete deck arch bridges survive in Paterson (1600390). This one is too altered to be noteworthy.

INFOR MATION

PHOTO: 136:22-24 (04/92) REVISED BY (DATE): QUAD: Paterson

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1600011 **CO** PASSAIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED LINCOLN AVENUE (CR 653) OVER PASSAIC RIVER **FACILITY** LINCOLN AVENUE (CR 653)

TOWNSHIP PATERSON CITY

TYPE DECK GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 6 **LENGTH** 390 ft **WIDTH** 29.7 ft

CONSTRUCTION DT 1926 **ALTERATION DT** **SOURCE** PLAQUE/COUNTY RECORD

DESIGNER/PATENT GARWOOD FERGUSON, CO. ENGINEER **BUILDER** PARKER & GRAHAM INC.

SETTING / CONTEXT The bridge carries a busy 3-lane road, two sidewalks, and a utility pipe over the Passaic River at the boundary between Passaic and Bergen counties. It passes between Paterson and Fair Lawn in a commercial area dominated by modern buildings including gas stations and a restaurant.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 7/5/91

SUMMARY The encased 6-span deck plate girder bridge with cantilevered sidewalks is supported on concrete abutments and cutwater piers. The curving approaches are marked by low octagonal posts and paneled parapets while the sidewalks on the bridge are enclosed with standard-design balustrades. A representative example of a common bridge type, the span is neither historically nor technologically distinguished.

INFOR MATION

PHOTO: 136:25-26 (04/92) REVISED BY (DATE): QUAD: Paterson

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1600014 **CO** PASSAIC **OWNER** COUNTY **MILEPOINT** 0.0
NAME & FEATURE INTERSECTED STRAIGHT STREET OVER PASSAIC RIVER **FACILITY** STRAIGHT STREET
TOWNSHIP PATERSON CITY
TYPE THRU TRUSS **DESIGN** PENNSYLVANIA **MATERIAL** Steel
 # SPANS 1 **LENGTH** 255 ft **WIDTH** 28.8 ft

CONSTRUCTION DT 1907 **ALTERATION DT** **SOURCE** COUNTY RECORDS
DESIGNER/PATENT COLIN R. WISE, CO. ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries two lanes of traffic and two sidewalks over the Passaic River in an a mixed use area of commercial, industrial, and residential structures near downtown Paterson. The buildings date from the late-19th and early-20th centuries.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No
CONSULT STATUS Individually Eligible.
CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The heavy rivet-connected 6-panel Pennsylvania thru truss bridge with cantilevered sidewalks is supported on ashlar abutments from a previous span lost in the 1903 flood. In addition to being a rare example of the truss type applied to vehicular use, the 1907 bridge is well preserved with alterations apparently limited to the flooring system. The bridge is technologically significant because of its type and state of preservation.

INFOR MATION

Bibliography:
Passaic County Engineer. Bridge File 14.
Condit, Carl. American Building Art The 19th & 20th Century. New York, 1960.
Minutes. Passaic County Board of Chosen Freeholders. October 15, 1903.

Physical Description: The 6-panel Pennsylvania thru truss bridge of riveted construction is supported on brownstone ashlar abutments from a previous superstructure. The span is 255' long and 30.7' wide, and it survives in virtually unaltered condition. It is composed of traditionally built-up box members for the top and bottom chords and inclined end posts while the diagonals, verticals and sub ties and sub struts of the center subdivided panels are either laced channels or angles. While displaying no unusual construction details, the span is a good representative example of its type. The cantilevered sidewalks are enclosed by lattice-pattern railings that extend beyond the superstructure and also enclose the approaches.

Historical and Technological Significance: The 1907 riveted Pennsylvania thru truss bridge is historically and technologically significant as a well-preserved example of an uncommon truss type (criterion C). The Pennsylvania truss, a Parker variation on the Pratt truss with sub ties (tension) and sub diagonals (compression), or subdivided panels, was devised by Albert Fink in the late 1860s for the Pennsylvania Railroad's bridge across the Ohio River at Louisville. The engineers at the Pennsylvania Railroad immediately saw the merit of Fink's design, and they worked to simplify his design by reducing the number of intermediate members in each subdivided panel. By 1875, Fink's design had been developed in the Pennsylvania, or Petit, truss type represented by the Straight Street bridge. The polygonal top chord allowed for strength in the trusses where they are most needed balanced with economy of material, and it became a standard detail for long-span metal truss bridges after about 1875. The addition of a subdivision to center panels of Pratt trusses grew out of a recognition of the stress reversal from live loads through the length of the trusses. The Straight Street bridge is one of the few Pennsylvania truss highway bridges in the state. The truss type is more commonly associated with railroads.

The earlier span at this crossing was lost in the October, 1903 flood that carried away most of the bridges in the center of Paterson. A temporary wooden bridge was built at the crossing. The Pennsylvania thru truss replacement, not completed until 1907, was designed by then county engineer Colin R. Wise. Because of its location in what was then an industrial area of Paterson, the bridge was designed for heavy live load capacity. The bridge type is thus reflective of the historical development and use of the surrounding area. Unfortunately, much of the historic context of the span has been lost through modern urban renewal program redevelopment.

Boundary Description and Justification: The historic context of the bridge has been lost due to demolition of some of the historic factories and housing that surrounded it. The area does not have historic district potential. The bridge is evaluated as individually significant, and the boundaries are limited to the span itself, the superstructure and the substructure including the wingwalls.

PHOTO: 133:5-9 (04/92) REVISED BY (DATE): QUAD: Paterson

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1600015 **CO** PASSAIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED ARCH STREET OVER PASSAIC RIVER **FACILITY** ARCH STREET

TOWNSHIP PATERSON CITY

TYPE THRU TRUSS **DESIGN** PARKER **MATERIAL** Steel

 # SPANS 1 **LENGTH** 185 ft **WIDTH** 28 ft

CONSTRUCTION DT 1905 **ALTERATION DT** **SOURCE** COUNTY RECORDS

DESIGNER/PATENT **BUILDER** OWEGO BRIDGE COMPANY.

SETTING / CONTEXT The bridge originally carried two lanes of traffic and two sidewalks over the Passaic River, but the roadway has been closed to vehicular traffic. It, like the other bridges in Paterson, serves as a link between the late-19th and early-20th century residential districts on the west side of the river from the industrial east side. The bridge contributes to the historic character of the area.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 5/26/89, Letter 6/30/95.

SUMMARY The 11-panel pin-connected Parker thru truss bridge supported on coursed ashlar abutments is a large and well preserved example of the truss type that is not common. Parker trusses are more commonly found on rail lines rather than city streets. The span is technologically distinguished because of its type, a polygonal top chord variation of a Pratt truss, and its state of preservation. It is also historically notable as one of the significant Paterson bridges built after the 1903 flood.

INFOR MATION

PHOTO: 133:10-12 (04/92) REVISED BY (DATE): QUAD: Paterson

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1600016 **CO** PASSAIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MAIN STREET OVER PASSAIC RIVER **FACILITY** MAIN STREET

TOWNSHIP PATERSON CITY

TYPE 3 HINGE ARCH **DESIGN** ELLIPTICAL **MATERIAL** Cast Iron, Steel

 # SPANS 3 **LENGTH** 231 ft **WIDTH** 30.2 ft

CONSTRUCTION DT 1900 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT F. R. LONG COMPANY **BUILDER** F. R. LONG COMPANY

SETTING / CONTEXT The bridge carries a 2-lane city street and two sidewalks over the Passaic River in downtown Paterson, a city rich in 19th-century industrial history. The land on both sides of the bridge has been cleared of historic structures, and the west side has been redeveloped with modern brick high-rise apartments. The historic setting of the bridge has been lost.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The well-preserved metal 3-span 3-hinge arch bridge built in 1900 is supported on an ashlar substructure. It ranks as one of the technologically most significant spans in the region. Designed and fabricated by F.W. Long (1856-1911), a noted local contractor who formerly worked for Dean & Westbrook of NYC as their agent in Bergen & Passaic counties. The plaque identifies him as the designer of this unique and early example of the bridge type which is also significant for its fine detailing.

INFORMATION

Bibliography:
The Evening Record (Hackensack, N.J.), August 30, 1911.
Condit, Carl. American Building Art 19th Century. New York, 1960.

Physical Description: The handsome 3-span, 231'-long, ribbed three-hinge steel arch bridge with braced spandrels is supported on ashlar abutments and cutwater piers. Each elliptically shaped arch is composed of 5 arch ribs. The spandrel braces on the fascia arches are detailed in the classical taste as an arcade with the column-like verticals set on richly molded cast bases, and the arch spandrel is filled with a quatrefoil pierced panel. The hinges are located at each skewback and at the crown of each rib. The arch ribs are composed of built up members of angles and web plate. The cantilevered sidewalks on each side of the well-proportioned span are enclosed by metal railings that date to 1915. The originals were lost in the 1903 flood. The bridge appears to be unaltered.

Historical and Technological Significance: The three-hinge ribbed arch bridge built over the Passaic River at Paterson in 1900 ranks as the most distinguished example of the uncommon bridge type in the state (criterion C). In addition to its technological significance, the well-preserved span designed and fabricated by the F.R. Long Company of Hackensack is one of the most architectonic spans in the region. The detailing and workmanship of the castings is unmatched in the period.

The three-hinge metal arch was introduced into this country by Philadelphia engineer John M. Wilson, an engineer with the Pennsylvania Railroad, in 1869. It had been used in Europe about 20 years prior to its American appearance, and it was preferred over hingeless arches because of its ability to accommodate strains from expansion, contraction, and settlement. Few three-hinge arch bridges were built in the 1870s, but in the 1880s and 1890s, several significant examples, like the 1892 Strawberry Mansion span in Fairmont Park in Philadelphia and the 1896-1897 Panther Hollow Bridge in Pittsburgh were erected. While not an early nor a long or dramatically sited example of its type, the Main Street Bridge in Paterson ranks as one of the most handsome and richly detailed bridges of the turn-of-the-century era in northern New Jersey. The architectonic castings for the classically detailed spandrel columns on the fascia arches are of particular note.

The bridge is the product of the F.R. Long Company of New York. Frank R. Long (1856-1911) was born in Philadelphia. He was an apprentice at the William Sellers & Company iron foundry in Philadelphia, and then secured a position with the Pottstown Iron Company. In 1889 he went to New York City to join the nationally prominent bridge fabricating firm of Dean & Westbrook (founded in 1884). He served as their agent in Bergen & Passaic counties until 1896 when he left to go into business for himself. In 1898 he formed the F.R. Long Company with a yard in Hackensack (Bergen County). The company built bridges in northern New Jersey. In 1908 he was appointed to the New York & New Jersey Interstate Bridge Commission for one term. In addition to his professional activities, Long was active in civic and social affairs in Hackensack. He left no children.

Long is representative of the age of the entrepreneur/bridge designer who, in the era before the consulting engineer or the professional county engineer, designed as well as built the bridge to meet the construction specifications defined by the county boards of freeholders. No original plans for the bridge were located in the county engineer's files.

Boundary Description and Justification: Alterations and demolitions have drastically altered the historic setting of the bridge. The bridge is evaluated as individually distinguished, so the boundary is limited to the span itself.

PHOTO: 133:28-33 (04/92) REVISED BY (DATE): QUAD: Paterson

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1600017 **CO** PASSAIC **OWNER** COUNTY **MILEPOINT** 0.0
NAME & FEATURE INTERSECTED WEST BROADWAY OVER PASSAIC RIVER **FACILITY** WEST BROADWAY
TOWNSHIP PATERSON CITY
TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Steel
 # SPANS 3 **LENGTH** 290 ft **WIDTH** 35 ft

CONSTRUCTION DT 1897 **ALTERATION DT** **SOURCE** PLAQUE
DESIGNER/PATENT KEEPERS & THACHER **BUILDER** KEEPERS & THACHER

SETTING / CONTEXT The bridge carries a 2-lane city street and two sidewalks over the Passaic River in downtown Paterson, a city rich in 19th century industrial history. The historic setting on both sides of the bridge has been largely demolished. The area on the west side has been redeveloped with modern brick high-rise apartment buildings, and the east side has some modern commercial development.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No
CONSULT STATUS Individually Eligible.
CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY When built in 1897, the well-proportioned 3-span elliptical deck arch bridge with a patented Melan reinforcing system encased in concrete was not only one of the longest built by noted engineer Edwin Thacher, the American licensee of Melan's innovative designs, but it ranks as one of the earliest. The span, with its ashlar spandrel walls, is one of the most technologically significant steel and concrete bridges in the state based on its designer, type, date, and state of preservation.

INFORMATION

Bibliography:
"Three-Span Melan Arch Bridge Across the Passaic River, Paterson, NJ." Engineering News. March 16, 1899, p. 175.
"Flood Damage To Bridges at Paterson, N.J." Engineering News. Vol. L, No. 18 (October 29, 1903), pp. 377-378.
Jackson, Donald. Great American Bridges and Dams. The Preservation Press, 1988.

Physical Description: The handsome, well-proportioned 233'-long, 3-span, Melan steel and concrete elliptical arch bridge has coursed brownstone ashlar-faced spandrel walls and cutwater piers. They are backed by concrete. It is 54'-wide and carries a 2-lane city street flanked by wide sidewalks enclosed by metal railings with lattice panels on the bottom. The railings were installed in 1937 replacing the original. Each of the cinder-filled arch spans is approximately 89' long, and the rise is 9.5'. The bridge is built on the Melan system with 10" I-beams set 3' on center and embedded in concrete that varies in thickness from 15" at the crown to 66" at the skewbacks. Expansion joints are built in the spandrel walls over the piers to provide for thermal changes. The southernmost two spans were damaged in the 1903 flood and were repaired in kind at that time. The bridge is well preserved.

Historical and Technological Significance: When completed in 1898, the handsome elliptical arch bridge was the second longest Melan-type bridge in the country, ranking after a similar span in Topeka, Kansas completed in 1896-97. Industrial Historian Donald C. Jackson states that the Topeka bridge, completed about one year before the similar arch at Paterson, was the "first major reinforced concrete arch bridge in the United States" (p. 35). Thacher's bridge at Paterson is one of the most important concrete-steel spans in the Northeast based on its date, structural type, and remarkably complete state of preservation (criterion C). It is a nationally significant example of the Melan arch bridge technology, and it was designed by noted civil engineer Edwin Thacher. Thacher was a proponent of the Melan arch which is a series of parallel iron or steel I-beams curved to the profile of the soffit and encased in plain concrete. Joseph Melan, a Viennese engineer, was granted an American patent for his design in 1894. Fritz von Emperger, a German-born engineer, built the first Melan arch in the United States at Rock Rapids, Iowa, and he is credited with popularizing the design in this country. Emperger made additions to the Melan system, adding a beam to the deck and joining the deck and arch beams by means of bars set on radial lines. He was granted a patent in 1897 for the changes to Melan's patent.

Edwin Thacher and William Mueser formed the Concrete-Steel Engineering Company in New York City in 1901, and the firm was responsible for many important Melan-type bridges in the country, including the 8-span Grand Avenue Viaduct, Milwaukee, Wisconsin, built in 1907; a 7-span Melan arch built at Wichita, Kansas, built in 1911; the 6-span Hudson River bridge at Glens Falls, New York, built in 1914-15; the bridge over the Mississippi River at Minneapolis composed of five 231' spans built in 1907. Thacher was a versatile engineer who received many patents including one for the "Thacher Cylindrical Slide-Rule," the "Thacher Steel Bridge Truss," the "System of Concrete Steel Arches," and the "Thacher Combination Bridge Truss" among others. He held positions of chief engineer for the Decatur Bridge Company of Decatur, Alabama, and the Keystone Bridge Company of Pittsburgh before opening his own consulting firm in Louisville, Kentucky. He was responsible for the 1891 Walnut Street bridge across the Mississippi River at Chattanooga and the 1892 Costilla Crossing bridge over the Rio Grande in Colorado which was an example of the Thacher truss patented in 1884 and designed to reduce the effect of temperature stresses on truss members. Thacher formed a partnership with W.H. Keepers in 1894 at Detroit, and the partnership lasted as Thacher and Keepers until October of 1899. It was this firm that designed the West Broadway bridge at Paterson. Thacher remained with the Concrete-Steel Engineering Company until his retirement in 1912. The Melan arch was replaced in popularity in this country by the reinforced concrete arch span.

The Thacher & Keepers-designed Melan-type arch bridge is one of two in the state designed by Edwin Thacher. The other is located in Branch Brook Park in Newark (Essex County) (0700101). It was designed by the Concrete-Steel Engineering Company in 1905. Both are technologically and historically important as examples of the experimentation associated with the introduction of concrete and steel arch bridges in this country.

Boundary Description and Justification: The bridge is evaluated as individually distinguished. The area around it has been redeveloped and has lost most of its historic character. Consequently, the historic setting for the technologically distinguished span has been lost. The boundary is limited to the span itself.

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

PHOTO: 133:22-27 (04/92) REVISED BY (DATE): QUAD: Paterson

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1600021 **CO** PASSAIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED LACKAWANNA AVENUE OVER PASSAIC RIVER **FACILITY** LACKAWANNA AVENUE

TOWNSHIP WEST PATERSON BOROUGH

TYPE THRU GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 3 **LENGTH** 305 ft **WIDTH** 17.5 ft

CONSTRUCTION DT 1894 **ALTERATION DT** 1965, 1976 **SOURCE** COUNTY BRIDGE FILE

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The narrow bridge carries two lanes of traffic and one sidewalk over the Passaic River in a mixed use area of mid-20th century single family houses and light industrial structures.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY In 1894 a 3-span thru truss bridge on an ashlar substructure was built at the crossing. In 1965 one span was lost and replaced with wide-flange rolled I-section girders from which the original built-up floor beams were suspended. In 1976 the other two thru truss spans were lost and replaced with similar girder-floor beams spans. It was intended as a temporary span. The cantilevered sidewalk is enclosed by a chain-link fence. The bridge is not historically or technologically noteworthy.

INFOR MATION

PHOTO: 143:13-16 (04/92) REVISED BY (DATE): QUAD: Paterson

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1600022 **CO** PASSAIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED UNION AVENUE OVER PASSAIC RIVER **FACILITY** UNION AVENUE (BEATTIE BRIDGE)

TOWNSHIP LITTLE FALLS TOWNSHIP

TYPE DECK TRUSS **DESIGN** PRATT **MATERIAL** Wrought Iron

 # SPANS 1 **LENGTH** 132 ft **WIDTH** 22.2 ft

CONSTRUCTION DT 1890 **ALTERATION DT** Demolished **SOURCE** PLAQUE

DESIGNER/PATENT **BUILDER** PASSAIC ROLLING MILL COMPANY

SETTING / CONTEXT The bridge carries 2 lanes of traffic, utility pipes, and one narrow sidewalk over the Passaic River in Little Falls just below the Little Falls in the river. The southwesterly quadrant is next to the historically significant Beattie Carpet Mill complex, established at the Falls in 1846. The buildings have been converted to residential use, but the historic setting of the bridge remains. The north side of the bridge is wooded. Mill complex was found eligible in a SHPO opinion 12/12/79.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Bridge was Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 9-panel riveted Pratt deck truss bridge erected in 1890 by the Passaic Rolling Mills is remarkably well preserved. Supported on high ashlar abutments and located next to a historic Beattie Carpet mill complex dating to 1848, the span ranks as one of the most distinguished examples of its type in the state. The roadway was widened in 1966 by incorporating the downstream sidewalk. The bridge is technologically and historically significant.

INFOR MATION

Bibliography:
Passaic County Engineer. Bridge File: 22.
Schriner, Charles. Paterson, Illustrated. Paterson, NJ: The Press Printing & Publishing Company, 1890.
Darnell, Victor. Directory of American Bridge Builders. 1984.

Physical Description: The one span, 132'-long rivet-connected Pratt deck truss bridge over the Passaic River below Little Falls is supported on high ashlar abutments. The bridge is made up of nine panels, and although there has been some strengthening of the original members, the trusses still perform as originally designed. The upper chords and verticals are toe-out channel with lacing and the diagonals are angles set back-to-back. The lateral and sway bracing are also composed of angle section as are the bottom chords. In 1966 one of the sidewalks was incorporated into the widened roadway. New floor beams and stringers were placed at that time. The original lattice railing was lost on the widened side, but it is in place on the cantilevered sidewalk on the other side. In 1975 welded strengthening was added to some truss members. The abutments have been sensitively rebuilt.

Historical and Technological Significance: The riveted deck truss bridge built in 1890 ranks as one the earliest and most complete examples of its type in the state (criterion C). It is also an early example of riveted field connections. Only two deck truss bridges from the 19th century were identified during the 1991-1993 New Jersey Historic Bridge Survey. The other example (1400084) is pin connected. The fabricator, the Passaic Rolling Mill of Paterson, is one of the important late-19th century iron manufactures and rolling mills in the country, but few bridges New Jersey bridges have been documented as their work. In addition to its individual technological and historical significance, the bridge is adjacent to the well-preserved Beattie Carpet Mill complex that dates to 1846. It was originally water powered and was in operation until the 1970s. The complex was determined eligible in SHPO finding in 1979.

The Passaic Rolling Mill at Paterson was chartered in 1869. In 1873 the company began rolling iron I beams and channel section. Many of the beams were used in building the country's early "skyscrapers" and the New York state capitol building at Albany. The company recognized the application of their products to bridge building, and they erected metal truss bridges for counties and railroads, especially the local Erie Railroad and the Delaware Lackawanna & Western Railroad. They also supplied iron for the New York City elevated street railways. By 1890 their bridge division had grown enormously, and bridges were being shipped to every state in the union and Central and South America.

Passaic Rolling Mill began producing steel in 1889. In 1890 the company employed about 1,000 persons, and in 1903 its output was 60,000 long tons. Steel became a more significant product, and by 1903, the company changed its name to the Passaic Steel Company. Later in the 1910s it was changed again to the Passaic Structural Steel Company. The yard was located on Straight Street at the Erie Railroad tracks. Despite the size of the and longevity of the mill, few bridges have been identified as their work. Some of their iron and steel sections and beams have been identified in other fabricator's bridges.

Boundary Description and Justification: The bridge is adjacent to a mill complex that has been determined to meet National Register criteria. The bridge was built within the period of significance of that mill complex, but it is significant independent of any association with the mill complex. The bridge is significant on its own merits, but its setting appears to be composed of contiguous significant resources.

PHOTO: 134:26-28,143:33 (04/92) REVISED BY (DATE): QUAD: Paterson

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1600028 **CO** PASSAIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PATERSON-HAMBURG TURNPIKE OVER PEQUANNOCK RIVER **FACILITY** PATERSON-HAMBURG TURNPIKE

TOWNSHIP POMPTON LAKES BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 98 ft **WIDTH** 40 ft

CONSTRUCTION DT 1939 **ALTERATION DT** 1972 **SOURCE** PLAQUE/COUNTY RECORD

DESIGNER/PATENT GARWOOD FERGUSON, CO. ENGINEER **BUILDER** ELL DORER CONTRACTING CO.

SETTING / CONTEXT The bridge carries a 2-lane road and sidewalks over a river in a mixed-use area at the boundary of Morris and Passaic Counties. Structures adjacent to the bridge include a well-preserved 19th-century home, a tract of 1950s capes, and modern commercial buildings. The road, the Paterson-Hamburg Turnpike, was incorporated in 1806, and it remains a major link from the rural northern part of the county to the county seat at Paterson.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 2-span encased stringer bridge is typical of the pre-World War II bridges with concrete used for the substructure, deck, sidewalks, and balustrades. A 1971 flood cracked and tilted the center pier and scoured part of the foundation of the west abutment. A reinforced concrete hammerhead pier was installed in 1972 to replace the original pier. The bridge is a representative example of a common bridge type and style and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 139:34-35 (04/92) REVISED BY (DATE): QUAD: Pompton Plains

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1600029 **CO** PASSAIC **OWNER** COUNTY **MILEPOINT** 14.4

NAME & FEATURE INTERSECTED PATERSON-HAMBURG TURNPIKE OVER PEQUANNOCK RIVER **FACILITY** PATERSON-HAMBURG TURNPIKE

TOWNSHIP BLOOMINGDALE BOROUGH

TYPE THRU GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 158 ft **WIDTH** 30 ft

CONSTRUCTION DT 1925 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane road and one sidewalk over a river in a lightly wooded setting with 20th-century residential and modern commercial uses. The road itself was established in 1806 as the Paterson-Hamburg Turnpike. When the old turnpike became part of the state highway system in 1917, sections like this one were realigned. This section of road has now been bypassed by a new state highway, and the bridge has been transferred to county jurisdiction.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed, 2-span encased thru girder with floor beams bridge with a cantilevered sidewalk is supported on a concrete substructure. The sidewalk is enclosed by a standard-design metal railing, and the square concrete end posts at the girders were originally fitted with cast metal land standards, all but one of which have been removed. Pipe railing remains at one approach. The bridge is a representative example of a design that is common in the state. It is not technologically notable.

INFOR MATION

PHOTO: 139:36-37 (04/92) REVISED BY (DATE): QUAD: Wanaque

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1600030 **CO** PASSAIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MAIN STREET OVER PEQUANNOCK RIVER **FACILITY** MAIN STREET

TOWNSHIP BLOOMINGDALE BOROUGH

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 115 ft **WIDTH** 35 ft

CONSTRUCTION DT 1915 **ALTERATION DT** 1948 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT GARWOOD FERGUSON & WM. KING **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane city street and two sidewalks over a river in a former turn-of-the-century residential area that has largely been converted to commercial use. The buildings are extensively altered. The river is the boundary between Passaic and Morris counties.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The attenuated reinforced concrete deck arch bridge is earth-filled and has plain spandrel walls. In 1948 the curb-to-curb width of the span was increased from 30' to 35' and cantilevered sidewalks were added to each face. The metal picket-like railing also dates from 1948. The bridge is a representative example of what by 1915 was a common bridge type. It is not historically or technologically noteworthy.

INFOR MATION

PHOTO: 140:2-3 (04/92) REVISED BY (DATE): QUAD: Wanaque

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1600032 **CO** PASSAIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PATERSON-HAMBURG TURNPIKE OVER PEQUANNOCK RIVER **FACILITY** PATERSON-HAMBURG TURNPIKE

TOWNSHIP BLOOMINGDALE BOROUGH

TYPE THRU GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 96 ft **WIDTH** 31.7 ft

CONSTRUCTION DT 1924 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a realigned section of the 2-lane with shoulders Paterson-Hamburg Turnpike over a river in a mixed use area of modern commercial, multi-family and single-family dwellings. The old turnpike, chartered in 1806, was incorporated into the state highway system in 1917 as Route 8 from Montclair to Unionville, NY. Now that 1917 section of state highway has been bypassed.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed single-span encased thru girder with floor beams bridge is supported on concrete abutments. The concrete end posts are inscribed. The bridge is a representative example of a common pre-1927 State Highway Department bridge type and design, and it is neither historically or technologically distinguished. Examples of the same bridge type and design are located throughout the state.

INFOR MATION

PHOTO: 140:4-5 (04/92) REVISED BY (DATE): QUAD: Wanaque

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1600039 **CO** PASSAIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED HILLERY STREET OVER PASSAIC RIVER **FACILITY** HILLERY STREET

TOWNSHIP TOTOWA BOROUGH

TYPE PONY TRUSS **DESIGN** PRATT **MATERIAL** Steel

 # SPANS 4 **LENGTH** 353 ft **WIDTH** 30 ft

CONSTRUCTION DT 1898 **ALTERATION DT** Various **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a busy 2-lane city street and sidewalks over the Passaic River where it serves as the boundary between the Boro's of Totowa and West Paterson. The surrounding area is a mix of 20th-century commercial and residential structures.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 4-span riveted Pratt pony truss bridge is made up of trusses 8 panels in length. It is supported on an ashlar abutments and piers and has cantilevered sidewalks. The chords are built-up members, and the diagonals are angles with battens. The most unusual detail of the well-preserved span are the verticals with web plate knee braces. The floor beams are also built-up. The lattice railings are original. Original plans do not survive. The span is significant for its design, size, & condition.

INFOR MATION

Bibliography:
Passaic County Engineer: Bridge File 39.

Physical Description: The 4-span, 8-panels each, riveted Pratt pony truss bridge is supported on brownstone ashlar abutments and piers. The top chord and inclined end posts are built-up members with angles, top cover plate and web plate. The verticals and diagonals fit inside the top chord with plate reinforcing for the rivets at the panel points. The verticals are angles with the triangular-shaped braces of plate at the inside face. Diagonals are composed of toe-down angles joined by battens. Some of the original built-up floor beams have been replaced by rolled section, wide flange beams. The sidewalks are cantilevered on brackets and enclosed by the original lattice-pattern railings with bolted outrigger braces. There are minor welded and bolted repairs to small sections of the trusses, and some verticals have been replaced by rolled section. On the whole, the bridge, now fitted with a steel grid deck and new stringers, is well preserved.

Historical and Technological Significance: The 4-span rivet-connected Pratt pony truss bridge built over the Passaic River in 1898 is technologically significant as the only example of its type in the county or the region (criterion C). That significance is enhanced by the fact that it is a multi-span bridge. It is well preserved, and it is one of the few truss bridges in the county to predate the 1903 flood. No plans for the span survive in the county engineers records, so the designer and fabricator are undocumented. The Pratt truss in the pin-connected version emerged as the most common late-19th century truss bridge type, but riveted Pratt pony truss bridges are not frequent. An unusual construction detail is the plate knee braces that are an integral part of the verticals. They add lateral stability to the truss lines. The span also retains its early sidewalk railings which add to its technological and historical significance.

Boundary Description and Justification: Because the bridge is evaluated as individually distinguished, the boundary is limited to the span itself, superstructure and substructure, including the abutments and wingwalls.

PHOTO: 143:21-25 (04/92) REVISED BY (DATE): QUAD: Paterson

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1600040 **CO** PASSAIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PATERSON-HAMBURG TURNPIKE OVER RAMAPO RIVER **FACILITY** PATERSON-HAMBURG TURNPIKE

TOWNSHIP POMPTON LAKES BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 124 ft **WIDTH** 40 ft

CONSTRUCTION DT 1929 **ALTERATION DT** **SOURCE** COUNTY RECORDS

DESIGNER/PATENT GARWOOD FERGUSON, CO. ENGINEER **BUILDER** BROOKS BROTHERS

SETTING / CONTEXT The bridge is located in a commercial area at the boundary of Wayne Township and Pompton Lakes Borough. It carries 4 lanes of traffic and sidewalks over the Ramapo River just below the Pompton Falls. The road was incorporated in 1806 as the Paterson-Hamburg Turnpike.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 12/07/89

SUMMARY The 3-span encased steel stringer bridge supported on a concrete substructure is finished with standard-design balustrades. A representative example of a common type and design used by both the county and state, it is one of over 33 encased stringer bridges designed for the county under county engineer Garwood Ferguson. The only alteration appears to be the removal of 8 light standards, the bases of which remain atop the posts. The bridge is neither historically or technologically noteworthy.

INFOR MATION

PHOTO: 139:17-18 (04/92) REVISED BY (DATE): QUAD: Pompton Plains

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1600042 **CO** PASSAIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PATERSON-HAMBURG TURNPIKE OVER WANAQUE RIVER **FACILITY** PATERSON-HAMBURG TURNPIKE

TOWNSHIP POMPTON LAKES BOROUGH

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 95 ft **WIDTH** 39.7 ft

CONSTRUCTION DT 1910 **ALTERATION DT** 1925 **SOURCE** PLAQUE

DESIGNER/PATENT GARWOOD FERGUSON, CO. ENGINEER **BUILDER** F. W.SCHWIERS, JR.

SETTING / CONTEXT The bridge carries a 2-lane street with narrow shoulders and two sidewalks over a river in a residential area dominated by 1930-1950s houses. The east side of the bridge is a small park known as Wilderness Island Park.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY Built in 1910, the slightly skewed reinforced concrete deck arch span was widened inkind on both sides (10' on the north and 28' on the south) in 1925. The standard-design concrete balustrades also date from 1925. Seams from the additions are clearly visible on the intrados. The altered span is a representative example of a common bridge type, and while well-proportioned, it is not a technologically or historically noteworthy.

INFOR MATION

PHOTO: 139:19-22 (04/92) REVISED BY (DATE): QUAD: Pompton Plains

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1600044 **CO** PASSAIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PATERSON-HAMBURG TURNPIKE OVER WANAQUE RIVER **FACILITY** PATERSON-HAMBURG TURNPIKE

TOWNSHIP POMPTON LAKES BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 88 ft **WIDTH** 39.6 ft

CONSTRUCTION DT 1925 **ALTERATION DT** **SOURCE** PLAQUE/COUNTY RECORD

DESIGNER/PATENT GARWOOD FERGUSON, CO. ENGINEER **BUILDER** ARNOLT-MORE, INC.

SETTING / CONTEXT The bridge marks the transition from a residential area to Wilderness Island Park which is located in the flood plain of the river. The houses are a mix of mid-19th century homes and a tract of 1950s capes. The bridge carries a 2-lane road and sidewalks over the main channel of the Wanaque River. The Paterson-Hamburg Turnpike was incorporated in 1806 and remains a major collector road in the county.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span encased stringer bridge has a concrete deck, sidewalks, and standard-design balustrades that are common details on bridges designed by longtime county engineer Garwood Ferguson. Rusticated ashlar abutments from a previous span were widened with concrete to accommodate the present superstructure. The bridge is neither historical nor technologically distinguished.

INFOR MATION

PHOTO: 139:23-25 (04/92) REVISED BY (DATE): QUAD: Pompton Plains

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1600046 **CO** PASSAIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED RINGWOOD AVENUE OVER WANAQUE RIVER **FACILITY** RINGWOOD AVENUE

TOWNSHIP WANAQUE BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 108 ft **WIDTH** 30 ft

CONSTRUCTION DT 1924 **ALTERATION DT** **SOURCE** PLAQUE/COUNTY RECORD

DESIGNER/PATENT GARWOOD FERGUSON, CO. ENGINEER **BUILDER** DANSEN CONSTRUCTION CO.

SETTING / CONTEXT The bridge is located just below the mid-1920s Raymond Dam of the Wanaque Reservoir. It was built for a realignment of Ringwood Avenue to accommodate construction of the reservoir complex which was executed in granite. The stone serves as a stylistic motif visually unifying the reservoir complex. The bridge carries two lanes of traffic and two sidewalks over the river just below the spillway. The bridge is not part of the reservoir complex.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Historic District Status Unresolved.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 2-span encased stringer bridge is a representative example of a common type and design. The use of concrete for the substructure, sidewalks, and balustrades is typical the era. The span is not connected with the Wanaque Reservoir. Built on a realignment mandated by the reservoir project, it was built by the county (reservoir was not), and it is of a different finish material than the reservoir. The delineation between the two is clear. It is an undistinguished, independent structure.

INFOR MATION

PHOTO: 192:27-32,141:6-7 (04/92) REVISED BY (DATE): QUAD: Wanaque

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1600050 **CO** PASSAIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PASSAIC STREET OVER WEASEL BROOK **FACILITY** PASSAIC STREET

TOWNSHIP PASSAIC CITY

TYPE BRICK ARCH **DESIGN** BARREL **MATERIAL** Brick

 # SPANS 1 **LENGTH** 40 ft **WIDTH** 30.2 ft

CONSTRUCTION DT 1892 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT D. DEMAREST, ARCHITECT **BUILDER** ADRIAN WENTINK

SETTING / CONTEXT The bridge carries a 2-lane city street and two sidewalks over a brook in an urban area of Passaic with late-19th century brick industrial buildings and county buildings. The bridge is just north and in full view of the elevated, limited access NJ 21. Utility pipes pass through the intrados of the arch. A chain-link pedestrian fence has been added atop the parapets. The setting does not have historic district potential.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The well-proportioned 40'-long brick arch span has rusticated-finish coursed ashlar spandrel walls, and the arch ring is accented with ringstones. Some sections of the south parapet are missing. The parapets are capped with bluestone. The handsome bridge is the most complete example of the three in the county, and as such it is technologically distinguished. Brick arches were commonly used in north Jersey in 1874-1905.

INFOR MATION

Bibliography:
Paterson City Directory. 1890-1896.
Pape, William. History of Passaic. 1899.

Physical Description: The handsome, well-proportioned 40'-long brick arch bridge with rusticated ashlar spandrel walls is finished with rusticated ashlar voussoirs in an alternating header and stretcher pattern. The parapets are topped with blue stone cap stones. A plaque is set in the north parapet. Utility pipes have been added. Some of the south side parapet is missing. A chain-link fence pedestrian barrier has been added atop the cap stones.

Historical and Technological Significance: The well-proportioned brick arch bridge is a handsome and documented example of its type. The brick arch was used in northern New Jersey from approximately 1870 through the 1890s, but few examples are as complete as this one. An earlier brick arch span built in Haledon in 1875 (1600124) was altered in 1924 when it was widened with a stringer addition. The other brick arch span in Passaic County in Clifton over the Third River (1600081) was also widened, and it has lost its integrity of original design from deterioration. The span is thus technologically significant as a well-preserved example of the type that was important in the evolution of bridge building in northern New Jersey (criterion C). No information was located on D. Demarest who is identified on the plaque as the "architect" of the bridge. It is known that he did not practice in Paterson. No original plans for the bridge survive.

Boundary Description and Justification: The bridge is evaluated as individually significant. The boundary is thus limited to the span itself.

PHOTO: 136:14-16 (04/92) REVISED BY (DATE): QUAD: Weehawken

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1600056 **CO** PASSAIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED DAVIDSON STREET OVER WEASEL BROOK **FACILITY** DAVIDSON STREET

TOWNSHIP CLIFTON CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 30 ft **WIDTH** 24.3 ft

CONSTRUCTION DT 1931 **ALTERATION DT** **SOURCE** COUNTY RECORDS

DESIGNER/PATENT GARWOOD FERGUSON, CO. ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 24'-wide street with one-directional traffic and shoulders over a channelized stream in residential area of multiple-family homes, mainly late 19th-century and early 20th-century structures that lack integrity. The area does not have historic district potential because of the alterations to most of the buildings.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The concrete-encased stringer bridge is supported on concrete abutments that are contiguous to brownstone coursed ashlar retaining walls that line the curving stream. The stream floor is lined with Belgian block pavers installed in 1943. The date of the brownstone retaining walls is not known. The pipe railing dates to the original construction of the span. One of over 33 remaining stringer bridges built when Garwood Ferguson was county engineer, it is not technologically distinguished.

INFOR MATION

PHOTO: 135:9-10 (04/92) REVISED BY (DATE): QUAD: Orange

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1600057 **CO** PASSAIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED HOPE AVENUE OVER WEASEL BROOK **FACILITY** HOPE AVENUE

TOWNSHIP CLIFTON CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 31 ft **WIDTH** 39.5 ft

CONSTRUCTION DT 1916 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT GARWOOD FERGUSON, CO. ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane street and sidewalks over a channelized stream in a predominantly early-20th century residential area of Clifton with both apartments and duplexes. There are also modern infill structures. The area does not have the integrity to be evaluated as a potential historic district. The stream is carried in a culvert on the upstream side. The downstream side of the bridge is the culvert outlet.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed encased stringer bridge is supported on concrete abutments that are contiguous with coursed ashlar retaining walls that line Weasel Brook through this section. Only the downstream side of the bridge is exposed (upstream hidden by culvert), and it is finished with a paneled fascia that is spalled. The pipe railings that mark the limits of the bridge are original. The upstream culvert was placed ca. 1957. The bridge is neither historically nor technologically noteworthy.

INFOR MATION

PHOTO: 141:23-24 (04/92) REVISED BY (DATE): QUAD: Orange

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1600059 **CO** PASSAIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CENTER STREET OVER WEASEL BROOK **FACILITY** CENTER STREET

TOWNSHIP CLIFTON CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 30 ft **WIDTH** 33.8 ft

CONSTRUCTION DT 1914 **ALTERATION DT** 1949, 1973 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT GARWOOD FERGUSON, CO. ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT Located in an early-20th century residential area of altered duplexes, apartment buildings, and numerous modern infill structures, the bridge carries a 2-lane street and sidewalks over a channelized stream. A culvert hides the original upstream side of the bridge.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed encased stringer bridge on a concrete substructure was altered in 1949 as part of the Weasel Brook improvements when the channel was narrowed and deepened. A concrete wall was placed in front east abutment to improve stream alignment, and the west abutment was underpinned with concrete. The steel railing on the south side dates from 1973, the year the bridge was widened inkind to the north. The altered bridge is neither historically nor technologically distinguished.

INFOR MATION

PHOTO: 136:11-12 (04/92) REVISED BY (DATE): QUAD: Orange

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1600060 **CO** PASSAIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED LEXINGTON AVENUE OVER WEASEL BROOK **FACILITY** LEXINGTON AVENUE

TOWNSHIP CLIFTON CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 30 ft **WIDTH** 40 ft

CONSTRUCTION DT 1903 **ALTERATION DT** 1949 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT WILLIAM WHITMORE, CO. ENGINEER **BUILDER** HERBERT SANDFORD

SETTING / CONTEXT The bridge carries a 2-lane city street over a channelized stream in an early-20th century mixed-use section of Clifton. The street is lined with neighborhood commercial businesses. There are many late-20th century infill structures, like the large apartment complex on the downstream side, in the area that was originally developed with 2- and 3-story apartment buildings and frame duplexes. Both sides of the bridge are next to culverts, so the stream is not visible.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY According to the county engineer, the nucleus of the encased rolled stringer bridge on a concrete substructure was placed in 1905. It was altered in 1949 when an invert slab was added, and the fasciae were hidden by culverts. The inlet for the culvert is behind the buildings that front on the street the bridge carries. No bridge railings survive. The altered span, now part of a long culvert, is neither historically nor technologically significant.

INFOR MATION

PHOTO: 136:41-43 (04/92) REVISED BY (DATE): QUAD: Orange

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1600061 **CO** PASSAIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CENTRAL AVENUE OVER WEASEL BROOK **FACILITY** CENTRAL AVENUE

TOWNSHIP CLIFTON CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 30 ft **WIDTH** 41.8 ft

CONSTRUCTION DT 1911 **ALTERATION DT** 1957 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT GARWOOD FERGUSON, CO. ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane street and sidewalks over a channelized stream in a mixed use area with a scrap metal yard, under which the stream flows, to the west and a county-maintained playground to the east. Multi-family housing is also in the vicinity. The bridge is one of several over the channelized stream that flows through Clifton.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased stringer bridge is supported on a concrete substructure that has been altered. The original railings were replaced with modern metal railings ca. 1957, and cut off walls were added at the abutment footings when an invert slab was placed in 1957. The west side of the structure has been enclosed. The channel is directed through concrete retaining walls lining the banks. An undistinguished example of a common bridge type, the span is neither historically or technologically noteworthy.

INFOR MATION

PHOTO: 136:44-2 (04/92) REVISED BY (DATE): QUAD: Orange

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1600062 **CO** PASSAIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MAIN AVENUE OVER WEASEL BROOK **FACILITY** MAIN AVENUE

TOWNSHIP CLIFTON CITY

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 29 ft **WIDTH** 40 ft

CONSTRUCTION DT 1905 **ALTERATION DT** 1957 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT WILLIAM L. WHITMORE **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in a mixed-use area just south of the central business district. The neighborhood is comprised of commercial, light industrial and multiple-unit dwellings, all of which lack integrity. To the west the brook flows in a deep channel, but culvertized under a swim club to the east. The bridge currently carries four lanes of city traffic and two sidewalks over the brook. When constructed, the bridge also carried two pairs of trolley tracks.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased stringer bridge designed by William L. Whitmore, former county engineer, replaced a structure destroyed in the 1903 flood. The bridge was altered in the Weasel Brook Improvement Project in 1957. Concrete alterations include cut-off walls in front of the footings, 2' thick walls in front of the abutments, and a slab form the channel invert 3' below the original floor as well as a new steel railing. The bridge is not historically or technologically significant.

INFOR MATION

PHOTO: 136:7-8 (04/92) REVISED BY (DATE): QUAD: Orange

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1600063 **CO** PASSAIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED SECOND STREET OVER WEASEL BROOK **FACILITY** SECOND STREET

TOWNSHIP CLIFTON CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 30 ft **WIDTH** 79 ft

CONSTRUCTION DT 1919 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT GARWOOD FERGUSON, CO. ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is part of a larger culvert that directs a minor stream through a residential area of primarily altered early-20th century dwellings and modern infill structures. The top of concrete culvert is utilized as a play yard on the east and a driveway/garage floor on the west. The bridge carries two lanes of traffic, two parking lanes, and two wide sidewalks over the channelized stream.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed, 79'-wide encased-stringer bridge was built in 1919 on stone abutments from an earlier span. It is finished with standard-design concrete parapets and paneled fascias. Culverts were added at each side of the bridge as part of the Weasel Brook Improvement program in 1957. The span is a representative example of a common county bridge type, and it is neither historically nor technologically distinguished.

INFOR MATION

PHOTO: 136:3-4 (04/92) REVISED BY (DATE): QUAD: Orange

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1600064 **CO** PASSAIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED THIRD STREET OVER WEASEL BROOK **FACILITY** THIRD STREET

TOWNSHIP CLIFTON CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 24 ft **WIDTH** 36 ft

CONSTRUCTION DT 1938 **ALTERATION DT** **SOURCE** PLAQUE/COUNTY RECORD

DESIGNER/PATENT GEORGE HEWITT, CO. ENGINEER **BUILDER** UNION BUILDING & CONST. CO.

SETTING / CONTEXT The bridge is located in a mixed-use neighborhood of altered single- and multiple-family dwellings dating from the early to mid-19th century, a large industrial structure, and the county-owned Weasel Brook Park. The brook is channeled to the east of the bridge, and the concrete culvert serves as a front yard, driveway, and garage floor. The bridge carries a two-lane street with shoulders and sidewalks over the brook.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased-stringer bridge is carried on a concrete substructure. It is enclosed with standard-design concrete balustrades. The stream is carried in a concrete flume, and a concrete culvert was added at the downstream side of the bridge in 1957. The bridge is a representative example of a common type in the county, and it is neither historically important nor technologically innovative.

INFOR MATION

PHOTO: 136:5-6 (04/92) REVISED BY (DATE): QUAD: Orange

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1600080 **CO** PASSAIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED RIVER ROAD OVER THIRD RIVER **FACILITY** RIVER ROAD

TOWNSHIP CLIFTON CITY

TYPE DECK GIRDER **DESIGN** JACK ARCH (CONCRETE) **MATERIAL** Steel

 # SPANS 2 **LENGTH** 91 ft **WIDTH** 28.5 ft

CONSTRUCTION DT 1903 **ALTERATION DT** **SOURCE** COUNTY RECORDS

DESIGNER/PATENT WILLIAM L. WHITMORE **BUILDER** CYCLOPEAN IRON WORKS

SETTING / CONTEXT The bridge carries a two-lane road, utility pipes, and sidewalks over a minor river in a wooded setting in a mixed use area dominated by modern residential and corporate development. A late-19th or early-20th century brick factory is also near the bridge. The river has been dammed to create a mill pond.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 10/03/90

SUMMARY The 2-span continuous multi deck girder bridge on concrete abutments and pier was built to replace a 3-span arch bridge washed out in the 1903 flood. The built-up girders support transverse beams with concrete jack arches and a concrete deck. The original railings were replaced with the present one in 1948. The bridge is similar to 4 built over Molly Ann's Brook after the flood. They are more complete than this example, all evaluated by the SHPO as not eligible. This span is not distinguished.

INFOR MATION

PHOTO: 131:9-11 (04/92) REVISED BY (DATE): QUAD: Orange

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1600081 **CO** PASSAIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED KINGSLAND ROAD (CR 644) OVER THIRD RIVER **FACILITY** KINGSLAND ROAD (CR 644)

TOWNSHIP CLIFTON CITY

TYPE BRICK ARCH **DESIGN** BARREL **MATERIAL** Brick

 # SPANS 1 **LENGTH** 35 ft **WIDTH** 30 ft

CONSTRUCTION DT 1885ca **ALTERATION DT** 1925 **SOURCE** STYLE

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a two-lane street, utility pipes, and sidewalks over a minor river in a mixed use area with residential, light industrial, and parks uses surrounding the span. Most of the structures are modern.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge was built in 2 sections. The original is a brick arch with a brick arch ring and ashlar spandrel walls that dates stylistically to ca. 1885. Footings for the arch are failing. The span was widened on both sides with encased stringers on concrete abutment extensions in 1925. The standard-design concrete balustrades also date to 1925. The 35' bridge has lost its integrity of design through deterioration. This is an altered example of what is not an uncommon bridge type in northern NJ.

INFOR MATION

PHOTO: 131:12-16 (04/92) REVISED BY (DATE): QUAD: Orange

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1600103 **CO** PASSAIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WAGARAW ROAD (CR 504) OVER GOFFLE BROOK **FACILITY** WAGARAW ROAD (CR 504)

TOWNSHIP HAWTHORNE BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 31 ft **WIDTH** 40.2 ft

CONSTRUCTION DT 1926 **ALTERATION DT** **SOURCE** PLAQUE/COUNTY RECORD

DESIGNER/PATENT GARWOOD FERGUSON, CO. ENGINEER **BUILDER** DANSEN CONSTRUCTION CO.

SETTING / CONTEXT The bridge carries a 2-lane city street and sidewalks over a minor stream in a lightly wooded area dotted with commercial and light industrial buildings dating from the late-19th century to the present.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single span encased stringer bridge with a standard design balustrade is supported on a concrete substructure. One post is set with a metal bridge plaque. A representative example of the most common pre-World War II bridge type in the state, the span is neither historically or technologically distinguished. It is one of over 33 stringer bridges dating from before 1946 in Passaic County.

INFOR MATION

PHOTO: 133:2-3 (04/92) REVISED BY (DATE): QUAD: Paterson

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1600104 **CO** PASSAIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED DIAMOND BRIDGE AVENUE OVER GOFFLE BROOK **FACILITY** DIAMOND BRIDGE AVENUE

TOWNSHIP HAWTHORNE BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 43 ft **WIDTH** 30.1 ft

CONSTRUCTION DT 1904 **ALTERATION DT** **SOURCE** COUNTY RECORDS

DESIGNER/PATENT WILLIAM L. WHITMORE, CO. ENG **BUILDER** FRANK SISCO

SETTING / CONTEXT The bridge carries a 2-lane road and sidewalks over a minor stream in a casually landscaped Goffle Brook Park in Hawthorne Borough. The primarily open park is surrounded by homes from the last quarter of the 19th century to the present. A footpath that parallels the stream also is crossed by the road-carrying bridge. It is one of two bridges in the park. 1600105 is an undistinguished 1929 encased stringer.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased stringer bridge supported on a concrete substructure is nicely detailed with pebble-dash finish panels on the abutments, fascias, and posts. It is a relatively early example of what would become the most common mid-century bridge type in the state. Because of its age, custom detailing, and good state of preservation, the span is technologically and historically distinguished in the state context.

INFOR MATION

Bibliography:
Passaic County Engineer. Bridge File: 104.

Physical Description: The well-detailed 43'-long encased stringer bridge over a minor stream and parallel footpath in a small park is supported on a concrete substructure. The fascia stringers are finished with bush-hammer textured panels that match those that accent the posts of the concrete balustrades. The same detail is repeated at the corners of the abutments. The bridge carries a two-lane road and two sidewalks. It is well preserved.

Historical and Technological Significance: The bridge is technologically significant as an early and well detailed example of an encased stringer bridge. Built in 1904 to replace a bridge lost in the 1903 flood that claimed many bridges in the Paterson area, this span marks the transition from metal truss bridges to encased rolled stringers, the bridge type that would go on to dominate the 1915-1945 era (criterion C). In addition to being an early example of its type, the bridge is also well detailed, and its fine accenting with bush-hammer finished panels reflects the philosophy of the City Beautiful movement that encouraged aesthetic as well as functional considerations in civic projects. The custom detailing is in deference to the park setting of the span. It is located in Goffle Brook Park. The Passaic County engineers adopted stringer bridge technology earlier than most of their counterparts throughout the state.

Boundary Description and Justification: The bridge has been evaluated as significant on its own merits. The park in which it is located does not meet National Register criteria. It is small and does not have notable landscaping. The boundary is thus limited to the span itself.

PHOTO: 133:43-1 (04/92) REVISED BY (DATE): QUAD: Paterson

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1600105 **CO** PASSAIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WARBURTON AVENUE OVER GOFFLE BROOK **FACILITY** WARBURTON AVENUE

TOWNSHIP HAWTHORNE BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 44 ft **WIDTH** 30 ft

CONSTRUCTION DT 1929 **ALTERATION DT** **SOURCE** PLAQUE/COUNTY RECORD

DESIGNER/PATENT GARWOOD FERGUSON, CO. ENGINEER **BUILDER** F. W. SCHWIERS JR. CO., NY

SETTING / CONTEXT The bridge carries a 2-lane road and sidewalks over a minor stream in a casually landscaped park in Hawthorne Borough. It is one of two bridges in the park (1600104 is other). A modern school complex is located to the northeast of the span. The park is surrounded by late-19th and 20th century homes.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 09/98 03/12/01.

SUMMARY The single span encased stringer bridge on a concrete substructure is finished with arched fasciae to give the appearance of an arch span. Battered octagonal posts mark the limits of the span, which is finished with a standard-design balustrade. The date and county are inscribed in the fascia walls. Original lamps and standards have been removed. While more detailed than most other stringer spans in the region, the bridge is a late example of the most common bridge type in the state.

INFOR MATION

PHOTO: 136:29-30 (04/92) REVISED BY (DATE): QUAD: Paterson

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1600110 **CO** PASSAIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED LAFAYETTE AVENUE OVER GOFFLE BROOK **FACILITY** LAFAYETTE AVENUE

TOWNSHIP HAWTHORNE BOROUGH

TYPE STRINGER **DESIGN** JACK ARCH (CONCRETE) **MATERIAL** Steel

 # SPANS 1 **LENGTH** 30 ft **WIDTH** 36.1 ft

CONSTRUCTION DT 1911 **ALTERATION DT** **SOURCE** COUNTY RECORDS

DESIGNER/PATENT GARWOOD FERGUSON **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a two-lane road with shoulders and sidewalks over a minor stream in a mixed use area. One side is on the limits of Goffle Park and the Hawthorne water supply facility. The other side is next a car dealership.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 11/22/92

SUMMARY The encased stringer bridge with concrete jack arch arches is supported on a concrete substructure. One of over 33 stringer bridges designed by longtime county engineer Garwood Ferguson, the span is nicely detailed with paneled fascias and wingwalls and standard-design concrete balustrades. It is a representative example of a common bridge type and is not historically nor technologically distinguished.

INFOR MATION

PHOTO: 136:27-28 (04/92) REVISED BY (DATE): QUAD: Paterson

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1600112 **CO** PASSAIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED TOTOWA AVENUE OVER MOLLY ANN'S BROOK **FACILITY** TOTOWA AVENUE

TOWNSHIP PATERSON CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 43 ft **WIDTH** 40 ft

CONSTRUCTION DT 1939 **ALTERATION DT** **SOURCE** PLAQUE/COUNTY RECORD

DESIGNER/PATENT GARWOOD FERGUSON, CO. ENGINEER **BUILDER** UNION BUILDING & CONST. CO.

SETTING / CONTEXT The bridge carries a 2-lane street and sidewalks over a minor stream in a mid-20th century residential area of Paterson adjacent to JFK High School, a modern building, and West Side Park, a small, casually landscaped park with tennis courts.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 9/24/92

SUMMARY The 43'-long encased steel stringer bridge is supported on a concrete substructure and is finished with standard-design balustrades with paneled posts and paneled fascias. The wingwalls are scored. The bridge is a common design and type in the county, and it is neither historically or technologically distinguished.

INFOR MATION

PHOTO: 135:23-24 (04/92) REVISED BY (DATE): QUAD: Paterson

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1600113 **CO** PASSAIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED UNION AVENUE OVER MOLLY ANN'S BROOK **FACILITY** UNION AVENUE

TOWNSHIP PATERSON CITY

TYPE THRU GIRDER **DESIGN** JACK ARCH (CONCRETE) **MATERIAL** Steel

 # SPANS 1 **LENGTH** 66 ft **WIDTH** 45 ft

CONSTRUCTION DT 1904 **ALTERATION DT** **SOURCE** COUNTY RECORDS

DESIGNER/PATENT WILLIAM L. WHITMORE **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a two-lane city street, shoulders, and sidewalks over a stream in a mixed-use but predominantly residential area of Paterson. Many of the late-19th century vernacular buildings have been converted to commercial use. The area does not have the integrity to be evaluated as a potential historic district.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 12/07/89

SUMMARY The well-preserved thru girder with built-up floor beams bridge has concrete jack arches set between the stringers. The sidewalks are also a girder arrangement with jack arches between the transverse beams. They are enclosed by nicely detailed cast-and wrought-iron railings. The bridge, one of 4 similar spans built to replace those over the feature lost in the 1903 flood, is a good unaltered example of a prominent mid-1900s type and design in the county.

INFOR MATION

PHOTO: 135:14-20 (04/92) REVISED BY (DATE): QUAD: Paterson

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1600114 **CO** PASSAIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BERKSHIRE AVENUE OVER MOLLY ANN'S BROOK **FACILITY** BERKSHIRE AVENUE

TOWNSHIP PATERSON CITY

TYPE STRINGER **DESIGN** PARTIALLY ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 43 ft **WIDTH** 36 ft

CONSTRUCTION DT 1931 **ALTERATION DT** 1971 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT GARWOOD FERGUSON, CO. ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane street and sidewalks over a minor stream in a formerly residential area dating to the late-19th and early-20th centuries that has undergone change to commercial use. The buildings are extensively altered.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 9/24/92

SUMMARY The steel stringer bridge is supported on a concrete substructure. Interior stringers are encased while the fascia stringers are not. County records indicate that the bridge was not widened, but the original balustrades, now present only on the approaches, were replaced with modern metal ones in 1971. The span is an altered example of a common type. It is not historically or technologically distinguished.

INFOR MATION

PHOTO: 135:21-22 (04/92) REVISED BY (DATE): QUAD: Paterson

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1600115 **CO** PASSAIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED SHERWOOD AVENUE OVER MOLLY ANN'S BROOK **FACILITY** SHERWOOD AVENUE

TOWNSHIP PATERSON CITY

TYPE STRINGER **DESIGN** PARTIALLY ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 30 ft **WIDTH** 35.8 ft

CONSTRUCTION DT 1931 **ALTERATION DT** 1970ca **SOURCE** COUNTY RECORDS

DESIGNER/PATENT GARWOOD FERGUSON, CO. ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge, located at an intersection, carries a 2-lane street and sidewalk over a channeled stream. The bridge serves as the inlet for the channelized stream that then passes underground. The surroundings are a mix of industrial, processing, and commercial structures and multi-family residential buildings. A bypass culvert was added to the northeasterly side in 1957.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 9/24/92

SUMMARY The skewed, steel stringer bridge supported on a concrete substructure has encasement on all but the bottom flanges and the easterly fascia stringer. The original balustrades were replaced by modern metal ones about 1970. An altered example of a common type, the bridge is neither historically or technologically distinguished.

INFOR MATION

PHOTO: 137:28-30 (04/92) REVISED BY (DATE): QUAD: Paterson

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1600117 **CO** PASSAIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED REDWOOD AVENUE OVER MOLLY ANN'S BROOK **FACILITY** REDWOOD AVENUE

TOWNSHIP PATERSON CITY

TYPE THRU GIRDER **DESIGN** JACK ARCH (CONCRETE) **MATERIAL** Steel

 # SPANS 1 **LENGTH** 70 ft **WIDTH** 30 ft

CONSTRUCTION DT 1903 **ALTERATION DT** Demolished: 1993 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT WILLIAM L. WHITMORE **BUILDER** BOGERT & CARLOUGH COMPANY

SETTING / CONTEXT The bridge carries a two-lane street, utility pipe, and sidewalks over a stream in a highly altered late-19th and early-20th century residential area of Paterson. The span is one of several built to replace those over the brook lost in the 1903 flood. The bridge was demolished and replaced with a new span on the existing alignment in 1993.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 9/24/92

SUMMARY The thru girder with floor beams bridge supported on a concrete substructure is one of about 4 similar spans built by the county over the brook after the 1903 flood. It has built-up floor beams and concrete jack arches set between the stringers. The cantilevered sidewalks also have the jack arch detail, and they are enclosed by nicely detailed wrought iron railings. The bridge is an unaltered example of its type. It was evaluated by the SHPO as not eligible. It has been removed and replaced.

INFOR MATION

PHOTO: 137:31 (04/92) REVISED BY (DATE): QUAD: Paterson

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1600121 **CO** PASSAIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CLINTON STREET OVER MOLLY ANN'S BROOK **FACILITY** CLINTON STREET

TOWNSHIP HALEDON BOROUGH

TYPE THRU GIRDER **DESIGN** JACK ARCH (CONCRETE) **MATERIAL** Steel

 # SPANS 1 **LENGTH** 59 ft **WIDTH** 29 ft

CONSTRUCTION DT 1904 **ALTERATION DT** **SOURCE** COUNTY RECORDS

DESIGNER/PATENT WILLIAM L. WHITMORE **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a two-lane city street and sidewalks over a stream in a mixed use area of altered late-19th and early-20th century houses, modern neighborhood commercial establishments, and some light industrial and service businesses. It does not have the integrity to be evaluated as a potential historic district. Haledon is a working-class borough that developed around silk mills.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 9/24/92

SUMMARY The thru girder with floor beams bridge has cantilevered sidewalks enclosed with the original picket fence-like railings. Concrete jack arches are set between the stringers. The bridge is similar in type and design to others built to replace spans over Molly Ann's Brook lost in the 1903 flood. This one is a representative example of what was a locally popular type. It is not individually distinguished and is not technologically innovative.

INFOR MATION

PHOTO: 137:35-39 (04/92) REVISED BY (DATE): QUAD: Paterson

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Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1600122 **CO** PASSAIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED ROE STREET OVER MOLLY ANN'S BROOK **FACILITY** ROE STREET

TOWNSHIP HALEDON BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 34 ft **WIDTH** 30.2 ft

CONSTRUCTION DT 1935 **ALTERATION DT** **SOURCE** PLAQUE/COUNTY RECORD

DESIGNER/PATENT GEORGE HEWITT, CO. ENGINEER **BUILDER** RICHARD S. SOWERBUTT

SETTING / CONTEXT The bridge carries a 2-lane street and a sidewalk over a minor stream in a residential area with both single- and multi-family dwellings and some institutional structures including a Masonic hall. The area does not have historic district potential.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 9/24/92

SUMMARY The 1935 encased steel stringer bridge is supported on concrete abutments built in front of the masonry abutments of an earlier span. Standard-design concrete balustrades are used on the span while the approaches are marked by original pipe railings. A representative example of the most common pre-World War II bridge type in the state, the span is not historically or technologically distinguished.

INFOR MATION

PHOTO: 137:32-34 (04/92) REVISED BY (DATE): QUAD: Paterson

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1600123 **CO** PASSAIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED IDA STREET OVER MOLLY ANN'S BROOK **FACILITY** IDA STREET

TOWNSHIP HALEDON BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 36 ft **WIDTH** 30.2 ft

CONSTRUCTION DT 1937 **ALTERATION DT** **SOURCE** PLAQUE/COUNTY RECORD

DESIGNER/PATENT GEORGE HEWITT, CO. ENGINEER **BUILDER** RICHARD S. SOWERBUTT

SETTING / CONTEXT The bridge carries a 2-lane street and sidewalks over a minor stream in a residential area composed of homes from the 1920s through the 1960s. Most of the earlier houses have been altered. There is no historic district potential.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 9/24/92

SUMMARY The encased steel stringer bridge is supported on a concrete substructure. Adjacent to the abutments are rubble stone retaining walls lining the stream banks. The bridge is finished with standard-design concrete balustrades with paneled posts and pipe railings marking the approaches. A representative example of a common type and design, the bridge is neither historically or technologically distinguished.

INFOR MATION

PHOTO: 137:40-42 (04/92) REVISED BY (DATE): QUAD: Paterson

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1600124 **CO** PASSAIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED HALEDON AVENUE (CR 504) OVER MOLLY ANN'S BROOK **FACILITY** HALEDON AVENUE (CR 504)

TOWNSHIP HALEDON BOROUGH

TYPE BRICK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Brick

 # SPANS 2 **LENGTH** 46 ft **WIDTH** 43 ft

CONSTRUCTION DT 1875 **ALTERATION DT** 1924 **SOURCE** KEYSTONE INSCRIPTION

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a two-lane city street and sidewalks over a minor stream in a mid- to late-20th century mixed use area with single family homes and neighborhood commercial establishments, including service stations and a shopping center. The area does not have the integrity to be evaluated as having historic district potential.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 9/24/92

SUMMARY The skewed 2-span bridge was built in two sections. The original portion is a brick arch with ashlar abutments and spandrel walls dating to 1875. It was widened in 1924 on the upstream side with encased stringers on concrete abutment and pier extensions. Both sides were finished with standard-design concrete balustrades. A metal walkway and steps provides pedestrian access to the bank on the upstream side. This appears to be a 1924 detail. The span is an late and altered example of its type.

INFOR MATION

PHOTO: 137:43-2 (04/92) REVISED BY (DATE): QUAD: Paterson

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1600125 **CO** PASSAIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CHURCH STREET (CR 677) OVER MOLLY ANN'S BROOK **FACILITY** CHURCH STREET (CR 677)

TOWNSHIP HALEDON BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 29 ft **WIDTH** 40 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** PLAQUE/COUNTY RECORD

DESIGNER/PATENT GARWOOD FERGUSON, CO. ENGINEER **BUILDER** JOHN H. MAGEE

SETTING / CONTEXT The bridge carries a 2-lane road and sidewalks over a minor stream adjacent to a modern school and school yard with athletic fields and a large chemical plant. The chemical plant has as its nucleus a late-19th century complex, but it has been extensively altered and expanded. Haledon was noted as a silk manufacturing center.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 9/24/92

SUMMARY The skewed, encased steel stringer bridge is supported on a concrete substructure and is finished with standard-design concrete balustrades. The approaches are marked by pipe railings. A representative example of a common bridge type and design, the span is neither historically nor technologically distinguished.

INFOR MATION

PHOTO: 137:3-4 (04/92) REVISED BY (DATE): QUAD: Paterson

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1600126 **CO** PASSAIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED OVERLOOK AVENUE (CR 664) OVER MOLLY ANN'S BROOK **FACILITY** OVERLOOK AVENUE (CR 664)

TOWNSHIP NORTH HALEDON BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 24 ft **WIDTH** 30.3 ft

CONSTRUCTION DT 1939 **ALTERATION DT** **SOURCE** PLAQUE/COUNTY RECORD

DESIGNER/PATENT GARWOOD FERGUSON, CO. ENGINEER **BUILDER** ELL DORER CONTRACTING CO.

SETTING / CONTEXT The bridge carries a 2-lane road and sidewalks over a minor stream in a mid- to late-20th century residential area adjacent to the borough building in Haledon.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The short encased steel stringer span is supported on a concrete substructure. The bridge has standard-design balustrades with paneled posts. A representative example of the most common pre-World War II bridge type in the state, the span is not historically or technologically distinguished.

INFOR MATION

PHOTO: 137:5-7 (04/92) REVISED BY (DATE): QUAD: Paterson

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1600127 **CO** PASSAIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED SQUAW BROOK ROAD OVER MOLLY ANN'S BROOK **FACILITY** SQUAW BROOK ROAD

TOWNSHIP NORTH HALEDON BOROUGH

TYPE STRINGER **DESIGN** JACK ARCH (CONCRETE) **MATERIAL** Steel

 # SPANS 1 **LENGTH** 36 ft **WIDTH** 28.5 ft

CONSTRUCTION DT 1905 **ALTERATION DT** 1960ca **SOURCE** COUNTY RECORDS

DESIGNER/PATENT WILLIAM L. WHITMORE **BUILDER** CYCLOPEAN IRON WORKS

SETTING / CONTEXT The bridge carries a 2-lane road and sidewalks over a minor stream in a wooded residential area dominated by 1950s and 1960s one-story houses.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The steel stringer and concrete jack arch bridge is supported on concrete abutments. Abutments were extended in concrete ca. 1960 to accommodate the added stringer sidewalks. The downstream sidewalk also has steel bent supports. The metal railings also date to ca. 1960. While the underside of the bridge is complete, the upper portion does not retain its original appearance. The span is one of over 10 in the county with jack arches, and it is not historically or technologically distinguished.

INFOR MATION

PHOTO: 137:8-11 (04/92) REVISED BY (DATE): QUAD: Paterson

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1600129 **CO** PASSAIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED SICOMAC ROAD OVER MOLLY ANN'S BROOK **FACILITY** SICOMAC ROAD

TOWNSHIP NORTH HALEDON BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 27 ft **WIDTH** 30 ft

CONSTRUCTION DT 1905ca **ALTERATION DT** **SOURCE** STYLE

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane road and sidewalks over a minor stream in a suburban area adjacent to scattered houses and modern commercial development, including a large shopping center. Utility pipes pass through the abutments.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased steel stringer bridge is supported on a concrete substructure. The concrete parapets and fascia panels have bush-hammered finished panels. No plans for the bridge remain, but it is dated ca. 1905 based on its stylistic similarity with the 1905 Diamond Bridge Road bridge (1600104) built in 1905. The representative but undocumented example of a common local bridge type and design is not as complete as the other. The span is neither historically or technologically distinguished.

INFOR MATION

PHOTO: 137:12-15 (04/92) REVISED BY (DATE): QUAD: Paterson

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1600130 **CO** PASSAIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MCBRIDE AVENUE (CR 639) OVER PECKMAN RIVER **FACILITY** MCBRIDE AVENUE (CR 639)

TOWNSHIP WEST PATERSON BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 38 ft **WIDTH** 67.3 ft

CONSTRUCTION DT 1905ca **ALTERATION DT** 1914, 1924 **SOURCE** PLAQUE/COUNTY RECORD

DESIGNER/PATENT GARWOOD FERGUSON **BUILDER** LOGAN CONSTRUCTION CO.,INC.

SETTING / CONTEXT The bridge carries a 2-lane street and two sidewalks over a river in a mixed use 20th century area with a range of building types and styles ranging from ca. 1910 houses to 1980s office buildings.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased steel stringer bridge is supported on ashlar abutments from an earlier span. They were extended with concrete and also have concrete toe walls. The railing is a low concrete geometric balustrade over the clear span and plain parapet over the wingwalls. Pipe railings survive at some approaches. The bridge was widened twice; 12'-6" to the east in 1914 and 18'-6" to the west in 1924. No plans for the original span survive. The bridge is an altered example of a common bridge type.

INFOR MATION

PHOTO: 143:19-20 (04/92) REVISED BY (DATE): QUAD: Paterson

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1600131 **CO** PASSAIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED LACKAWANNA AVENUE OVER PECKMAN RIVER **FACILITY** LACKAWANNA AVENUE

TOWNSHIP WEST PATERSON BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 45 ft **WIDTH** 30.3 ft

CONSTRUCTION DT 1941 **ALTERATION DT** **SOURCE** PLAQUE/COUNTY RECORD

DESIGNER/PATENT GARWOOD FERGUSON, CO. ENGINEER **BUILDER** KUCHAR BROTHERS, INC.

SETTING / CONTEXT The bridge carries a two-lane road and shoulders over a channelized stream in an industrial park area with active factories. The industrial park is known as Lackawanna Park. The bridge replaces an earlier span that was narrower and located on a curve.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased steel stringer bridge is supported on concrete abutments with wingwalls. A portion of the earlier stone wingwall remains at the southwest end. The bridge is finished with standard-design concrete balustrades with paneled posts. One of many encased stringer bridges in the county, the 1941 span is neither historically nor technologically distinguished.

INFOR MATION

PHOTO: 143:17-18 (04/92) REVISED BY (DATE): QUAD: Paterson

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1600132 **CO** PASSAIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED EAST MAIN STREET OVER PECKMAN RIVER **FACILITY** EAST MAIN STREET

TOWNSHIP LITTLE FALLS TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 2 **LENGTH** 79 ft **WIDTH** 29.8 ft

CONSTRUCTION DT 1913 **ALTERATION DT** Demolished: 1992 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT GARWOOD FERGUSON **BUILDER** KUCHAR BROS.

SETTING / CONTEXT

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 1913 stringer bridge was removed in 1992.

INFOR MATION

PHOTO: 138:15 (04/92) REVISED BY (DATE): QUAD: Paterson

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1600136 **CO** PASSAIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PREAKNESS AVENUE OVER SINGAC BROOK **FACILITY** PREAKNESS AVENUE

TOWNSHIP WAYNE TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 35 ft **WIDTH** 40.2 ft

CONSTRUCTION DT 1928 **ALTERATION DT** 1960 **SOURCE** PLAQUE/CO. RECORDS

DESIGNER/PATENT GARWOOD FERGUSON, CO. ENGINEER **BUILDER** KUCHAR BROTHERS

SETTING / CONTEXT The bridge carries a two-lane road and one sidewalk over a minor stream in a wooded 20th-century residential area.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased steel stringer bridge is supported on concrete abutments. The span is enclosed by standard-design concrete balustrades. It was built on a slightly new alignment to replace a narrower span constructed in 1903. In 1960 a steel stringer footbridge supported on steel bents was added at the north fascia. One of over 50 encased stringer spans built in the county between 1905-1945, the bridge is neither historically nor technologically distinguished.

INFOR MATION

PHOTO: 138:24-26 (04/92) REVISED BY (DATE): QUAD: Paterson

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1600140 **CO** PASSAIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PATERSON-HAMBURG TURNPIKE (CR 504) OVER SINGAC BROOK **FACILITY** PATERSON-HAMBURG TURNPIKE (CR 504)

TOWNSHIP WAYNE TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 27 ft **WIDTH** 40.3 ft

CONSTRUCTION DT 1920 **ALTERATION DT** 1959 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT GARWOOD FERGUSON, CO. ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a striped 4-lane county road over a minor stream in a commercial area of modern office buildings and strip malls. There are also apartment complexes in the area.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased steel stringer bridge was altered in 1959 when the 1920 concrete balustrades were removed and replaced with metal railings to accommodate widening the traffic lanes. Encasement was also removed from the fascia stringers. The bridge is one of over 50 examples of its type built in the county between 1905 and 1945. It is an altered example, and it is neither historically nor technologically distinguished.

INFOR MATION

PHOTO: 138:27-29 (04/92) REVISED BY (DATE): QUAD: Paterson

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1600141 **CO** PASSAIC **OWNER** **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED RINGWOOD AVENUE OVER POST BROOK **FACILITY** RINGWOOD AVENUE

TOWNSHIP POMPTON LAKES BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 29 ft **WIDTH** 30 ft

CONSTRUCTION DT 1922 **ALTERATION DT** **SOURCE** INSCRIPTION/COUNTY

DESIGNER/PATENT GARWOOD FERGUSON, CO. ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a two-lane road and narrow sidewalks over a minor stream in a mixed-use area with modern apartment complexes and commercial establishments. It is located at a T intersection and is contiguous to 1600142, built the same time and in the same style as this span.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased stringer bridge is supported on a concrete substructure that incorporates the stone abutments of the previous bridge. The clear-span portion of the bridge is framed by concrete balustrades while the approaches are marked by flared paneled parapets. One of over 50 encased stringer bridges in the county that were built between 1905 and 1945, the bridge is neither historically nor technologically distinguished.

INFOR MATION

PHOTO: 139:26-28 (04/92) REVISED BY (DATE): QUAD: Wanaque

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1600142 **CO** PASSAIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BROAD STREET OVER POST BROOK **FACILITY** BROAD STREET

TOWNSHIP POMPTON LAKES BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 27 ft **WIDTH** 45 ft

CONSTRUCTION DT 1922 **ALTERATION DT** **SOURCE** INSCRIPTION/COUNTY

DESIGNER/PATENT GARWOOD FERGUSON, CO. ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a two-lane street and two narrow sidewalks over a minor stream in a mixed use area with modern commercial establishments, like gas stations, and apartment complexes. It is located at a T intersection and is contiguous to 1600141, built at the same time and in the same style.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased stringer bridge is supported on concrete abutments with wingwalls which are flared. The clear span-portion of the bridge is marked by low concrete balustrades while the flared wingwalls have paneled parapets of the same height. The bridge is unaltered, but it one of over 50 encased stringers from the 1905-1945 period in the county. It is an example of a common bridge type and design and is neither historically nor technologically distinguished.

INFOR MATION

PHOTO: 139:29-30 (04/92) REVISED BY (DATE): QUAD: Wanaque

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1600143 **CO** PASSAIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WILLARD STREET OVER POST BROOK **FACILITY** WILLARD STREET

TOWNSHIP POMPTON LAKES BOROUGH

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 25 ft **WIDTH** 30 ft

CONSTRUCTION DT 1918 **ALTERATION DT** **SOURCE** COUNTY RECORDS

DESIGNER/PATENT GARWOOD FERGUSON, CO. ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane road and sidewalks over a minor stream in a residential section of Pompton Lakes. The east side has ca. 1900 2-story vernacular duplexes that appear to be mill-related housing while the west side of the bridge is an area of modern houses and apartments. The duplexes have all been significantly altered. Pompton Lakes was a water-powered industrial community that had, among other concerns, a DuPont gunpowder plant and textile mills in 1912.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The slab bridge is supported on a concrete substructure. The concrete balustrades have plain posts. There is some spalling. Although unaltered, the span is a representative example of a common bridge type. It is one of three slab spans in the county designed under the direction of Garwood Ferguson, long-time county engineer. The span is neither historically nor technologically distinguished.

INFOR MATION

PHOTO: 139:31-33 (04/92) REVISED BY (DATE): QUAD: Wanaque

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1600144 **CO** PASSAIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED UNION AVENUE (CR 511) OVER POST BROOK **FACILITY** UNION AVENUE (CR 511)

TOWNSHIP WANAQUE BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 26 ft **WIDTH** 34 ft

CONSTRUCTION DT 1929 **ALTERATION DT** **SOURCE** INSCRIPTION/COUNTY

DESIGNER/PATENT GARWOOD FERGUSON **BUILDER** FREDERICK J. WRIGHT CO.

SETTING / CONTEXT The bridge carries a two-lane road and sidewalks over a minor stream in an area dominated by light industrial and material storage establishments.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 11/29/90

SUMMARY The encased stringer bridge is supported on a concrete substructure. The span is framed by standard-design concrete balustrades with plain posts. There is considerable spalling evident. A deteriorated example of a very common bridge type, the span is neither historically nor technologically distinguished.

INFOR MATION

PHOTO: 138:30-32 (04/92) REVISED BY (DATE): QUAD: Wanaque

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1600146 **CO** PASSAIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED DOTY ROAD OVER POST BROOK **FACILITY** DOTY ROAD

TOWNSHIP WANAQUE BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 32 ft **WIDTH** 20.3 ft

CONSTRUCTION DT 1920 **ALTERATION DT** **SOURCE** INSCRIPTION/COUNTY

DESIGNER/PATENT GARWOOD FERGUSON, CO. ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane road over a minor stream in a wooded residential area built in the 1920s-1950s. There are also some commercial establishments along the road. The bridge is at the intersections with Old Lakeside Road and New Lakeside Road.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased stringer bridge built in 1920 was designed by longtime county engineer Garwood Ferguson, and is one of over 33 such spans he did between 1905 and 1943. It is finished with concrete balustrades over the clear span and parapets at the approaches. The design is a common Ferguson detail. The stringers are supported on stone abutments with concrete caps. The bridge is a representative example of a common type and is not historically nor technologically distinguished.

INFOR MATION

PHOTO: 138:33-34 (04/92) REVISED BY (DATE): QUAD: Wanaque

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1600158 **CO** PASSAIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BELMONT AVENUE OVER MEADOW BROOK **FACILITY** BELMONT AVENUE

TOWNSHIP WANAQUE BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 43 ft **WIDTH** 24 ft

CONSTRUCTION DT 1931 **ALTERATION DT** 1950ca **SOURCE** COUNTY RECORDS

DESIGNER/PATENT GARWOOD FERGUSON, CO. ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane road and narrow sidewalks over a minor stream in a late-20th century residential area with both single family homes and apartments. The setting is wooded.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed encased stringer bridge supported on a concrete substructure has been altered. The original balustrades/parapets have been replaced with steel railings ca. 1950, and modern beam guide rails have been welded to them. The fascia stringers are paneled. The bridge is an altered example of the most common pre-1945 bridge type in the county. It is not historically or technologically significant.

INFOR MATION

PHOTO: 141:44-2 (04/92) REVISED BY (DATE): QUAD: Wanaque

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1600175 **CO** PASSAIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CLINTON ROAD OVER MASSMAN'S BROOK **FACILITY** CLINTON ROAD

TOWNSHIP WEST MILFORD TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 20 ft **WIDTH** 26.6 ft

CONSTRUCTION DT 1912 **ALTERATION DT** 1955 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT GARWOOD FERGUSON, CO. ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane road and narrow shoulders over a channel of a minor stream. It is one span in a span-span structure that includes a pre-1900 stone arch span of less than 20'. The date of construction of the arch was not documented. The bridge is located in a sparsely developed wooded area at the head of the Clinton Reservoir.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The slab span on ashlar abutments was built in 1912 as a replacement span at an earlier 2-span stone bridge. What the original span was is not documented on the 1912 plans, but it was removed to accommodate the 20'-long 1912 slab span which was finished with pipe railings. Those railings were replaced with beam guide rail railings in 1955. The altered bridge is not technologically distinguished. The stone arch was not surveyed because it is less than 20' long and thus not a bridge.

INFOR MATION

PHOTO: 140:12-14 (04/92) REVISED BY (DATE): QUAD: Newfoundland

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1600211 **CO** PASSAIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED ELLISON STREET OVER PASSAIC RIVER RACEWAY **FACILITY** ELLISON STREET

TOWNSHIP PATERSON CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 45 ft **WIDTH** 24 ft

CONSTRUCTION DT 1912 **ALTERATION DT** 1970ca **SOURCE** PLAQUE/COUNTY RECORD

DESIGNER/PATENT GARWOOD FERGUSON, CO. ENGINEER **BUILDER** F. W. SCHWIERS CO., NYC

SETTING / CONTEXT The bridge carries a two-lane street and narrow sidewalks over a mill tail race in the Society of Useful Manufacturers Historic District, the historic industrial heart of Paterson. The district, dominated by well-preserved late-19th century brick mills and works, was established in the 1790s and was powered initially by water from the Passaic River delivered thru a series of power canals and races used until about 1900. The power source was converted to electricity in 1912-14.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Listed. Society for Useful Manufacturers Historic District 04/17/1970. Noncontributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased stringer bridge on an ashlar substructure with some concrete repairs was built at the end of the water-power era in the SUM district, but it does cross an original feature of the canal system. It is a noncontributing element based on its' alteration. The span was finished with a concrete balustrade with paneled end posts. One side has been replaced with ca. 1970 beam guide rail set between the original curved posts. The altered span is not distinguished in its own right.

INFOR MATION

Bibliography:
ONJH. National Register File: Passaic County; Paterson; SUM Historic District, 1970.
HAER. "Great Falls/ S U M Survey A Report on the First Summer's Work," 1973.
"The Great Falls Amble." Great Falls Preservation and Development Corporation, nd.

Physical Description: The undistinguished 45'-long encased stringer bridge is supported on ashlar abutments with some concrete repairs. The stone abutments predate this span. It was originally finished with a concrete balustrades with paneled end posts. One balustrade has been removed and replaced with modern beam guide rail.

Historical and Technological Significance: The altered encased stringer bridge is not individually technologically distinguished. It is a representative example of the most common pre-1946 bridge type in the state. But, it is located within the Society for the Establishment of Useful Manufactures Historic District, listed in the National Register and designated a National Historic Landmark district. Located at the great falls of the Passaic River, the S.U.M., as the area came to be known, was one of the pioneer industrial corporations in the county. It relied on a sophisticated system of canals to provide water to turn water wheels to power the factories. The three-tiered canal system that delivered water to turn the water wheels, the source of power for the factories and mills in the district, was in place in 1846.

The water powered industrial district was succeeded by the areas along the Erie and Paterson and Hudson railroads where more versatile steam was used to power the mills. By 1900 it was apparent that the individual water wheels using water from the raceway was generally less efficient than a central station generated by a hydroelectric plant on the river. The water wheels were inefficient unless all the mills on a raceway were operating at full capacity. Additionally, water was being used more in the industrial process, especially for the wet-spinning process at the Dolphin Jute mill and the Barbour flax-spinning mill, than in powering the mills. In 1910 the S.U.M. planned a hydroelectric plant to supply electricity to power the mills, and it was built between 1912-1914 closing the water-powered era in the district.

The bridge on Ellison Street crosses one of the historically significant power canals in historic district, but it was built after water had been superseded as the power source in the district. Thus it is not associated with the historical significance of the district. The bridge is also an altered structure and does not appear as it did in 1912 as a result of the loss of an entire balustrade line. Thus, the Ellison Street bridge is not historically related to the period of significance of the district. It is evaluated as a noncontributing resource.

PHOTO: 133:13-14 (04/92) REVISED BY (DATE): QUAD: Paterson

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1600255 **CO** PASSAIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED LA RUE ROAD OVER CLINTON BROOK **FACILITY** LA RUE ROAD

TOWNSHIP WEST MILFORD TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 38 ft **WIDTH** 34 ft

CONSTRUCTION DT 1941 **ALTERATION DT** **SOURCE** PLAQUE/COUNTY RECORD

DESIGNER/PATENT GARWOOD FERGUSON, CO. ENGINEER **BUILDER** FREDERICK J. WRIGHT CO.

SETTING / CONTEXT The bridge carries a 2-lane road over a minor stream in a sparsely developed wooded area.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased stringer bridge built in 1941 is supported on scored concrete abutments with flared wingwalls. It is finished with standard-design concrete balustrades with paneled end posts. One of over 50 steel stringer bridges built in the county between 1905 and 1945, the span is a representative example of a common type and design. It is neither historically nor technologically distinguished.

INFOR MATION

PHOTO: 140:10-11 (04/92) REVISED BY (DATE): QUAD: Newfoundland

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1600325 **CO** PASSAIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED OLD TURNPIKE ROAD OVER SINGAC BROOK **FACILITY** OLD TURNPIKE ROAD

TOWNSHIP WAYNE TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 34 ft **WIDTH** 33.6 ft

CONSTRUCTION DT 1905ca **ALTERATION DT** 1914 **SOURCE** STYLE/COUNTY RECORDS

DESIGNER/PATENT GARWOOD FERGUSON, CO.ENG(1914) **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a two-lane road over a minor stream in a wooded area with commercial establishments related to bulk storage.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 8/2/90

SUMMARY The steel stringer bridge on stone abutment was built ca. 1905. It was widened 12'in 1914 with the additional stringers placed on concrete abutment extensions. Only the fascia stringers are encased, and they are finished with flat panels. The altered span is one of many such bridges in the county, and it is neither historically nor technologically noteworthy.

INFOR MATION

PHOTO: 135:12-13 (04/92) REVISED BY (DATE): QUAD: Paterson

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1600332 **CO** PASSAIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED TERHUNE DRIVE (US 202) OVER HAYCOCK BROOK **FACILITY** TERHUNE DRIVE (US 202)

TOWNSHIP WAYNE TOWNSHIP

TYPE STRINGER **DESIGN** PARTIALLY ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 24 ft **WIDTH** 38.7 ft

CONSTRUCTION DT 1904 **ALTERATION DT** 1931 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT WILLIAM WHITMORE, CO. ENGINEER **BUILDER** CORNELIUS POARTFLEET

SETTING / CONTEXT The bridge carries a two-lane road with narrow shoulders over a minor stream in a mid-20th century residential area. The road is a busy highway.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY Built in 1904 to replace a bridge lost in the 1903 flood, the encased stringer span on a concrete substructure was widened in kind to each side in 1931. The pipe railings date to 1931. One of over 50 stringer bridges in the county from the 1904-1945 era, the span is neither historically nor technologically distinguished.

INFOR MATION

PHOTO: 139:15-16 (04/92) REVISED BY (DATE): QUAD: Pompton Plains

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1600348 **CO** PASSAIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PATERSON-HAMBURG TURNPIKE (CR 504) OVER PREAKNESS BROOK **FACILITY** PATERSON-HAMBURG TURNPIKE (CR 504)

TOWNSHIP WAYNE TOWNSHIP

TYPE STRINGER **DESIGN** PARTIALLY ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 26 ft **WIDTH** 44.5 ft

CONSTRUCTION DT 1915 **ALTERATION DT** 1961 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT GARWOOD FERGUSON, CO. ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 4-lane road over a minor stream in a late-20th century commercial area with modern office buildings and a large shopping center. A large modern apartment complex is also nearby. The road was originally developed as the Paterson-Hamburg Turnpike that was chartered in 1806. None of the 19th century character of the roadway survives in this section.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed encased stringer bridge on a concrete substructure was built in 1915, but it was more than doubled in width as the result of an inkind widening to the downstream side in 1961. The original concrete balustrades were removed at that time, and the present welded steel railings date to 1961. Encasement of the fascia stringers has been removed. The altered bridge has little integrity of original design and is not historically nor technologically significant.

INFOR MATION

PHOTO: 192:33-34 (11/92) REVISED BY (DATE): QUAD: Paterson

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1600363 **CO** PASSAIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PROSPECT AVENUE OVER MEADOW BROOK **FACILITY** PROSPECT AVENUE

TOWNSHIP WANAQUE BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 33 ft **WIDTH** 20 ft

CONSTRUCTION DT 1936 **ALTERATION DT** **SOURCE** PLAQUE/COUNTY RECORD

DESIGNER/PATENT GEORGE HEWITT, CO. ENGINEER **BUILDER** THOMAS ADAMETZ

SETTING / CONTEXT The bridge carries a 2-lane street and sidewalks over a minor stream in a residential area of detached homes that date primarily to the 1960s and 1970s. There are also some Craftsman bungalows and an 1880s Italianate house in the vicinity. The earlier houses were built when Wanaque was noted as a summer community.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased stringer bridge is supported on a concrete substructure. It is finished with standard-design concrete balustrades with paneled end posts and paneled fascia stringers. Some of the pipe railings at the approaches survive while other sections have been replaced with modern beam guide rails. The span is one of over 50 stringer bridges in the county dating from 1904 to 1945, and it is neither historically nor technologically distinguished.

INFOR MATION

PHOTO: 141:3-5 (04/92) REVISED BY (DATE): QUAD: Wanaque

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1600368 **CO** PASSAIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED SNAKE DEN ROAD OVER WEST BROOK **FACILITY** SNAKE DEN ROAD

TOWNSHIP WEST MILFORD TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 26 ft **WIDTH** 17.2 ft

CONSTRUCTION DT 1925ca **ALTERATION DT** Unknown **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries one lane of a lightly traveled road over a minor stream in a sparsely developed wooded area. It is adjacent to the T-intersection with West Brook Road.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 11/29/90

SUMMARY Originally built as a 1-span steel stringer bridge supported on concrete abutments, the span has been modified. At an undetermined date, it was underpinned with timber pile bents added to support the interior stringers. The present railings were composed of modern beam guide rails. The bridge has lost its integrity of original design. It is neither historically nor technologically distinguished.

INFOR MATION

PHOTO: 141:42-43 (04/92) REVISED BY (DATE): QUAD: Wanaque

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1600371 **CO** PASSAIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MARGARET KING AVENUE OVER RINGWOOD BROOK **FACILITY** MARGARET KING AVENUE

TOWNSHIP RINGWOOD BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 35 ft **WIDTH** 29.5 ft

CONSTRUCTION DT 1931 **ALTERATION DT** **SOURCE** PLAQUE/COUNTY RECORD

DESIGNER/PATENT GARWOOD FERGUSON, CO. ENGINEER **BUILDER** A. VANDERMADE

SETTING / CONTEXT The bridge carries a 2-lane road and utility pipes over a minor river in a wooded setting adjacent to Ringwood State Park and a municipal recreation area.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed encased stringer bridge is supported on a concrete substructure. It is finished with a concrete balustrade with paneled posts and scored abutments. Although unaltered, the bridge is not technologically nor historically distinguished. It is one of many stringer bridges designed by longtime county engineer Garwood Ferguson, who served most of the years from 1904 until 1943.

INFOR MATION

PHOTO: 140:18-19 (04/92) REVISED BY (DATE): QUAD: Greenwood Lake

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1600390 **CO** PASSAIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED SPRUCE STREET OVER MIDDLE RACEWAY **FACILITY** SPRUCE STREET

TOWNSHIP PATERSON CITY

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 46 ft **WIDTH** 40 ft

CONSTRUCTION DT 1903 **ALTERATION DT** 1913 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT F. R. LONG COMPANY **BUILDER** F. R. LONG COMPANY

SETTING / CONTEXT The bridge carries a 2-lane street, shoulders, and sidewalks over the Middle Raceway in the Society of Useful Manufactures industrial district (A National Historic Landmark) in Paterson adjacent to the Great Falls of the Passaic River. The district is dominated by well-preserved 3- and 4-story brick mid- to late-19th century mills and works that were originally powered by water supplied by the canal system. The area is of tremendous historical significance.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible. Listed. Society for Useful Manufacturers Historic District 04/17/1970. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY Built to replace a span washed out in the 1903 flood, the reinforced concrete deck arch span with ashlar spandrel walls was built after plans by noted local builder F.R. Long. A cantilevered sidewalk was added to the west side in 1913, and both sides are finished with pipe railings dating to 1913. The bridge was built within the period of significance of the Society of Useful Manufactures district. It is also significant in its own right as an early local application of concrete technology.

INFOR MATION

Bibliography:

ONJH. National Register File: Passaic County; Paterson: Society for Useful Manufactures Historic District, 1970.
HAER. "Great Falls S U M Survey A Report on the First Summer's Work." 1973.
Passaic County Engineer: Bridge File #390.

Physical Description: The graceful one-span reinforced elliptical concrete deck arch bridge appears to have been built on the Monier reinforcing system. It is finished with ashlar spandrel walls which are probably concrete-backed. The spandrels are capped with blue stone and finished with pipe railings with handsome cast posts with ball finials. The railing is used elsewhere along the power canal. The sidewalk on the downstream side is original, but the cantilevered one on the upstream side was added in 1913. The bridge appears to be unaltered.

Historical and Technological Significance: The reinforced concrete deck arch bridge built in 1903 to replace a span lost in the October, 1903 flood, is individually distinguished as an early example of its type in the county. It was designed and built by noted local engineer and contracting firm F. R. Long of Hackensack (Bergen County) (criterion C). It is the second oldest bridge of its type in the county with only the 1898 3-span arch at West Broadway in Paterson designed by Edwin Thacher being older (1600017). Reinforced concrete was introduced into this country for bridge construction in the early 1890s, and it gained currency because of its low maintenance and economy in the first few years of the 20th century. By 1906 reinforced concrete arch bridges were common in New Jersey, but in 1903, the bridge type was just establishing its foothold. Fred R. Long (1850-1911), the designer and contractor, worked with Dean & Westbrook of New York City before going into business on his own in 1896. His office was in New York, but his yard and residence were in Hackensack, and he built many bridges in Bergen and Passaic counties.

In addition to its technological significance, the Spruce Street bridge is located within the Society for Useful Manufactures Historic District, listed in the National Register of Historic Places in 1970 and also designated a National Historic Landmark. Located at the great falls on the Passaic River, the area, with its sophisticated three-tiered power canal system, was developed as the model water-powered industrial district in the first half of the 19th century. Despite economic ups and downs, the district did prosper and remained active into the first decade of this century, although water power was less important as the 20th century approached. In 1910 the S U M developed plans to convert to hydroelectric power, and in 1912-1914 a hydroelectric generating plant was built at the falls. The electricity was used by the factories in the district. Thus, the Spruce Street bridge, which crosses the middle canal, was built at the end of the period of significance of the water-powered era. Because of its date of construction and state of preservation it is evaluated as a contributing resource.

Boundary Description and Justification: The bridge, while individually distinguished, is also evaluated as a contributing resource in the historic district based on its date of construction and appearance. It is situated well within the district, so the area on all quadrants are evaluated as significant.

PHOTO: 133:19-21 (04/92) REVISED BY (DATE): QUAD: Paterson

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1600404 **CO** PASSAIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MAGEE ROAD OVER WEST BROOK **FACILITY** MAGEE ROAD

TOWNSHIP RINGWOOD BOROUGH

TYPE PONY TRUSS **DESIGN** WARREN **MATERIAL** Steel

 # SPANS 1 **LENGTH** 49 ft **WIDTH** 16.3 ft

CONSTRUCTION DT 1915ca **ALTERATION DT** 1954 **SOURCE** STYLE

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a two-lane road over a minor stream in a rural area with active farms.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 11/22/95

SUMMARY The 4-panel riveted Warren pony truss bridge with original knee brace-like verticals has rolled I-section floor beams placed on top of the lower gusset plates instead of being attached to them. This was done in 1954. No original plans survive, but physical evidence suggests that the unorthodox arrangement appears to be an original detail. The bridge is technologically significant as an example of experimentation inherent in hybrid truss designs. It is the only example of the floorbeam detail identified in the bridge survey.

INFOR MATION

Bibliography:
Passaic County Engineers Office: Bridge Files.

Physical Description: The 4-panel, 49'-long riveted construction Warren pony truss bridge is unusual in that the rolled I-section floor beams are placed above the lower chord and rest on the gusset plate at the lower panel points. There is no physical evidence to suggest this configuration is not original, but it appears that the flooring system was modified in 1954 when new rolled I-section floor beams and stringers, welded to the top flange of the floor beams, were placed. The depth of the original floor beams is not known. Welding the stringers to the floor beams distributes live load throughout the truss. The original outriggers are connected to the top flange of the replacement floor beams that extend beyond the panel point, and they serve to brace the top chord. The top chord members are composed of toe-in channels with lacing on the upper face and battens on the bottom. Cover plate is used only at the connection between the inclined end posts and the bearings. The diagonals and bottom chords are a pair of angles with battens. The stone abutments have been raised or rebuilt with concrete extensions upon which the stringers and the small, end-panel floor beams bear. The pipe railings in the roadway faces of the trusses are attached by the original cast brackets. There is no scaring to indicate that the railings were ever in a different position. Aside from the new flooring system, the bridge appears to be well preserved.

Historical and Technological Significance: The undocumented Warren pony truss bridge is technologically significant as an example of a hybrid design. It is dated ca. 1910 based on the fact that it is of riveted construction, and it is known from the County Engineer's records that other pony trusses of this design were built in Passaic County. No plans for the bridge survive. The span represents the experimentation inherent in hybrid truss designs as thoughts on improved economy of material and transfer of loads were worked out in variations on the standard Pratt and Warren truss designs (criterion C). Nothing is known about the designer or the intent of the unusual design, but it does conform to fact that placing floor beams above the lower chord provides a stiffer truss. It also appears that the use of the outriggers and the wide spacing of the diagonals was an attempt at economy and efficiency.

The flooring system (floor beams, stringers, and deck) were replaced in 1954, and the composition and dimensioning of the original is not known. There is no evidence on the trusses themselves to suggest, however, that the unusual configuration of the truss dates from 1954. The pipe railings at the inside faces appear to have always been in their present location. They and their mounting brackets appear to be original.

Thus the bridge survives as one of the most unusual Warren pony truss designs in the state. It reflects idiosyncratic thinking about metal truss bridges. What is noteworthy about this span is that it is applied to riveted bridges. Hybrid designs are more often associated with the early days of metal truss bridge development and pin-connected spans rather than ones with riveted field connections that date to after 1895. By that time the efficiency and economy of the Pratt and Warren trusses with floor beams placed below the bottom chord was well established and acknowledged.

Boundary Description and Justification: The bridge is evaluated as individually distinguished. Therefore, the boundary is limited to the substructure and superstructure. The substructure is noteworthy on this span because it was modified to accommodate the present flooring system.

PHOTO: 140:27-31,141:37-39 (04/92) REVISED BY (DATE): QUAD: Wanaque

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1600420 **CO** PASSAIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED OSBORNE TERRACE OVER PACKANACK LAKE OVERFLOW **FACILITY** OSBORNE TERRACE

TOWNSHIP WAYNE TOWNSHIP

TYPE MULTI GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 4 **LENGTH** 64 ft **WIDTH** 23.9 ft

CONSTRUCTION DT 1925ca **ALTERATION DT** 1952 **SOURCE** STYLE/COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane road over an outlet from a recreational lake in a low-density wooded residential area initially developed in the 1920s as a cottage community. Some 1920s and 1930s rustic-style cottages remain, but the area is dominated by modern year round homes. Packanack Lake was created by an earth dam located parallel to the road. The overflow is at one corner of the lake. A sidewalk is carried on a separate stringer span on the lake side of the bridge.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge is composed of 2- and 4-span rolled I section multi-girders supported on a concrete substructure. The lake side girders are 4 span while those on the downstream side are 2 span. The girders support transverse beams that support the rolled stringers and corrugated deck pans placed in 1952. The bridge is framed by modern guide rail railings. The sidewalk is a separate 2-span stringer structure added in 1965. Sluice gates have been removed. The span is not technologically distinguished.

INFOR MATION

PHOTO: 192:35-38 (04/92) REVISED BY (DATE): QUAD: Pompton Plains

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1600434 **CO** PASSAIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED UNION VALLEY ROAD OVER GREEN BROOK **FACILITY** UNION VALLEY ROAD

TOWNSHIP WEST MILFORD TOWNSHIP

TYPE CULVERT **DESIGN** 2 CELL **MATERIAL** Reinforced Concrete

 # SPANS 2 **LENGTH** 34 ft **WIDTH** 36.6 ft

CONSTRUCTION DT 1930 **ALTERATION DT** 1964 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane road and sidewalks over a minor stream in a residential area of post-World War II single-family houses.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The reinforced concrete 2-cell culvert span was widened with steel stringers supported on concrete abutments in 1964. The original railings were removed at that time and replaced with modern metal railings, now protected with beam guide rails. The altered structure is neither historically nor technologically distinguished.

INFOR MATION

PHOTO: 140:14-15 (04/92) REVISED BY (DATE): QUAD: Greenwood Lake

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1600437 **CO** PASSAIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED VALLEY VIEW ROAD OVER QUARRY RUNOFF **FACILITY** VALLEY VIEW ROAD

TOWNSHIP HALEDON BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 39 ft **WIDTH** 22.7 ft

CONSTRUCTION DT 1927 **ALTERATION DT** **SOURCE** PLAQUE/COUNTY RECORD

DESIGNER/PATENT GARWOOD FERGUSON, CO. ENGINEER **BUILDER** JOHN H. MAGEE

SETTING / CONTEXT The bridge carries a two-lane road and one closed sidewalk over a minor stream in a wooded, undeveloped area. A stone quarry owned by Stone Industries, Inc. of nearby Haledon is to the north of the bridge, and a former hospital converted to offices to the south.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 8/2/90

SUMMARY The encased steel stringer bridge is supported on a concrete substructure. It is finished with a standard-design concrete balustrade which was originally fitted with cast iron light standards (only some bases remain). Concrete Jersey-barriers have been placed in front of the balustrades. The substructure is spalling. The span is one of over 30 encased stringer bridges designed by longtime county engineer Garwood Ferguson, and it is neither historically nor technologically distinguished.

INFOR MATION

PHOTO: 138:22-23 (04/92) REVISED BY (DATE): QUAD: Paterson

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1600460 **CO** PASSAIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WEST BROOK ROAD OVER WEST BROOK **FACILITY** WEST BROOK ROAD

TOWNSHIP WEST MILFORD TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 24 ft **WIDTH** 29.8 ft

CONSTRUCTION DT 1936 **ALTERATION DT** 1947 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT GEORGE HEWITT, CO. ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane road and narrow shoulders over a minor stream in a wooded area with sparse residential development.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 12/07/89

SUMMARY The skewed encased stringer bridge is supported on concrete-capped fieldstone abutments from a previous span. The bridge is finished with beam guide rail railings installed in 1947. The bridge is an undistinguished example of a very common bridge type, and it is neither historically nor technologically noteworthy.

INFOR MATION

PHOTO: 141:40-41 (04/92) REVISED BY (DATE): QUAD: Wanaque

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1600491 **CO** PASSAIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WEST BROOK ROAD OVER WANAQUE RESERVOIR **FACILITY** WEST BROOK ROAD

TOWNSHIP RINGWOOD BOROUGH

TYPE T BEAM **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 7 **LENGTH** 505 ft **WIDTH** 20 ft

CONSTRUCTION DT 1926-28 **ALTERATION DT** 1974 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The viaduct carries a 2-lane road over the Wanaque Reservoir, a project started in 1923. The bridge was designed by and built in the 1920s for the North Jersey Water Supply Commission, and it survives in its original context.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Agreed Potential Historic District. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 7-span T-beam bridge on a low rise concrete substructure is finished with a standard-design concrete balustrade. The west sidewalk was eliminated in 1974 to increase roadway width. The bridge has historical value as one of the structures built as part of the development of the potentially historic reservoir that provides water to the Paterson-Newark area, but it is a technologically undistinguished and altered example of common bridge type. It is not noteworthy in its own right.

INFOR MATION

Bibliography:
North Jersey Water Supply Commission. 1925 Report.

Physical Description: The 505'-long, seven span bridge is a concrete T-beam structure with a concrete substructure. It is finished with a standard-design concrete balustrade with paneled end sections. The bridge originally had concrete sidewalks on both sides, but in 1974 the south sidewalk was removed and the area became part of the roadway. The roadway width was increased from 16'-6" to 20'-1". Otherwise, the bridge appears to be unaltered.

Historical and Technological Significance: The seven-span concrete T-beam bridge built in 1926-27 is not distinguished in its own right. It is a representative example of a common bridge type. It is evaluated as significant because it was built by the North Jersey Water Supply Commission as part of the 1920s development of the Wanaque Reservoir, a major engineering project to address the issue of a safe water supply for the Paterson and Newark areas (criteria A, C). The reservoir appears to be a potential National Register historic district based on its social history and engineering significance. The controversial project involved securing the water rights to Greenwood Lake and then to planning to relocate roads and other features that would be under water once the concrete Raymond Dam across the Wanaque River was completed.

Several routes across the reservoir to link Ringwood/Greenwood Lake Road and Stonetown Road were contemplated, and the present route of West Brook Road was selected to minimize the cost of bridge construction. Several bridge types, including concrete arch spans and steel bridges, were studied, and it was decided that when factoring in both cost of construction and maintenance, the concrete girder and pier bridge was the best technology for the crossing. Because the bridge was one of the prominent structures in the Wanaque project, "the element of appearance warranted and was given consideration." That "consideration" is reflected in the detailing of the concrete balustrades.

The dam, water control-related buildings at the base of the dam, and the West Brook Road bridge all retain their original appearance and function.

Boundary Description and Justification: The bridge is located within a potential historic district. Because of its situation within the potential district, the bridge and its surroundings are evaluated as significant.

PHOTO: 140:22-24 (04/92) REVISED BY (DATE): QUAD: Wanaque

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1600502 **CO** PASSAIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED OLD LAKESIDE AVENUE OVER POSTS BROOK **FACILITY** OLD LAKESIDE AVENUE (GREENWOOD AVENUE)

TOWNSHIP WANAQUE BOROUGH

TYPE ARCH **DESIGN** BARREL **MATERIAL** Reinforced Concrete

 # SPANS 6 **LENGTH** 34 ft **WIDTH** 17.5 ft

CONSTRUCTION DT 1920ca **ALTERATION DT** **SOURCE** STYLE/ORAL HISTORY

DESIGNER/PATENT UNKNOWN **BUILDER** E. J. RICKER

SETTING / CONTEXT The bridge carries pedestrian traffic over the spillway of manmade Rainbow Valley Lake, built in the mid-1920s as part of a subdivision. Development of the lakefront subdivision was halted by the Depression, and only about 20 houses had been built by 1942. The war again stopped building. After the war development was completed with modern ranch-type houses. The bridge is closed to vehicular traffic, which now is carried on New Lakeside Avenue located 500' to the west (1600146).

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 34'-long 6-span reinforced concrete bridge is composed of 2 short arch spans flanked by 2-cell culverts with varying invert elevations. The abutments and wingwalls are also concrete. The bridge is not technologically distinguished. It was built a part of the development of a manmade lake and corresponding subdivision, but the area does not possess the architectural or historical significance to be evaluated as a potential historic district.

INFOR MATION

PHOTO: 138:35-39 (04/92) REVISED BY (DATE): QUAD: Wanaque

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1600503 **CO** PASSAIC **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED DAWES HIGHWAY OVER RAMAPO RIVER **FACILITY** DAWES HIGHWAY (COLFAX BRIDGE)

TOWNSHIP POMPTON LAKES BOROUGH

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 92 ft **WIDTH** 24.3 ft

CONSTRUCTION DT 1928 **ALTERATION DT** **SOURCE** MORRIS CANAL RECORDS

DESIGNER/PATENT CORNELIUS VERMEULE, CONS. ENG. **BUILDER** WINSTON & CO., INC.

SETTING / CONTEXT The bridge carries a 2-lane street and sidewalks over a river in a wooded residential area that dates to the 1960s. The Federal-style house adjacent to the bridge was reportedly moved to the site in the 1960s or 1970s. The span is one of several bridges built on state highways as part of the abandonment agreement of the Morris Canal, which was closed to navigation in 1924 and subsequently filled in many areas.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Listed. Morris Canal. 10/01/1974. Contributing.

CONSULT DOCUMENTS SHPO Letter 03/12/01

SUMMARY The elliptical deck arch bridge with a vertical crest to the roadway and paneled parapets set between massive end posts is a late example of the bridge type. It was built in 1928 as part of the 1924-28 Morris Canal abandonment that was designed and directed by consulting engineer C. Vermeule. Closing the 88-mile long canal involved filling most of the canal and buildings some bridges, culverts, and dams. This span is one of the major bridges, and it crosses a river used for canal navigation. The bridge is not individually eligible for listing in the National Register, but is a contributing element of the Morris Canal Historic District eligible under Criteria A and C.

INFOR MATION

Bibliography:
Vermeule, C., Jr. Morris Canal and Banking Company Final Report of Consulting and Directing Engineer. 1929.

Physical Description: The well-proportioned 92'-long reinforced concrete deck arch bridge with a vertical profile is detailed with massive end posts that mark the limits of the clear span. They are paneled to match those used to give scale to the concrete parapets. The approaches are marked by a similar paneled parapets. The bridge appears to be unaltered.

Historical and Technological Significance: Built in 1928 as part of the of the Morris Canal abandonment, the reinforced concrete deck arch bridge is historically significant because of its association with the abandonment campaign. The ambitious abandonment was designed and directed by Cornelius C. Vermeule, a consulting engineer from East Orange, New Jersey who was hired by the Morris Canal and Banking Company board of directors. The project closed and disposed of the 88-mile long right-of-way and all the structures related to the canal that was completed in 1824 between Phillipsburg and Elizabeth and later Jersey City.

Under an 1836 agreement with Revolutionary war officer William Colfax, the Morris Canal and Banking Company built and maintained a bridge near this crossing. The Ramapo River was canalized for navigation at this point. When it became necessary to replace the narrow, wooden bridge with a permanent structure as part of the abandonment, the residents requested that the new bridge be located downstream so that approaches and roadway width could be improved. Passaic County contributed $11,500. to the building of the new span, and construction began in 1928. Thus the 1928 span, known as the Colfax Bridge, stands as witness to the canal that was one of the important early transportation networks in the state. Although the bridge is not original to the canal, it is one of the major structures built as part of the elimination of the canal and is thus historically linked to one of the significant engineering feats in the state (criterion A). The bridge is not technologically distinguished, but it is significant for its association with the history of the Morris Canal and the statewide improvement campaign to remove it. The Colfax Bridge is one of seven that were built under the abandonment campaign.

Boundary Description and Justification: The bridge is evaluated as significant because of its historical association with the Morris Canal and the abandonment campaign. The canal right-of-way, which is the river at this location, was listed in the National Register 10/1/74, but none of the structures that intersect the historic right-of-way were addressed in the nomination. The boundary of this resource is limited to the structure itself. It should be noted that this bridge is not on the location of the historic one it replaced. The original crossing is upstream from this span.

PHOTO: 139:10-14 (04/92 JPH (5/96)) REVISED BY (DATE): QUAD: Pompton Plains

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1601151 **CO** PASSAIC **OWNER** NJDOT **MILEPOINT** 1.25

NAME & FEATURE INTERSECTED NJ 3 OVER BROAD STREET (CR 509) **FACILITY** NJ 3

TOWNSHIP CLIFTON CITY

TYPE STRINGER **DESIGN** PARTIALLY ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 101 ft **WIDTH** 126 ft

CONSTRUCTION DT 1945 **ALTERATION DT** 1959 **SOURCE**

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries a divided 8-lane state highway over a divided county road in a residential area of Clifton that is dominated by single-family mid-20th century houses.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY Built in 1945 as a grade crossing elimination, the encased stringer span on concrete abutments and column bents was widened on both sides with stringers on concrete abutment and pier extensions in 1959. The concrete parapets with pipe railings were placed at that time. An altered example of the most common pre-1946 bridge type in the state, the span is neither historically nor technologically distinguished.

INFOR MATION

PHOTO: 131:18-19 (04/92) REVISED BY (DATE): QUAD: Orange

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1601461 **CO** PASSAIC **OWNER** CITY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BARCLAY STREET OVER RAILROAD RELIEF **FACILITY** BARCLAY STREET

TOWNSHIP PATERSON CITY

TYPE THRU GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 329 ft **WIDTH** 30 ft

CONSTRUCTION DT 1927 **ALTERATION DT** 1964 **SOURCE** PLAQUE

DESIGNER/PATENT DL&W RR OFF. OF CHIEF ENGINEER **BUILDER** AMERICAN BRIDGE COMPANY

SETTING / CONTEXT The viaduct carries a 2-lane street and sidewalks over an abandoned railroad right-of-way and a vehicle storage area. Located in an older mixed-use (residential and neighborhood commercial) area of Paterson, the west end of the bridge is contiguous to and was altered to accommodate an entrance ramp to NJ 19.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed viaduct is composed of 13 slab approach spans and a 75' thru girder with encased floor beams main span, all supported on a concrete substructure with stub abutments and column bents. The sidewalks, enclosed with standard-design DL&WRR parapets, are cantilevered. Some Neo-Classical light standards remain. The west end was altered in 1964 when 2 approach spans were removed and replaced with a short slab span to accommodate an intersection. The span is not historically distinguished.

INFOR MATION

PHOTO: 134:33-39 (04/92) REVISED BY (DATE): QUAD: Paterson

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1602150 **CO** PASSAIC **OWNER** RAILROAD **MILEPOINT** 18.81

NAME & FEATURE INTERSECTED NEW YORK SUSQUEHANNA & WESTERN RR OVER NJ 20 **FACILITY** NEW YORK SUSQUEHANNA & WESTERN RR

TOWNSHIP PATERSON CITY

TYPE DECK GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 2 **LENGTH** 94 ft **WIDTH** 27 ft

CONSTRUCTION DT 1937 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge carries two active tracks over a divided 6-lane highway through an industrial area with modern bulk processing facilities and some commercial establishments. The right-of-way was initially developed in the late 1860s as the New Jersey Midland Railway, a conglomerate of local lines, and became part of the New York Susquehanna & Western about 1875. The line was double-tracked by 1887. The line was leased to the Erie Railroad in 1898, but separated in 1940.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 2-span built up thru girder with floor beams and ballasted deck span is supported on concrete abutments with tapered wingwalls and a center pier bent. A channel has been attached to the top flange of the three girders that make up the bridge. A representative example of a common bridge type, the span is neither historically nor technologically distinguished. The thru girder was used by railroads for grade crossing elimination in New Jersey since the 1890s.

INFOR MATION

PHOTO: 141:8-9 (04/92) REVISED BY (DATE): QUAD: Paterson

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1604150 **CO** PASSAIC **OWNER** NJDOT **MILEPOINT** 4.52

NAME & FEATURE INTERSECTED NJ 23 OVER PASSAIC RIVER **FACILITY** NJ 23

TOWNSHIP LITTLE FALLS TOWNSHIP

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 3 **LENGTH** 303 ft **WIDTH** 44 ft

CONSTRUCTION DT 1916 **ALTERATION DT** 1923, 1990 **SOURCE** NJDOT RECORDS

DESIGNER/PATENT H. RAFF, CONSULT.ENG. (1916) **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 4-lane state highway and sidewalks over the Passaic River in the commercial district of Singac. Buildings from the early-20th century through the present are in the vicinity.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 3-span concrete deck arch bridge originally built by the county in 1916 has been altered several times by the state. The original classical balustrade was removed when the state widened the span by 4' on each side in 1923. It was widened again by extending the cantilevered sections in 1990. The modern parapets presently in place date to the 1990 widening. The bridge is not an early example of its type in the county, nor is it well preserved. It is not technologically distinguished.

INFOR MATION

PHOTO: 135:6-7 (04/92) REVISED BY (DATE): QUAD: Paterson

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1604159 **CO** PASSAIC **OWNER** STATE AGENCY **MILEPOINT** 19.88

NAME & FEATURE INTERSECTED BOONTON LINE RR OVER NJ 23 NB **FACILITY** BOONTON LINE RAILROAD

TOWNSHIP WAYNE TOWNSHIP

TYPE THRU GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 62 ft **WIDTH** 14 ft

CONSTRUCTION DT 1935 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT ERIE RR OFFICE OF ENGINEER **BUILDER**

SETTING / CONTEXT The bridge carries 1 track over 3 lanes of one-directional traffic and a sidewalk of NJ 23. Opposing traffic passes under an identical bridge .31 mile to the north (1604160). US 46 is located between the two NJ 23 bridges, and the railroad is carried over US 46 on a modern span. Commercial development dominates the area.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 03/12/01

SUMMARY One of a pair of bridges erected in 1935 by the Erie Railroad over a new limited-access state route, the encased thru girder with floor beams bridge is supported on a concrete substructure. It is finished with Moderne-style stepped pilasters that extend as the posts for the flat-paneled encasement of the girders. Pipe railings mark the approaches. The name of the Erie Railroad is cast on an insert panel on the girder encasement. The bridge is distinguished by its Art Moderne influenced design. It is individually eligible for listing in the National Register of Historic Places under Criterion C as a representative example of encased through girder technology.

INFOR MATION

PHOTO: 135:8-9 (04/92) REVISED BY (DATE): QUAD: Pompton Plains

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1604160 **CO** PASSAIC **OWNER** STATE AGENCY **MILEPOINT** 19.95

NAME & FEATURE INTERSECTED BOONTON LINE RR OVER NJ 23 SB **FACILITY** BOONTON LINE RAILROAD

TOWNSHIP WAYNE TOWNSHIP

TYPE THRU GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 60 ft **WIDTH** 14 ft

CONSTRUCTION DT 1935 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT ERIE RR OFFICE OF ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries one active railroad track over two lanes of one-directional traffic and one sidewalk in an area dominated by mid-to late-20th century commercial development. Opposing traffic passes under an identical span 400' to the south (1604159). The area between the NJ 23 bridges is filled by US 46 which is crossed by the railroad on a modern bridge.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 03/12/01

SUMMARY One of a pair of bridges erected in 1935 by the Erie Railroad over a new limited-access state route, the encased thru girder with floor beams bridge is supported on a concrete substructure. It is finished with Moderne-style stepped pilasters that extend as the posts for the flat-paneled encasement of the girders. Pipe railings mark the approaches. The name of the Erie Railroad is cast on an insert panel on the girder encasement. The bridge is distinguished by its Art Moderne influenced design. It is individually eligible for listing in the National Register of Historic Places under Criterion C as a representative example of encased through girder technology.

INFOR MATION

PHOTO: 135:10-11 (04/92) REVISED BY (DATE): QUAD: Pompton Plains

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1605161 **CO** PASSAIC **OWNER** NJDOT **MILEPOINT** 21.95

NAME & FEATURE INTERSECTED NJ 23 SB OVER PEQUANNOCK RIVER **FACILITY** NJ 23 SOUTHBOUND

TOWNSHIP WEST MILFORD TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 104 ft **WIDTH** 30 ft

CONSTRUCTION DT 1924 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries two lanes of one-directional traffic over a meandering river in a wooded setting dominated by modern commercial development. Opposing traffic is carried over the same feature on a bridge built after 1947. The two spans are separated by a wide grassy and wooded median.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 4/10/90

SUMMARY The 2-span encased stringer bridge is supported on a concrete substructure with horizontal scoring. A low-standard-design balustrade frames the bridge, and modern beam guide rail has been attached to the inner face. The bridge is a representative example of a common bridge type of which there are over 50 examples built between 1904 and 1945 in Passaic County alone. It is neither historically nor technologically distinguished.

INFOR MATION

PHOTO: 140:8-9 (04/92) REVISED BY (DATE): QUAD: Newfoundland

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1605162 **CO** PASSAIC **OWNER** NJDOT **MILEPOINT** 22.5

NAME & FEATURE INTERSECTED NJ 23 SB OVER PEQUANNOCK RIVER **FACILITY** NJ 23 SOUTHBOUND

TOWNSHIP WEST MILFORD TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 86 ft **WIDTH** 30 ft

CONSTRUCTION DT 1924 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries two lanes of one directional traffic of a divided state road over a meandering river in a mixed use area that includes a range of buildings types and uses from a mid-19th century school converted to a restaurant to modern service stations. Opposing traffic is carried over the same feature on a post-1946 bridge.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 4/10/90

SUMMARY The skewed two-span encased stringer span is supported on a scored concrete substructure. It is framed by a standard-design balustrade with end posts inscribed with the date and original route designation (8). The span is a representative example of the most common first half of the 20th century bridge type in the county, and it is neither historically nor technologically distinguished.

INFOR MATION

PHOTO: 140:6-7 (04/92) REVISED BY (DATE): QUAD: Newfoundland

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1606158 **CO** PASSAIC **OWNER** NJDOT **MILEPOINT** 57.9

NAME & FEATURE INTERSECTED US 46 OVER PASSAIC RIVER & RIVERVIEW DRIVE **FACILITY** US 46

TOWNSHIP LITTLE FALLS TOWNSHIP

TYPE OPEN SPANDREL RIBBED ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 5 **LENGTH** 476 ft **WIDTH** 92 ft

CONSTRUCTION DT 1939 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER** BATES & ROGERS CONTRTORS, NYC

SETTING / CONTEXT The bridge carries a divided 6-lane state road over the Passaic River and a 2-lane local street. The highway is lined with modern commercial establishments.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 02/08/90 02/21/97, Letter 6/30/95.

SUMMARY The 5-span open spandrel ribbed arch bridge, one of 10 designed between 1929 and 1939 by the bridge division under the direction of Morris Goodkind, is a large and well preserved example of the technologically noteworthy bridge type. They combine economy of material with great elegance and were selected by the state for highly visible large crossings. The bridge is an important example of its type.

INFOR MATION

PHOTO: 143:8-12 (04/92) REVISED BY (DATE): QUAD: Paterson

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1606159 **CO** PASSAIC **OWNER** NJDOT **MILEPOINT** 58.05

NAME & FEATURE INTERSECTED US 46 OVER MCBRIDE AVENUE **FACILITY** US 46

TOWNSHIP LITTLE FALLS TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 65 ft **WIDTH** 90 ft

CONSTRUCTION DT 1939 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries a divided 6-lane, limited access state road over a two-lane local street and sidewalks. The highway is lined with modern commercial establishments. The local street has access ramps to the state road. The route was designated as State Route 6 in 1939.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95, Finding 2/21/97.

SUMMARY The encased stringer bridge is supported on a scored concrete substructure articulated with shallow pilasters and inset lights. The concrete balustrade with some inkind replacement sections is a standard design of the period. The bridge is a representative example of the most common pre-World War II bridge type in the state, and it is not historically nor technologically distinguished.

INFOR MATION

PHOTO: 143:6-7 (04/92) REVISED BY (DATE): QUAD: Paterson

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1606160 **CO** PASSAIC **OWNER** NJDOT **MILEPOINT** 58.3

NAME & FEATURE INTERSECTED US 46 OVER PECKMAN RIVER **FACILITY** US 46

TOWNSHIP LITTLE FALLS TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 52 ft **WIDTH** 114 ft

CONSTRUCTION DT 1939 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries a barrier-divided 6-lane state road and sidewalks over a minor stream through a commercial and industrial area. The state road is limited access.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95, Finding 2/21/97.

SUMMARY The skewed encased stringer bridge is supported on concrete abutments with wingwalls. The standard-design balustrade is set between paneled posts, and the end ones are incised with the date of construction and original route designation (6). The northwest end post is a replacement. A representative example of the most common state-designed bridge from the era between the two world wars, the span is neither historically nor technologically distinguished.

INFOR MATION

PHOTO: 143:4-5 (04/92) REVISED BY (DATE): QUAD: Paterson

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1606163 **CO** PASSAIC **OWNER** NJDOT **MILEPOINT** 58.7

NAME & FEATURE INTERSECTED US 46 OVER BROWERTOWN ROAD **FACILITY** US 46

TOWNSHIP LITTLE FALLS TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 51 ft **WIDTH** 116 ft

CONSTRUCTION DT 1939 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries a barrier-divided, 6-lane state highway over a 2-lane street. The state highway is lined with modern commercial establishments while the local street is a mix of commercial and residential uses.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95, Finding 2/21/97.

SUMMARY The encased stringer bridge is supported on vertically scored concrete abutments articulated with shallow panels and retaining the original inset round lights. The concrete balustrades are a standard state design of the period, and the paneled end posts are have inset faience tile letters identifying the date and route (6). The bridge is a representative example of the most common pre-World War II type in the state, and it is not historically nor technologically distinguished.

INFOR MATION

PHOTO: 143:44-1 (04/92) REVISED BY (DATE): QUAD: Paterson

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1606165 **CO** PASSAIC **OWNER** NJDOT **MILEPOINT** 59.06

NAME & FEATURE INTERSECTED US 46 OVER LOWER NOTCH ROAD **FACILITY** US 46

TOWNSHIP LITTLE FALLS TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 52 ft **WIDTH** 116 ft

CONSTRUCTION DT 1939 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries a barrier-divided, 6-lane limited access highway over a 2-lane local street. The highway is lined with modern commercial establishments while the local street is in a wooded 20th-century residential area.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95, Finding 2/21/97.

SUMMARY The encased stringer span is supported on concrete abutments articulated with shallow panels and retaining the original inset round lights openings (luminaries removed). It is finished with standard-design concrete balustrades that have end posts with faience tile characters of the date and route designation (6). The bridge is a representative example of the most common pre-World War II type in the state, and it not historically nor technologically distinguished.

INFOR MATION

PHOTO: 143:2-3 (04/92) REVISED BY (DATE): QUAD: Paterson

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1606167 **CO** PASSAIC **OWNER** NJDOT **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED RIFLE CAMP ROAD OVER US 46 **FACILITY** RIFLE CAMP ROAD

TOWNSHIP WEST PATERSON BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 102 ft **WIDTH** 42 ft

CONSTRUCTION DT 1939 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries a two-lane road and sidewalks over a barrier divided, 6-lane limited access highway with grass sidewalks. The highway is lined with modern commercial establishments while the road is in a lightly wooded residential district.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95, Finding 2/21/97.

SUMMARY The 2-span encased stringer bridge is supported on a concrete substructure. The abutments are articulated with shallow panels with recessed lighting (luminaries removed), and the tapered wingwalls are scored. The bridge is finished with standard-design concrete balustrades. The end posts have faience tile characters identifying the date and route designation (6). Although unaltered, the bridge is a representative example of a common pre-1942 type in the state and is not technologically notable.

INFOR MATION

PHOTO: 143:43 (04/92) REVISED BY (DATE): QUAD: Paterson

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1606172 **CO** PASSAIC **OWNER** NJDOT **MILEPOINT** 60.05

NAME & FEATURE INTERSECTED US 46 OVER VALLEY ROAD **FACILITY** US 46

TOWNSHIP CLIFTON CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 75 ft **WIDTH** 109 ft

CONSTRUCTION DT 1939 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries a barrier-divided, 6-lane, limited access highway over a 4 -lane road in a mixed use modern commercial and residential area.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95, Finding 2/21/97.

SUMMARY The 2-span encased stringer bridge is supported on concrete substructure. The abutments have shallow panels and round lights (luminaries removed). The bridge is framed by standard-design concrete balustrades with end posts that are extensions of the corner pilasters of the abutments. The span is a representative example of the most common pre-1945 bridge type in the state. It is neither historically nor technologically distinguished.

INFOR MATION

PHOTO: 142:22-23 (04/92) REVISED BY (DATE): QUAD: Orange

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1607151 **CO** PASSAIC **OWNER** NJDOT **MILEPOINT** 60.19

NAME & FEATURE INTERSECTED US 46 OVER NJ 3 WB **FACILITY** US 46

TOWNSHIP CLIFTON CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 72 ft **WIDTH** 58 ft

CONSTRUCTION DT 1939 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries a guide rail-divided, 4-lane, limited access highway and narrow sidewalks over two lanes of one directional (westbound) traffic of another state highway. The interchange was built as part of the a road improvement campaign to ease access to the Lincoln Tunnel, opened in 1938. The highways pass through mixed use areas with a predominance of modern commercial establishments.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95, Finding 2/21/97.

SUMMARY Built as part of a breakout of a new short route to help access the Lincoln Tunnel, the skewed, encased stringer bridge is supported on concrete abutments accented with shallow panels and corner pilasters. The standard-design balustrades have paneled posts. The bridge is not technologically distinguished, and the interchange of which it is a part is not innovative or historically noteworthy. It is a typical state design solution to common traffic engineering problems in northern New Jersey.

INFOR MATION

PHOTO: 142:20-21 (04/92) REVISED BY (DATE): QUAD: Orange

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1607152 **CO** PASSAIC **OWNER** NJDOT **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED VAN HOUTEN AVENUE OVER US 46 **FACILITY** VAN HOUTEN AVENUE

TOWNSHIP CLIFTON CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 82 ft **WIDTH** 40 ft

CONSTRUCTION DT 1939 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries a 2-lane street with shoulders and narrow sidewalks over a four-lane, median-divided, limited access highway and narrow sidewalks in Clifton. An access ramp to US 46 WB is at the south end of the overpass. The surrounding area is dominated by mid-20th century residential development and a school. US 46 was developed initially after 1927 as Rt 6 linking the Ben Franklin and George Washington bridges. This section was upgraded in 1939.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95, Finding 04/15/93 2/21/97.

SUMMARY The 2-span encased stringer bridge is supported on concrete abutments accented with shallow panels and a central concrete octagonal-column bent. The bridge is finished with standard-design concrete balustrades with paneled posts, and the abutments have shallow corner pilasters. The bridge is a typical of the 1930s State Highway Department spans and is neither historically nor technologically distinguished. It is a representative example of a very common bridge type and design.

INFOR MATION

PHOTO: 135:5,427:7-9 (04/92) REVISED BY (DATE): QUAD: Orange

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1607153 **CO** PASSAIC **OWNER** NJDOT **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED GROVE STREET OVER US 46 **FACILITY** GROVE STREET

TOWNSHIP CLIFTON CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 152 ft **WIDTH** 40 ft

CONSTRUCTION DT 1939 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries a two-lane street with shoulders and sidewalks over a busy 4-lane state highway divided by a mountable barrier. The street is lined with houses dating from the mid-19th century through the 1960s with the modern character dominating. This section of US 46 was designated Rt 6 in the 1927 expansion of state highways to go from the "Hudson River Bridge" to the Delaware River. It was improved (widened/grade crossings eliminated/realigned in sections) in the late 1930s.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95, Finding 04/15/93 2/21/97.

SUMMARY The skewed 2-span encased steel stringer bridge with standard-design concrete balustrades is supported on concrete abutments and pier. The abutments are detailed in the Moderne style with shallow pilasters and panels, and the pier has octagonal-shaped columns. The bridge is a representative example of a standard State Highway Department type and design from the period, and neither the bridge nor the highway are historically nor technologically distinctive. Their history and style are common.

INFOR MATION

PHOTO: 135:4,34A;427:4-6 (04/92) REVISED BY (DATE): QUAD: Orange

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1607154 **CO** PASSAIC **OWNER** NJDOT **MILEPOINT** 61.28

NAME & FEATURE INTERSECTED US 46 OVER BROAD STREET **FACILITY** US 46

TOWNSHIP CLIFTON CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 86 ft **WIDTH** 54 ft

CONSTRUCTION DT 1939 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries a barrier-divided, 4-lane, limited access highway with sidewalks over a median-divided, 4-lane street in a light industrial/commercial area of Clifton. The area behind the modern commercial development is mid-20th century single-family houses. The road was initially developed in the 1920s as Route 6 linking the Ben Franklin and George Washington bridges. It was upgraded and made a limited access road in the late 1930s.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95, Finding 2/21/97.

SUMMARY The 2-span encased stringer bridge is supported on a concrete substructure. Pilasters accent the corners of the abutments, and the roadway is framed by standard-design concrete balustrades with paneled posts. Faience tile characters are inset into the posts to identify the date and route. The well-detailed bridge is consistent in design and type with the many other overpasses on the busy route, and it is neither historically nor technologically distinguished in its own right.

INFOR MATION

PHOTO: 135:2-3 (04/92) REVISED BY (DATE): QUAD: Paterson

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1607156 **CO** PASSAIC **OWNER** NJDOT **MILEPOINT** 61.6

NAME & FEATURE INTERSECTED US 46 OVER ERIE-LACKAWANNA RR **FACILITY** US 46

TOWNSHIP CLIFTON CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 139 ft **WIDTH** 54 ft

CONSTRUCTION DT 1939 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries a median-divided, limited access, 4-lane highway and narrow sidewalks over one track of the former Erie Lackawanna Railroad in a commercial and industrial area. US 46 was initially developed as Route 6 linking the Ben Franklin and George Washington bridges. This section was upgraded in 1939.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95, Finding 2/21/97.

SUMMARY The 3-span encased stringer bridge is supported on concrete stub abutments and high column bents with crash walls. The span is finished with standard-design concrete balustrades with paneled posts. Those on the end are set with faience tile characters identifying the date and route. Although unaltered, the bridge is a representative example of a common state type and design. It is neither historically nor technologically distinguished.

INFOR MATION

PHOTO: 134:3-4 (04/92) REVISED BY (DATE): QUAD: Paterson

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1607157 **CO** PASSAIC **OWNER** NJDOT **MILEPOINT** 61.7

NAME & FEATURE INTERSECTED US 46 OVER ERIE-LACKAWANNA RR **FACILITY** US 46

TOWNSHIP CLIFTON CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 168 ft **WIDTH** 54 ft

CONSTRUCTION DT 1939 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge carries a median-divided, 4-lane, limited-access highway over two tracks of the former Erie-Lackawanna Railroad in a mid- to late-20th century industrial/commercial area. The highway was originally designated NJ 6 and was built to link the Ben Franklin and George Washington bridges. This section was upgraded in 1939.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95, Finding 2/21/97.

SUMMARY The 3-span continuous stringer bridge is supported on concrete stub abutments and column bents. It is finished with a 6'-high concrete parapet with shallow panels and posts. The end posts have faience tile characters identifying the original date and road number, a common detail on bridges on the route. The span is a representative example of common technology, and it not historically nor technologically noteworthy.

INFOR MATION

PHOTO: 134:1-2 (04/92) REVISED BY (DATE): QUAD: Paterson

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1607158 **CO** PASSAIC **OWNER** NJDOT **MILEPOINT** 61.75

NAME & FEATURE INTERSECTED US 46 OVER PAULISON AVENUE **FACILITY** US 46

TOWNSHIP CLIFTON CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 54 ft **WIDTH** 54 ft

CONSTRUCTION DT 1939 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries a median-divided, 4-lane, limited access highway over a 2-lane street and sidewalks in Clifton. The highway is lined with industrial buildings while the street services a single-family detached house residential area dating from the mid-20th century. US 46 was developed initially as Route 6 linking the Ben Franklin and George Washington bridges.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95, Finding 2/21/97.

SUMMARY The one-span encased stringer bridge is supported on concrete abutments accented with shallow panels and corner pilasters. It is framed by a concrete balustrade with paneled posts. The detailing is consistent with other bridges built on US in 46 in 1939, and it is a representative example of a standard state design and bridge type, and it is not historically nor technologically distinguished.

INFOR MATION

PHOTO: 134:43-44 (04/92) REVISED BY (DATE): QUAD: Paterson

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1607160 **CO** PASSAIC **OWNER** NJDOT **MILEPOINT** 62.35

NAME & FEATURE INTERSECTED US 46 OVER PIAGET AVENUE **FACILITY** US 46

TOWNSHIP CLIFTON CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 67 ft **WIDTH** 58 ft

CONSTRUCTION DT 1940 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries a barrier-divided, 4-lane, limited access highway and a narrow sidewalk over a 2-lane road and sidewalks in a 20th-century residential area. Many of the dwellings have been altered. US 46 was developed in the 1920s as Route 6 linking the Ben Franklin and George Washington bridges. This section was upgraded in 1939-1940.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95, Finding 2/21/97.

SUMMARY The one-span encased stringer bridge is supported on concrete abutments accented with shallow pilasters. Pilasters are also at the corners. A stairway on each side provides pedestrian access between the roadways. Each is fitted with a cast lamp post. The standard-design balustrades have paneled posts. The bridge is consistent in design and type with the many other spans on the route in Passaic County, and it is neither historically nor technologically distinguished.

INFOR MATION

PHOTO: 134:5-7 (04/92) REVISED BY (DATE): QUAD: Paterson

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1607161 **CO** PASSAIC **OWNER** NJDOT **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MAIN AVENUE OVER US 46 **FACILITY** MAIN AVENUE

TOWNSHIP CLIFTON CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 76 ft **WIDTH** 40 ft

CONSTRUCTION DT 1939 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries a grade-level 2-lane local street and sidewalks over a barrier-divided, 4-lane, limited access highway and sidewalks on a slightly depressed roadway. The street is in a mixed light-industrial and commercial area of Clifton. The highway is lined by a narrow greenbelt.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 12/07/89 2/21/97, Letter 6/30/95.

SUMMARY The 2-span encased stringer bridge is supported on a concrete substructure accented with shallow paneled panels and Modern-style pilasters that extend into the posts of the concrete balustrades. The elevated sidewalks flanking the highway are defined by pipe railings. Similar in type and design with the other bridges that take US 46 through the county, the span is neither historically nor technologically noteworthy.

INFOR MATION

PHOTO: 135:36-38 (04/92) REVISED BY (DATE): QUAD: Paterson

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1607162 **CO** PASSAIC **OWNER** RAILROAD **MILEPOINT** 13.07

NAME & FEATURE INTERSECTED PASSAIC SPUR RAILROAD OVER US 46 **FACILITY** PASSAIC SPUR RAILROAD

TOWNSHIP CLIFTON CITY

TYPE THRU GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 79 ft **WIDTH** 50 ft

CONSTRUCTION DT 1939 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT ERIE RR OFFICE OF ENGINEER **BUILDER**

SETTING / CONTEXT The bridge carries 3 active sets of railroad tracks over a barrier-divided, 4-lane, limited access highway and elevated sidewalks in a mid- to late-20th century industrial area.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95, Finding 12/07/89 2/21/97.

SUMMARY The 2-span encased thru girder with floor beams bridge is supported on a concrete substructure. It is composed of 5 girders with concrete encasing the entire floor system. Original concrete light standards have been removed. The plain concrete parapets include the outside girders. Grade-level sidewalks are enclosed by pipe railings. The bridge with a concrete deck is a representative example of a common type. The span is neither historically nor technologically distinguished.

INFOR MATION

PHOTO: 135:39-41 (04/92) REVISED BY (DATE): QUAD: Paterson

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1607163 **CO** PASSAIC **OWNER** NJDOT **MILEPOINT** 63.0

NAME & FEATURE INTERSECTED US 46 OVER LAKEVIEW AVENUE **FACILITY** US 46

TOWNSHIP CLIFTON CITY

TYPE OPEN SPANDREL ARCH **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 82 ft **WIDTH** 59.3 ft

CONSTRUCTION DT 1939 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries a barrier-divided, 4-lane, limited access highway over a 2-lane street and sidewalks in a ca. 1900 residential and neighborhood commercial area of Clifton. The buildings are altered. US 46 was originally developed as Route 6 linking the George Washington and Ben Franklin bridges. It was upgraded in this area in 1939.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95, Finding 2/21/97.

SUMMARY The one span open spandrel arch bridge with spandrel columns and stepped pilasters with tile decoration is the shortest of the approximately 10 bridges of the type designed by the state between 1929 and 1939. It is one of 3 in the county. It is significant because it is a well-preserved example of a technologically important bridge type that is not common. The bridge reflects the successful integration of aesthetics and innovative engineering.

INFOR MATION

Bibliography:
NJDOT. Plan File; 1607168.
Condit, Carl. American Building Art 20th Century. 1960.
Hess, Jeffrey & Frame, Robert. "Wisconsin Stone Arch and Concrete Arch Bridges." 1986.
Plowden, David. Bridges: The Spans of North America. 1974.

Physical Description: The 82'-long single span open spandrel arch bridge of reinforced concrete is well proportioned and well detailed. It is finished with spandrel columns and Modern-style stepped pilasters that define the span limits. The outside face of the end posts is decorated with a mosaic tile seal of the state. The deck is concrete, and the wearing surface is bituminous concrete. Sidewalks are framed by standard-design concrete balustrades. The bridge appears to be well preserved.

Historical and Technological Significance: The concrete open spandrel arch bridge built in 1939 is significant as a well-preserved example of the technologically noteworthy and aesthetically impressive works of Morris Goodkind (1869-1968) produced throughout his career as State Bridge Engineer (Criterion C). It is one of approximately 8 open-spandrel arch bridges in New Jersey, a bridge type that defines the highest level of refinement in reinforced concrete arch technology. It is one of three on NJ 46 in Passaic County (1607168, 1607158). The well-preserved bridge represents Goodkind's emphasis in the New Jersey State Highway Department Bridge Division to create aesthetically pleasing concrete structures prior to World War II. The moldable qualities of the material were used to create an architectural masterpiece at the same time that its structural qualities were used to efficiently carry a major highway across feature requiring a long clear span. The reinforced concrete arch was capable of relatively long spans while providing graceful and dynamic forms.

Around the turn of the century, reinforced concrete arches were generally limited to relatively short and often single span bridges. The dead load carried by the arches was reduced with the introduction of open spandrel arches. The lighter structures were capable of longer spans and more aesthetically pleasing large bridges. The Walnut Lane bridge (1906-8) over Wissahickon Creek in Philadelphia was a forerunner of the type. A massive structure, the open spandrel arches of that structure span 233 feet with virtually no steel reinforcement in the two ribs. In the first two decades of the 20th century, railroads began using reinforced concrete to construct large viaducts across rivers and valleys to eliminate steep grade changes. The length and number of spans increased to create massive structures that dominated the landscape. The Tunkhannock Viaduct (completed 1915 and designed by A. Burton Cohen, 1883-1956) of the Delaware Lackawanna & Western RR in Nicholson, Pennsylvania remains one of the greatest bridges in America. It is a ten-span open spandrel reinforced concrete arch, 2375 feet in total length, each span 180 feet in clear span, and rising 240 feet above the creek bed in the valley floor.

The US 1 Bridge, completed 14 years later in 1929, but comparable in size and beauty, was the first of Goodkind's open-spandrel concrete arch bridges in New Jersey. The bridge type was repeated with equal success at major crossings on major roads throughout the northern half of the state through the 1930s. NJ 46 was upgraded in the late 1930s to serve as a major link between the Hudson River crossings into Manhattan and the west portion of the state, especially Morris and Passaic counties.

Morris Goodkind, designer of the bridge, was a graduate of Columbia University. He worked for the New York City Public Service Commission in the development of the subway system before working on bridge designs for engineering firms and Mercer County, NJ. In 1922 he joined the New Jersey Highway Department, and became the Chief Bridge Engineer in 1925, a post he held through 1955 when he retired to private practice.

The 1920s and 1930s were a time of great expansion of the state's highway system which required many bridges to be built. Goodkind emphasized the need for aesthetically pleasing as well as structurally sound bridges. He brought in Arthur Lichtenburg to develop an architectural section in the Bridge Department. Many of the grade elimination bridges of the 1930s and 1940s in congested areas were detailed with Moderne and Deco pilasters and entablature due to the influence of Goodkind and Lichtenburg. The same structures had encased stringers, the most common type built during Goodkind's term. He emphasized the encasement for protection of the steel from the elements, a valid assertion considering the number and condition of such structures remaining in New Jersey.

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

While working for the state, he served as a consultant on bridge construction for the War Department. Upon his retirement as Chief Bridge Engineer, Goodkind became a consultant with the firm of Goodkind and O'Dea in Manhattan. He was internationally known and respected for his bridge engineering. He had been active in local and national engineering societies, and won several awards for the designs of bridges.

Goodkind was awarded the Phoebe Hobson Fowler Architectural Award by the American Society of Civil Engineers for the design of the US 1 bridge. To recognize the contribution which Goodkind made to the State of New Jersey, the name of the bridge was officially changed from the College Bridge to The Morris Goodkind Bridge on April 25, 1969, following his death the previous September.

Of the approximately 8 pre-1946 open-spandrel arch bridges in the state, all but one (1213150) have been evaluated as significant.

Boundary Description and Justification: The bridge is evaluated as individually significant, and the boundaries are thus limited to the span itself. NJ 46 was improved in the mid- to late-1930s as a major artery handling Morris County and Passaic County traffic approaching the Hudson River crossings. The road is dominated by what by the mid-1930s were standard solutions to common engineering problems.

PHOTO: 135:42-1 (04/92) REVISED BY (DATE): QUAD: Paterson

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1607164 **CO** PASSAIC **OWNER** NJDOT **MILEPOINT** 63.28

NAME & FEATURE INTERSECTED LEXINGTON AVENUE OVER US 46 EASTBOUND **FACILITY** LEXINGTON AVENUE

TOWNSHIP CLIFTON CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 41 ft **WIDTH** 50.3 ft

CONSTRUCTION DT 1939 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries a median-divided, 4-lane, limited access highway and narrow shoulders over a 2-lane road in a wooded setting with 20th-century single-family houses. US 46 was developed initially as Route 6 to link the Ben Franklin and George Washington bridges. This section was upgraded in 1939.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95, Finding 2/21/97.

SUMMARY The encased stringer bridge is supported on a concrete substructure accented with Moderne-style paneled pilasters at the corners. They continue as the posts for the standard-design concrete balustrades. The bridge is consistent in type and design with the many other bridges built in 1939 as part of the upgrading of old Route 6, and it is not technologically nor historically significant. The route itself is also not of sufficient historical or engineering significance to be noteworthy.

INFOR MATION

PHOTO: 141:21-22 (04/92) REVISED BY (DATE): QUAD: Paterson

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1607166 **CO** PASSAIC **OWNER** NJDOT **MILEPOINT** 63.85

NAME & FEATURE INTERSECTED US 46 EB OVER NJ 20 NB **FACILITY** US 46 EASTBOUND

TOWNSHIP CLIFTON CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 50 ft **WIDTH** 30 ft

CONSTRUCTION DT 1936 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries one lane and one shoulder of one-directional (eastbound) traffic over two lanes of one directional traffic in a wooded setting with some modern commercial establishments. The span is paired with 1607167 which carries westbound traffic. Both spans cross the west end of NJ 20. This bridge carries traffic flowing from eastbound US 46 to northbound NJ 20. The original designations were Route 4 over Route 3.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95, Finding 2/21/97.

SUMMARY The skewed encased stringer bridge is supported on a concrete substructure accented with Moderne-style paneled pilasters that continue as the standard-design balustrade posts. The end posts are inscribed with date and route. The bridge is one of many built in the late-1930s to make the route limited access. It is not historically nor technologically distinguished as it is consistent in type and style with other spans on the road.

INFOR MATION

PHOTO: 141:10-11 (04/92) REVISED BY (DATE): QUAD: Paterson

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1607167 **CO** PASSAIC **OWNER** NJDOT **MILEPOINT** 63.85

NAME & FEATURE INTERSECTED US 46 WB OVER NJ 20 NB **FACILITY** US 46 WESTBOUND

TOWNSHIP PATERSON CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 63 ft **WIDTH** 30 ft

CONSTRUCTION DT 1936 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries two lanes of one-directional traffic (westbound) of a limited access, wide grass median-divided highway (US 46) over two lanes of one directional traffic (northbound) of a similar state highway. The bridge is paired with 1607166 which carries US 46 in the opposite direction. The routes were originally designated Route 4 over Route 3. The overpass is located in a wooded setting with scattered modern commerical establishments.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95, Finding 2/21/97.

SUMMARY The skewed encased stringer bridge is supported on a concrete substructure accented with Moderne-style stepped pilasters that continue into the concrete balustrades as posts. The balustrades and corresponding posts are also used on the approaches. The span is one of many built on US 46 in the late-1930s when the route was improved as a limited access highway with few grade crossings. It is consistent in type and style with the other spans on the route and is not technologically distinguished.

INFOR MATION

PHOTO: 141:19-20 (04/92) REVISED BY (DATE): QUAD: Paterson

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1607168 **CO** PASSAIC **OWNER** NJDOT **MILEPOINT** 63.98

NAME & FEATURE INTERSECTED US 46 OVER PASSAIC RIVER **FACILITY** US 46

TOWNSHIP PATERSON CITY

TYPE OPEN SPANDREL RIBBED ARCH **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 5 **LENGTH** 538 ft **WIDTH** 48 ft

CONSTRUCTION DT 1937 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries a barrier-divided, 4-lane, limited access highway and sidewalks over the Passaic River, the feature that marks the division between Bergen and Passaic counties. It was built as part of the late-1930s improvement of Route 6, the road linking the Ben Franklin and George Washington bridges.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 10/03/90 02/21/97, Letter 6/30/95.

SUMMARY The 5-span open spandrel ribbed arch bridge built in 1939 is one of approximately 8 such bridges designed and built by the state on its major routes between 1929 and 1939. Representing the apex of concrete bridge technology of its day, the open-spandrel bridge is as handsome as it is technologically distinguished. This large and well-preserved example ranks as one of the most significant highway spans in the state and it is historically and technologically noteworthy.

INFORMATION

Bibliography:
NJDOT. Plan File; 1607168.
Condit, Carl. American Building Art 20th Century. 1960.
Hess, Jeffrey & Frame, Robert. "Wisconsin Stone Arch and Concrete Arch Bridges." 1986.
Plowden, David. Bridges: The Spans of North America. 1974.

Physical Description: The 5-span open spandrel ribbed arch bridge of reinforced concrete is well proportioned and well detailed. Each span is composed of six arch ribs. The bridge is finished with spandrel columns and Modern-style stepped pilasters that define the span limits. Each end pilaster is topped by a battered concrete lamp standard and a mosaic tile seal of the state. The deck is concrete, and the wearing surface is bituminous concrete. Sidewalks are framed by standard-design concrete balustrades. The bridge appears to be well preserved.

Historical and Technological Significance: The concrete open spandrel ribbed arch bridge built in 1937 is significant as a well-preserved example of the technologically noteworthy and aesthetically impressive works of Morris Goodkind (1869-1968) produced throughout his career as State Bridge Engineer (Criterion C). It is one of approximately 8 open-spandrel arch bridges in New Jersey, a bridge type that defines the highest level of refinement in reinforced concrete arch technology. It is one of three on NJ 46 in Passaic County (1607163, 1607158). The well-preserved bridge represents Goodkind's emphasis in the New Jersey State Highway Department Bridge Division to create aesthetically pleasing concrete structures prior to World War II. The moldable qualities of the material were used to create an architectural masterpiece at the same time that its structural qualities were used to efficiently carry a major highway across a wide river. The reinforced concrete arch was capable of relatively long spans while providing graceful and dynamic forms.

Around the turn of the century, reinforced concrete arches were generally limited to relatively short and often single span bridges. The dead load carried by the arches was reduced with the introduction of open spandrel arches. The lighter structures were capable of longer spans and more aesthetically pleasing large bridges. The Walnut Lane bridge (1906-8) over Wissahickon Creek in Philadelphia was a forerunner of the type. A massive structure, the open spandrel arches of that structure span 233 feet with virtually no steel reinforcement in the two ribs. In the first two decades of the 20th century, railroads began using reinforced concrete to construct large viaducts across rivers and valleys to eliminate steep grade changes. The length and number of spans increased to create massive structures that dominated the landscape. The Tunkhannock Viaduct (completed 1915 and designed by A. Burton Cohen, 1883-1956) of the Delaware Lackawanna & Western RR in Nicholson, Pennsylvania remains one of the greatest bridges in America. It is a ten-span open spandrel reinforced concrete arch, 2375 feet in total length, each span 180 feet in clear span, and rising 240 feet above the creek bed in the valley floor.

The US 1 Bridge, completed 14 years later in 1929, but comparable in size and beauty, was the first of Goodkind's open-spandrel concrete arch bridges in New Jersey. The bridge type was repeated with equal success at major crossings on major roads throughout the northern half of the state through the 1930s. NJ 46 was upgraded in the late 1930s to serve as a major link between the Hudson River crossings into Manhattan and the west portion of the state, especially Morris and Passaic counties.

Morris Goodkind, designer of the bridge, was a graduate of Columbia University. He worked for the New York City Public Service Commission in the development of the subway system before working on bridge designs for engineering firms and Mercer County, NJ. In 1922 he joined the New Jersey Highway Department, and became the Chief Bridge Engineer in 1925, a post he held through 1955 when he retired to private practice.

The 1920s and 1930s were a time of great expansion of the state's highway system which required many bridges to be built. Goodkind emphasized the need for aesthetically pleasing as well as structurally sound bridges. He brought in Arthur Lichtenburg to develop an architectural section in the Bridge Department. Many of the grade crossing elimination bridges of the 1930s and 1940s in congested areas were detailed with Moderne and Deco pilasters and entablature due to the influence of Goodkind and Lichtenburg. The same structures had encased stringers, the most common type built during Goodkind's term. He emphasized the encasement for protection of the steel from the elements, a valid assertion considering the number and condition of such structures remaining in New Jersey.

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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While working for the state, he served as a consultant on bridge construction for the War Department. Upon his retirement as Chief Bridge Engineer, Goodkind became a consultant with the firm of Goodkind and O'Dea in Manhattan. He was internationally known and respected for his bridge engineering. He had been active in local and national engineering societies, and won several awards for the designs of bridges.

Goodkind was awarded the Phoebe Hobson Fowler Architectural Award by the American Society of Civil Engineers for the design of the US 1 bridge. To recognize the contribution which Goodkind made to the State of New Jersey, the name of the bridge was officially changed from the College Bridge to The Morris Goodkind Bridge on April 25, 1969, following his death the previous September.

Of the approximately 8 pre-1946 open-spandrel arch bridges in the state, all but one (1213150) have been evaluated as significant.

Boundary Description and Justification: The bridge is evaluated as individually significant, and the boundaries are thus limited to the span itself. NJ 46 was improved in the mid- to late-1930s as a major artery handling Morris County and Passaic County traffic approaching the Hudson River crossings. The road is dominated by what by the mid-1930s were standard solutions to common engineering problems.

PHOTO: 141:12-18 (04/92) REVISED BY (DATE): QUAD: Paterson

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1650160 **CO** PASSAIC **OWNER** UNKNOWN **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MADISON AVENUE OVER PASSAIC SPUR RAILROAD **FACILITY** MADISON AVEMUE

TOWNSHIP PATERSON CITY

TYPE THRU GIRDER **DESIGN** PARTIALLY ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 125 ft **WIDTH** 55 ft

CONSTRUCTION DT 1929 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT ERIE-LACKAWANNA RR OFF OF ENG **BUILDER** AMERICAN BRIDGE COMPANY

SETTING / CONTEXT The bridge carries a two-lane street, sidewalks, and utility pipes over 3 tracks of the former Erie-Lackawanna Railroad in an industrial area of Paterson. The factory and storage buildings date from the early through the late 20th century.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed, 2-span, simply supported thru girder with floor beams bridge is supported on concrete abutments and a built-up steel bent with lateral bracing. The cantilevered sidewalks are enclosed by metal, picket fence-like railings. The banked approaches are enclosed by concrete parapets. Access to the track level is provided by riveted construction steel staircases on each side of the bridge. The span is a representative example of a common type and is not notable.

INFOR MATION

PHOTO: 134:30-32 (04/92) REVISED BY (DATE): QUAD: Paterson

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1650161 **CO** PASSAIC **OWNER** UNKNOWN **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PIAGET AVENUE (CR 628) OVER PASSAIC SPUR RAILROAD **FACILITY** PIAGET AVENUE (CR 628)

TOWNSHIP CLIFTON CITY

TYPE THRU GIRDER **DESIGN** PARTIALLY ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 125 ft **WIDTH** 30 ft

CONSTRUCTION DT 1926 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT ERIE RR OFFICE OF ENGINEER **BUILDER**

SETTING / CONTEXT The bridge carries a two-lane street and sidewalks over two tracks and one siding spur of the former Erie Railroad in a mixed-use area of Clifton with commercial and light industrial establishments lining the tracks and 20th-century houses and modern apartments behind. The area does not have historic district potential due to alterations to the older buildings. The railroad line was initially developed in the 1830s as the Paterson & Hudson River RR and acquired by the Erie in 1852.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed 3-span bridge is composed of an encased thru girder with floor beams main span and T-beam approaches supported on concrete stub abutments and pier bents. It is finished with a jack arch-supported concrete deck with a bituminous wearing surface. Inner girder faces have been filled with concrete. The cantilevered sidewalks are enclosed by metal fence-like railings. Although unaltered, the 1926 bridge is neither historically nor technologically significant.

INFOR MATION

PHOTO: 134:8-10 (04/92) REVISED BY (DATE): QUAD: Paterson

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1651161 **CO** PASSAIC **OWNER** UNKNOWN **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MINISINK ROAD (CR 642) OVER TOTOWA SPUR RAILROAD **FACILITY** MINISINK ROAD (CR 642)

TOWNSHIP TOTOWA BOROUGH

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 68 ft **WIDTH** 32.5 ft

CONSTRUCTION DT 1916 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT DL&W RR OFFICE OF ENGINEER **BUILDER**

SETTING / CONTEXT The bridge carries a 2-lane road over one track of the former DL&W RR's Boonton line that was put into service about 1870.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The elliptical concrete deck arch bridge with a standard-design concrete balustrade is neither an early nor a well-detailed example of its type. Built by the DL&W RR in 1916, it is one of at least 50 similar type bridges the line erected in the state. The span is unaltered, but it is not historically nor technologically distinguished.

INFOR MATION

PHOTO: 143:26-27 (04/92) REVISED BY (DATE): QUAD: Paterson

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1651162 **CO** PASSAIC **OWNER** UNKNOWN **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED RIVERVIEW DRIVE OVER TOTOWA SPUR RAILROAD **FACILITY** RIVERVIEW DRIVE

TOWNSHIP TOTOWA BOROUGH

TYPE THRU GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 7 **LENGTH** 378 ft **WIDTH** 50 ft

CONSTRUCTION DT 1941 **ALTERATION DT** 1978 **SOURCE** NJDOT/PLANS

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries 4 lanes of traffic and sidewalks over one railroad track. The area is composed of a modern industrial park.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed 7-span bridge was originally composed of built-up deck girder approaches and a thru girder with floor beams main span supported on a concrete substructure. The concrete columns supporting the main span continued to form posts protecting the girder ends. In 1978 it was nearly doubled in width by a rolled stringer addition to the west side. The addition is enclosed by a barrier-like concrete parapet with cap railings. The altered span is not historically or technologically noteworthy.

INFOR MATION

PHOTO: 143:28-32 (04/92) REVISED BY (DATE): QUAD: Paterson

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NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1651163 **CO** PASSAIC **OWNER** UNKNOWN **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PARISH DRIVE OVER TOTOWA SPUR RAILROAD **FACILITY** PARISH DRIVE

TOWNSHIP WAYNE TOWNSHIP

TYPE THRU GIRDER **DESIGN** PARTIALLY ENCASED **MATERIAL** Steel

 # SPANS 6 **LENGTH** 326 ft **WIDTH** 30 ft

CONSTRUCTION DT 1938 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT DL&W RR OFFICE OF ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a two-lane road and one sidewalk over one track of the former DL&W RR's Boonton Line that was put into service about 1870 and a 2-lane street in a mixed-use area that includes a post office and fire department. When the bridge was built in 1938, much of the surrounding land was still owned by the Parish family for whom the road is named.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed 6-span viaduct is composed of a thru girder with encased floor beams main span and multi-girder approach spans with built up haunched fascia girders. It is supported on a concrete substructure. The sidewalk and roadway are enclosed by flat-paneled concrete parapets with chamfered tops, and a concrete staircase is located off the east elevation of the bridge. Although unaltered, the bridge is a late example of a common type, and it is not historically nor technologically distinguished

INFOR MATION

PHOTO: 139:6-9 (04/92) REVISED BY (DATE): QUAD: Pompton Plains

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1661152 **CO** PASSAIC **OWNER** STATE AGENCY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED HAZEL STREET OVER ERIE MAIN LINE RAILROAD **FACILITY** HAZEL STEET

TOWNSHIP CLIFTON CITY

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 40 ft **WIDTH** 36.3 ft

CONSTRUCTION DT 1915ca **ALTERATION DT** **SOURCE** STYLE

DESIGNER/PATENT ERIE RR OFFICE OF ENGINEER **BUILDER**

SETTING / CONTEXT The bridge carries a 2-lane road with sidewalks over one railroad track. The area is dominated by light industrial and commerical establishments. The bridge crosses the Erie Railroad's Newark Branch that was initially developed in 1869.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The ca. 1915 skewed slab bridge is supported on a substructure composed of the random ashlar abutments from a previous span and concrete extensions with wingwalls. The bridge is finished with a concrete parapet accented with contrasting bush-hammer finish panels. No plans for the bridge appear to survive. It is dated ca. 1915 based on its type and design. It is not historically nor technologically distinguished.

INFOR MATION

PHOTO: 134:40-42 (04/92) REVISED BY (DATE): QUAD: Paterson

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1700199 **CO** SALEM **OWNER** COUNTY **MILEPOINT** 0.0
NAME & FEATURE INTERSECTED MILL ROAD (CR 642) OVER OLDMANS CREEK **FACILITY** MILL ROAD (CR 642)
TOWNSHIP OLDMANS TOWNSHIP
TYPE SWING SPAN **DESIGN** CENTER BEARING **MATERIAL** Steel
 # SPANS 2 **LENGTH** 170 ft **WIDTH** 16.4 ft

CONSTRUCTION DT 1906 **ALTERATION DT** 1976 **SOURCE** NEWSPAPER
DESIGNER/PATENT WILLIAM M. CARTER **BUILDER** NJ-WVA BRIDGE COMPANY

SETTING / CONTEXT The single-lane bridge spans a tidal estuary in a broad wetlands just north of the small 19th-century village of Pedricktown. The swing span's central pier sits on an island in the middle of Oldmans Creek and the moveable span crosses over only one of the creek's channels. Pedricktown has some excellent examples of 19th-century vernacular domestic and commerical architecture but has too many modern intrusions for a historic district.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No
CONSULT STATUS Not Individually Eligible.
CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY Originally a center-bearing truss swing span with a rivet-connected Warren pony truss approach span with masonry abutments and reinforced-concrete piers, the bridge has been so altered that it has lost its historical and technological significance. The truss approach span was replaced with the current steel-stringer span in 1976, and the swing span was reinforced and fixed in place. The operating mechanism was removed as were the wedges and toe locks.

INFOR MATION

SOURCES:
Biographical, Genealogical, and Descriptive History of the First Congressional District of New Jersey. New York: Union Publishing Co., 1900.
Gloucester County Board of Freeholders. Minute Books. Dec. 21, 1905.
Hool, George A. and W. S. Kinne, eds. Movable and Long Span Bridges. New York: McGraw-Hill, 1923.
Salem County Board of Freeholders. Minute Books. July 1904-May 1906.
Salem County Engineer. Plans and Bridge Cards.
Salem Sunbeam. Nov. 22, 1905.
Salem Standard and Jerseyman. Dec. 15, 1905, and Jan. 17, 1906.

PHYSICAL DESCRIPTION The bridge is a 103'-long, single-lane, wood-decked, center-bearing, steel through truss swing span with a 67'-long steel stringer approach span on the south side. The main span of nine panels with a central tower has a lower chord of channels with lacing, and an upper chord of channels with lacing and a cover plate. The verticals and diagonals are either laced or battened channels and angles. The bridge has lower lateral bracing rods with turnbuckles. The central tower has latticed portals, lateral tie rods, and a makers plaque. The truss system has not been significantly altered except for some repairs to the tower braces, and the addition of some reinforcing plates.

The swing span has been rendered inoperable and most of the operating mechanism has been removed. It is a center-bearing type, originally hand-powered by a crank attachment inset in the deck. The crank turned the pinion gear against the circular rack mounted on top of the center pier. A box-shaped system of four girders with four balance wheels supported and balanced the bridge's weight on the center pier when the bridge was in the open position. The girders and rollers are extant. In 1988, the bridge's end bearings, originally rollers designed to lift the bridge in the closed position and lock it in place, were replaced with elastometric pads on concrete pedestals.

The approach span was originally a 7'-deep, riveted Warren pony truss. In 1975 a dump truck broke through the deck and destroyed the truss. It was replaced with a steel-stringer span.

The substructure consists of masonry abutments with concrete reinforcing and repairs. The piers are reinforced concrete with metal sheeting. The bridge's timber pile fenders are in a deteriorated condition.

HISTORICAL AND TECHNOLOGICAL SIGNIFICANCE The swing span over Oldmans Creek has been significantly altered. The bridge was a representative example of a popular early-20th century movable-span technology. A better example of the bridge type is New Bridge over Alloways Creek (1905, No. 1701399) in Salem County. New Bridge is built upon similar specifications and is better preserved.

A bridge has spanned Oldmans Creek between Salem and Gloucester Counties at Pedricktown since the early 19th century. In 1904, the Salem County Board of Freeholders hear a report from the local residents that the old wooden draw had become unsafe. since the bridge spanned the creek between the two counties, the Salem County Freeholders determined to advise the Gloucester County Freeholders of the need to replace the bridge. Usually the two counties shared the cost of upkeep and repair of bridges on their shared border. In the case of the Pedricktown Bridge, however, the Gloucester County Freeholders refused to authorize the replacement of the bridge because the Bridge Meadow Company on Oldmans Creek, whose majority members were Salem County residents, had not maintained the banks and dikes along Oldmans Creek in sufficient repair to prevent flooding of Mill Road. In late 1905, the company made arrangements to repair the banks and dikes; subsequently, the two counties came to an agreement to share the cost of building a new steel draw.

The specifications for the new bridge were prepared by Woodbury's city engineer, William Carter, a self-taught professional with a sideline in insurance and real estate. At $11,300, the New Jersey-West Virginia Bridge Company was the lowest bidder for the job. No other bridges built by the NJ-WV Bridge Co. have been identified, although it seems likely that the company was a merger or buy-out of the financially-troubled New Jersey Bridge Co. of Manasquan by the West Virginia Bridge Co. of Wheeling. In 1905, the New Jersey Bridge Co. had constructed the New Bridge over Alloways Creek in Salem County, a span very similar to the Pedricktown Bridge over Oldmans

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Creek.

The Pedricktown Bridge over Oldmans Creek is not an example of innovative technology. Center-bearing swing spans were popular in the first decades of the 20th century for applications where large channel widths and long periods of interruption to vehicular traffic were not major considerations. The replacement of the approach span and the disablement of the swing span make it a poor candidate for preservation.

PHOTO: 47:40-42 (09/91) REVISED BY (DATE): QUAD: Marcus Hook

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1700200 **CO** SALEM **OWNER** COUNTY **MILEPOINT** 1.45

NAME & FEATURE INTERSECTED HAWK'S BRIDGE ROAD (CR 540) OVER SALEM RIVER **FACILITY** HAWK'S BRIDGE ROAD (CR 540)

TOWNSHIP CARNEY'S POINT TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 3 **LENGTH** 100 ft **WIDTH** 40 ft

CONSTRUCTION DT 1937 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge lies in a small tidal wetlands near the confluence of Salem Creek and the Deepwater Canal leading north to the Delaware River. The bridge spans Salem Creek about 7/10 mile south of the intersection of CR 540, US 40 and the New Jersey Turnpike. Although not visible from the bridge, the area to the north is highly developed with residences, motels, truck stops, and factories (c. 1950-90).

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed, steel-stringer bridge has concrete balustrades, encased fascia stringers, and reinforced-concrete substructure. It is one of at least 8 similar existing steel stringers built in Salem County between 1930 and 1941. In 1937-38, the bridge replaced a wooden draw bridge. It is a representative example of a common pre-1946 bridge type in New Jersey, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 47:24-25 (09/91) REVISED BY (DATE): QUAD: Penns Grove

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NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1700437 **CO** SALEM **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED KINGS HIGHWAY (CR 620) OVER SALEM CREEK **FACILITY** KINGS HIGHWAY (CR 620)

TOWNSHIP PILESGROVE TOWNSHIP

TYPE T BEAM **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 2 **LENGTH** 53 ft **WIDTH** 22 ft

CONSTRUCTION DT 1919 **ALTERATION DT** 1951 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT HOWARD B. KEASBY, CO. ENG. **BUILDER** WILLIAM H. SHOUGH

SETTING / CONTEXT The two-lane bridge spans Salem Creek in a residential area along tree-lined CR 620 in the village of Sharpstown (c. 1850-1990) about 2/5 mile south of the busy intersection of CR 620 and US 40.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The continuous T-beam bridge has a reinforced-concrete substructure and beam guide rails. In 1951 the county rebuilt inkind the northern abutment and pier inkind a storm washed out the original substructure. The bridge is one of at least 17 existing T-beam bridges built in Salem County between 1917 and 1944. It is not technologically innovative or historically significant.

INFOR MATION

PHOTO: 49:5a-6a (09/91) REVISED BY (DATE): QUAD: Woodstown

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NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1700448 **CO** SALEM **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MAIN STREET (CR 672) OVER MEMORIAL LAKE **FACILITY** MAIN STREET (CR 672)

TOWNSHIP WOODSTOWN BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 51 ft **WIDTH** 40 ft

CONSTRUCTION DT 1941 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT HARRY S. SKINNER, CO. ENG. **BUILDER** JOSEPH W. ROGERS

SETTING / CONTEXT The two-lane bridge spans man-made Memorial Lake in Memorial Park on the south side of Woodstown. The borough created the small lakeside park in the early 1920s to commemorate WWI. The surrounding residential area contains houses dating from c.1850 to c.1950. A memorial plaque on the bridge notes that it commemorates nine other bridges destroyed in the flood of 1940. The bridge replaced a steel truss destroyed in the flood.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span, encased, steel-stringer bridge has reinforced-concrete abutments and pier, and concrete balustrades with decorative Moderne detailing. Except for the embellishments, the bridge is similar to at least 8 other steel-stringer bridges built by Salem County between 1930 and 1941. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 47:5-6 (09/91) REVISED BY (DATE): QUAD: Woodstown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1700449 **CO** SALEM **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MILL STREET OVER MEMORIAL LAKE SPILLWAY **FACILITY** MILL STREET

TOWNSHIP WOODSTOWN BOROUGH

TYPE T BEAM **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 2 **LENGTH** 47 ft **WIDTH** 20 ft

CONSTRUCTION DT 1922 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT HOWARD B. KEASBY, CO. ENG. **BUILDER** KUCHAR BROTHERS

SETTING / CONTEXT The one-lane bridge spans the spillway from Memorial Lake in Memorial Park on the south side of Woodstown. The borough created the lakeside park in the early 1920s to commemorate WWI. The area surrounding the park is residential (c. 1850-1950). The bridge is structurally associated with the U-shaped spillway/dam that creates Memorial Lake. The center of the spillway once had a fountain. The park does not appear to be NR eligible.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span, T-beam bridge with concrete balustrades and substructure is representative of at least 17 examples of the bridge type built in the county between 1917 and 1944. Its setting in a 1920s memorial park is well preserved, but the bridge itself is technologically and historically undistinguished. Utility pipes and a steel platform have been added. The bridge's local historic value is not sufficient to meet National Register criteria.

INFOR MATION

SOURCES:

Combination Atlas and Map of Salem and Gloucester Counties. Philadelphia: Everts and Stewart, 1876.
Salem County Board of Freeholders. Minute Books. May 10, 1922 and Nov. 15, 1922.
Ketchum, Milo S. The Design of Highway Bridges of Steel, Timber and Concrete. New York: McGraw-Hill, 1920.
Shuck, Albert C., et. al. "A Story of Salem County." Typescript. Salem City Public Library. 1938.

PHYSICAL DESCRIPTION The two-span, concrete T-beam bridge has concrete balustrades and substructure. A T-beam bridge is characterized by reinforced concrete beams with T-shaped reinforcing bars. Structurally associated with the bridge is a stepped, semi-circular spillway/dam with a central water fountain display. Molded into the spillway walls are the words "Memorial Lake." The dam/spillway creates Memorial Lake, the central feature of Woodstown's Memorial Park. The bridge has not been significantly altered, but the spillway and fountain are in poor repair. A utility pipe has been suspended from the bridge, and a steel platform erected over the spillway next to the south abutment.

HISTORICAL AND TECHNOLOGICAL SIGNIFICANCE The Memorial Lake Bridge is one of the most distinguished of over 15 similar, short-span T-beam bridges built in Salem County between 1917 and 1944. It is structurally associated with a spillway/dam, and is located in Woodstown's largest city park. The T-beam was a standardized bridge design that came into wide use in Salem County during the tenure of the county's first professional engineer, Howard B. Keasby. The bridge is one of the best examples of a bridge type of local historic importance, but it is not significant enough to merit National Register recognition.

Shortly after WWI, Woodstown bought the Memorial Lake property for a city park, commemorating its wartime veterans. The property had formerly been the site of a grist mill with mill pond. An 1876 map shows a bridge spanning the mill pond spillway and a grist mill downstream from the bridge. The mill buildings no longer exist. In 1922 the worn-out wood-stringer bridge was replaced with a new T-beam bridge. The county was in the midst of a campaign to replace many of its wood bridges with concrete or steel. The plans for the Memorial Lake Bridge included "two spans of 30', a gravel roadway 2' higher than the old bridge, and a tumbling dam." The bridge was to be paid for by the county, and the "tumbling dam" by the Woodstown Chamber of Commerce. The contract to build the new bridge was awarded at a price of $13,240.47 to Kuchar Brothers, contractors from Spring Valley, New York. Kuchar Brothers also held large contracts for improvements to the newly-created state highways in Salem County.

PHOTO: 47:7-9 (09/91) REVISED BY (DATE): QUAD: Woodstown

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1700455 **CO** SALEM **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED EAST LAKE ROAD OVER SALEM CREEK **FACILITY** EAST LAKE ROAD

TOWNSHIP PILESGROVE TOWNSHIP

TYPE T BEAM **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 34 ft **WIDTH** 21.6 ft

CONSTRUCTION DT 1921 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** WILLIAM H. SHOUGH

SETTING / CONTEXT The bridge spans the spillway from Webster Mill Pond south of Woodstown. The surrounding area is rural with cow pastures, dairy barns, and residences (c. 1830-1990). A circular-shaped concrete dam and spillway extends from the bridge abutments to create the 3/5-mile long pond. The structural association of bridges and dams is frequent in South Jersey.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span, T-beam bridge with reinforced-concrete abutments is representative of at least 17 existing T-beams built in Salem County between 1917 and 1944. The county has replaced the original railings with steel guide rails. William H. Shough of Alloway, NJ, built at least seven of the county's existing T-beams. The bridge is not historically or technologically significant.

INFOR MATION

PHOTO: 49:2a-4a (09/91) REVISED BY (DATE): QUAD: Woodstown

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NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1700482 **CO** SALEM **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED SWEDESBORO ROAD (CR 605) OVER OLDMANS CREEK **FACILITY** SWEDESBORO ROAD (CR 605)

TOWNSHIP PILESGROVE TOWNSHIP

TYPE ARCH **DESIGN** BARREL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 38 ft **WIDTH** 29.6 ft

CONSTRUCTION DT 1923 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT HOWARD B. KEASBY, CO. ENG. **BUILDER** E. P. HENRY AND SON

SETTING / CONTEXT The bridge spans a tree-lined creek on the Gloucester-Salem County line. The surrounding area is rural with wooded lots, scattered residences (c. 1850-1990), and fields.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The reinforced-concrete arch with concrete parapets spans the county line, and was jointly built by Gloucester and Salem Counties. The bridge is similar to at least 19 arches built between 1912 and 1940 in Gloucester County. No other similar arches are in Salem County. Probably plans provided by Gloucester County engineer William C. Cattell were used. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 47:43-44 (09/91) REVISED BY (DATE): QUAD: Woodstown

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NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1700505 **CO** SALEM **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 540 OVER MANNINGTON CREEK **FACILITY** CR 540 (POINTERS-AUBURN ROAD)

TOWNSHIP MANNINGTON TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 4 **LENGTH** 54 ft **WIDTH** 31.3 ft

CONSTRUCTION DT 1939 **ALTERATION DT** 1972 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The two-lane bridge spans a tidal estuary in broad wetlands near the tidal pond known as Mannington Meadow. On the upstream side of the bridge is a timber tidal barrier and gates supported by lateral I-beams bolted to the bridge. The bridge is a favorite spot of fishermen, and the surrounding area is largely undeveloped. The structural association of bridges and dams is frequent in South Jersey.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The concrete slab with balustrades and reinforced-concrete substructure is the longest in Salem County. In 1972 the county substantially rebuilt the adjoining tidal barrier. Concrete slabs are a common bridge type in New Jersey. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 47:16-17 (09/91) REVISED BY (DATE): QUAD: Salem

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1700573 **CO** SALEM **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED KINGS HIGHWAY (CR 620) OVER MANNINGTON CREEK **FACILITY** KINGS HIGHWAY (CR 620)

TOWNSHIP MANNINGTON TOWNSHIP

TYPE T BEAM **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 3 **LENGTH** 70 ft **WIDTH** 31.8 ft

CONSTRUCTION DT 1931 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** C. FISKE CAMPBELL

SETTING / CONTEXT The two-lane bridge spans a tidal estuary in broad wetlands near the Delaware River. The surrounding area is undeveloped and the bridge is a favorite spot of fishermen.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The three-span T-beam bridge with reinforced-concrete substructure has balustrades on the center span and paneled parapets on the approach spans. The bridge is a representative example of at least 17 similar T-beam bridges built in Salem County between 1917 and 1944. C. F. Campbell of Bridgeton constructed at least six concrete bridges in the county between 1928 and 1933. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 400:2-3 (09/91) REVISED BY (DATE): QUAD: Salem

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US
November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1700954 **CO** SALEM **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED LAKE STREET OVER BRANCH OF ALLOWAYS CREEK **FACILITY** LAKE STREET

TOWNSHIP QUINTON TOWNSHIP

TYPE T BEAM **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 32 ft **WIDTH** 30 ft

CONSTRUCTION DT 1928 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** C. FISKE CAMPBELL

SETTING / CONTEXT The two-lane bridge spans the spillway from Laurel Lake Reservoir in the village of Quinton. Just east of the bridge is a concrete dam creating the reservoir, and nearby at the corner of Lake Street and Waterworks Road is a brick pumping station (c. 1920-30). The surrounding neighborhood is residential with many houses dating from the 19th century.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Potential Quinton's Bridge Historic District. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span T-beam bridge with balustrades and reinforced-concrete substructure is a representative example of at least 17 similar T-beam bridges built by Salem County between 1917 and 1944. C. F. Campbell, the builder, constructed at least six concrete bridges in the county from 1928 to 1933. The bridge is not historically or technologically significant.

INFOR MATION

PHOTO: 48:35-36 (09/91) REVISED BY (DATE): QUAD: Salem

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1700973 **CO** SALEM **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WATER WORKS ROAD OVER DEEP RUN **FACILITY** WATERWORKS ROAD

TOWNSHIP QUINTON TOWNSHIP

TYPE T BEAM **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 30 ft **WIDTH** 20 ft

CONSTRUCTION DT 1923 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** WILLIAM H. SHOUGH

SETTING / CONTEXT The single-lane bridge spans a spillway from the Elkinton Mill Pond dam. To the west of the bridge and extending from the abutments is a U-shaped, concrete spillway/dam. Trees line the banks of the creek and the pond, and the surrounding area is rural with fields and wooded lots. A brick water pump station (c. 1920-30) is next to the bridge. The structural association of bridges and dams is frequent in South Jersey.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The T-beam bridge with concrete balustrades and reinforced-concrete substructure is a representative example of at least 17 similar T-beams built in Salem County from 1917 to 1944. Builder W. H. Shough of Alloway constructed at least seven of the county's T-beam bridges. The bridge is not historically or technologically significant.

INFOR MATION

PHOTO: 48:37-39 (09/91) REVISED BY (DATE): QUAD: Alloway

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1701003 **CO** SALEM **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED TELEGRAPH ROAD (CR 540) OVER DEEP RUN **FACILITY** TELEGRAPH ROAD (CR 540)

TOWNSHIP ALLOWAY TOWNSHIP

TYPE T BEAM **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 31 ft **WIDTH** 30 ft

CONSTRUCTION DT 1924 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** SAMUEL CAMPBELL

SETTING / CONTEXT The two-lane bridge spans a small creek in a rural section of Salem County. Paralleling the tree-lined road are farmers' fields and wooded lots. A small pond is downstream from the bridge.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span T-beam bridge with concrete balustrades and reinforced-concrete abutments is a representative example of at least 17 similar T-beam bridges built in Salem County between 1917 and 1944. Builder Samuel Campbell of Bridgeton constructed the bridge, which according to county records replaced a timber-stringer bridge. The bridge is not historically or technologically significant.

INFOR MATION

PHOTO: 48:4-5 (09/91) REVISED BY (DATE): QUAD: Alloway

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1701028 **CO** SALEM **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED NORTH GREENWICH STREET (CR 540) OVER ALLOWAYS CREEK **FACILITY** NORTH GREENWICH STREET (CR 540)

TOWNSHIP ALLOWAY TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 3 **LENGTH** 124 ft **WIDTH** 30 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** C. FISKE CAMPBELL

SETTING / CONTEXT The two-lane, three-span bridge crosses Alloways Creek within the village of Alloway. The village contains many excellent examples of mid-nineteenth and early-twentieth century vernacular architecture. The village appears to have enough architectural cohesiveness to be considered for National Register District status but the bridge falls outside of the period of significance (c. 1830-1915).

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The three-span, steel-stringer bridge has concrete balustrades on the center span and paneled parapets on the approach spans. It has encased fascia and reinforced-concrete substructure. It is one of at least 8 similar steel stringers built in Salem County between 1930 and 1941. Lateral vertical bracing has been added between the stringers. The span is a representative example of a common pre-1946 bridge type in New Jersey and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 47:26-7 (09/91) REVISED BY (DATE): QUAD: Alloway

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1701030 **CO** SALEM **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 581 OVER DEEP RUN **FACILITY** CR 581

TOWNSHIP ALLOWAY TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 29 ft **WIDTH** 30.2 ft

CONSTRUCTION DT 1941 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The two-lane bridge spans a creek about 1/2 mile west of the nineteenth-century village of Alloway. The surrounding area is rural with farmers fields, wooded lots, and residences (c. 1920-1980).

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span, steel-stringer bridge with concrete balustrades, encased fascia, and reinforced-concrete substructure is a representative example of at least 8 similar steel stringers built in Salem County between 1930 and 1941. Steel stringers are a common pre-1946 bridge type in New Jersey. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 48:30-31 (09/91) REVISED BY (DATE): QUAD: Alloway

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1701040 **CO** SALEM **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CAMP EDGE ROAD OVER CARLISLE RUN **FACILITY** CAMP EDGE ROAD

TOWNSHIP ALLOWAY TOWNSHIP

TYPE T BEAM **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 34 ft **WIDTH** 20.2 ft

CONSTRUCTION DT 1927 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** WILLIAM H. SHOUGH

SETTING / CONTEXT The narrow two-lane bridge spans a shallow creek 50 yards downstream from Lake Sycamore, a privately-owned lake and campground in the small village of Remsterville. About 100 feet to the east near the intersection of Camp Edge Road and CR611 are two early-19th century homes with some alterations. The area to the west of the bridge is densely wooded.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span T-beam bridge with concrete balustrades and reinforced-concrete substructure is a representative example of at least 17 similar T-beams built by Salem County between 1917 and 1944. Builder W. H. Shough of Alloway constructed at least seven of the county's T-beam bridges. The span replaced an earlier timber stringer bridge. The bridge is not historically or technologically significant.

INFOR MATION

PHOTO: 48:2-3 (09/91) REVISED BY (DATE): QUAD: Alloway

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1701073 **CO** SALEM **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WITT ROAD OVER ALLOWAYS CREEK **FACILITY** WITT ROAD

TOWNSHIP ALLOWAY TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 34 ft **WIDTH** 30.2 ft

CONSTRUCTION DT 1920 **ALTERATION DT** 1965 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The two-lane bridge spans a small creek near a cow pasture. The surrounding area is rural with fields, wooded lots and scattered residences (c. 1830-1980).

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY According to county records, in 1965, Foundations and Structures, Inc. of Linwood, NJ, widened each side of an existing 15' wide, steel-stringer bridge with the addition of two 6'-wide prestressed concrete beams and parapets. The concrete substructure was also widened. The original design of the bridge has been substantially altered. The bridge is not historically or technologically significant.

INFOR MATION

PHOTO: 48:42-43 (09/91) REVISED BY (DATE): QUAD: Alloway

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1701074 **CO** SALEM **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED COMMISSIONERS PIKE (CR 581) OVER ALLOWAYS CREEK **FACILITY** COMMISSIONERS PIKE (CR 581)

TOWNSHIP ALLOWAY TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 52 ft **WIDTH** 30 ft

CONSTRUCTION DT 1932 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** C. FISKE CAMPBELL

SETTING / CONTEXT The two-lane bridge spans a small creek along a tree-lined county road. The surrounding area is rural with pastures, wooded lots, fields, and scattered homes (c. 1800-1990).

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span, steel-stringer bridge with balustrades, encased fascia, and reinforced-concrete substructure is a representative example of at least 16 similar steel-stringer bridges built in Salem County between 1930 and 1941. Builder C. Fiske Campbell of Bridgeton constructed the bridge, which replaced an earlier 24' wood stringer bridge. Steel-stringer bridges are a common type of pre-1946 bridge in New Jersey. The span is not historically or technologically distinguished.

INFOR MATION

PHOTO: 48:1,44 (09/91) REVISED BY (DATE): QUAD: Alloway

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1701088 **CO** SALEM **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PLEASANT HILL ROAD OVER ALLOWAYS CREEK **FACILITY** PLEASANT HILL ROAD

TOWNSHIP ALLOWAY TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 45 ft **WIDTH** 20.3 ft

CONSTRUCTION DT 1932 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** C. FISKE CAMPBELL

SETTING / CONTEXT The single-lane bridge spans a shallow creek in a wooded area near some farmers' fields in a rural section of eastern Alloway Township. The bridge is skewed at about 40 degrees.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed, single-span, steel-stringer bridge with pipe railing has a concrete deck and reinforced-concrete abutments. Builder C. Fiske Campbell of Bridgeton constructed the bridge which replaced a 16'-span wood stringer bridge. Steel stringers are a common pre-1946 bridge type in New Jersey. In Salem County alone there are at least 24 steel-stringer bridges. The span is not historically or technologically distinguished.

INFOR MATION

PHOTO: 48:9-10 (09/91) REVISED BY (DATE): QUAD: Alloway

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1701097 **CO** SALEM **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WOODSTOWN ROAD (CR 603) OVER ALLOWAYS CREEK **FACILITY** WOODSTOWN ROAD (CR 603)

TOWNSHIP ALLOWAY TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 30 ft **WIDTH** 30.1 ft

CONSTRUCTION DT 1941 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The two-lane bridge spans Alloways Creek along a tree-lined section of county highway. To the west, Alloways Creek flows into Alloway Lake, a dammed portion of the stream. Houses (c. 1920-90) on large wooded lots surround the lake.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span, steel-stringer bridge with concrete balustrades, encased fascia, and reinforced concrete substructure is a representative example of at least 8 similar steel stringers built by Salem County between 1930 and 1941. Steel stringers are a common pre-1946 bridge type in New Jersey. The span is not historically or technologically distinguished.

INFOR MATION

PHOTO: 48:40-41 (09/91) REVISED BY (DATE): QUAD: Alloway

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1701151 **CO** SALEM **OWNER** NJDOT **MILEPOINT** 2.61

NAME & FEATURE INTERSECTED US 40 WB OVER WEST BRANCH OF GAME CREEK **FACILITY** US 40 WESTBOUND

TOWNSHIP CARNEY'S POINT TOWNSHIP

TYPE T BEAM **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 2 **LENGTH** 53 ft **WIDTH** 38 ft

CONSTRUCTION DT 1941 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The two-lane bridge spans a wide creek 9/10 mile east of the busy intersection of US 40 and the New Jersey Turnpike. The Turnpike spans the West Branch of Game Creek about 1/10 mile north of the bridge. Immediately south of the bridge is a small boat launching area. To the west the area is heavily developed with truck stops, motels, and restaurants (c. 1950-80).

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span, T-beam bridge with balustrades and reinforced-concrete substructure is a representative example of at least 17 similar T-beam bridges built by Salem County between 1917 and 1944. The county-built bridge was added to the state highway system in the 1950s. It is not historically or technologically significant.

INFOR MATION

PHOTO: 47:22-23 (09/91) REVISED BY (DATE): QUAD: Penns Grove

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1701161 **CO** SALEM **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED COMMISSIONERS PIKE (CR 581) OVER SALEM CREEK **FACILITY** COMMISSIONERS PIKE (CR 581)

TOWNSHIP UPPER PITTSGROVE TOWNSHIP

TYPE T BEAM **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 33 ft **WIDTH** 30 ft

CONSTRUCTION DT 1927 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** JUST F. ERIKSEN

SETTING / CONTEXT The two-lane bridge spans Salem Creek along a tree-lined stretch of county highway. The surrounding area is rural with wooded lots, fields, and scattered residences (c. 1800-1990).

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span, T-beam bridge with concrete balustrades and reinforced-concrete substructure is a representative example of at least 17 similar T-beam bridges built by Salem County from 1917 to 1944. Builder J. F. Eriksen of Mantua constructed the bridge which replaced a timber-stringer bridge. The bridge is not historically or technologically significant.

INFOR MATION

PHOTO: 48:11-12 (09/91) REVISED BY (DATE): QUAD: Alloway

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1701198 **CO** SALEM **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PINE TAVERN-ELMER ROAD (CR 648) OVER MUDDY RUN **FACILITY** PINE TAVERN ELMER ROAD (CR 648)

TOWNSHIP UPPER PITTSGROVE TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 46 ft **WIDTH** 30 ft

CONSTRUCTION DT 1933 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** C. FISKE CAMPBELL

SETTING / CONTEXT The two-lane bridge spans a small creek in a wooded area near open farmland about one mile north of the town of Elmer. A T-beam bridge (1924) also spans Muddy Run on Friendship Church Road just downstream from the Pine Tavern-Elmer Road bridge.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span, steel-stringer bridge with reinforced-concrete balustrades and substructure is a representative example of at least 8 steel-stringer bridges built by Salem County between 1930 and 1941. Builder C. Fiske Campbell of Bridgeton constructed the bridge, which replaced an earlier steel stringer with stone abutments and wing walls. Steel-stringer bridges are a common type of pre-1946 bridges in New Jersey. The span is not historically or technologically distinguished.

INFOR MATION

PHOTO: 49:16a-17a (09/91) REVISED BY (DATE): QUAD: Elmer

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1701221 **CO** SALEM **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BURLINGTON ROAD (CR 627) OVER PALATINE BRANCH **FACILITY** BURLINGTON ROAD (CR 627)

TOWNSHIP PITTSGROVE TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 46 ft **WIDTH** 30 ft

CONSTRUCTION DT 1932 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** GEORGE A. CHARLESWORTH

SETTING / CONTEXT The two-lane bridge spans a small stream running through open farmland and scattered residential development.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span, steel-stringer bridge with reinforced-concrete balustrades and substructure is a representative example of at least 8 steel stringers built by Salem County between 1930 and 1941. In 1932, contractor George A. Charlesworth of Elmer, NJ, constructed the bridge, which replaced an earlier steel-stringer bridge. Steel-stringer bridges are a common type of pre-1946 bridge in New Jersey. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 49:1a,44a (09/91) REVISED BY (DATE): QUAD: Elmer

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1701235 **CO** SALEM **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CENTERTON BRIDGE (CR 540 & CR 553) OVER MUDDY RUN **FACILITY** CENTERTON BRIDGETON ROAD (CR 540 & CR 553)

TOWNSHIP PITTSGROVE TOWNSHIP

TYPE T BEAM **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 2 **LENGTH** 67 ft **WIDTH** 30 ft

CONSTRUCTION DT 1944 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The two-lane, two-span bridge crosses over Muddy Run just downstream from and to the east of Centerton Lake and Dam in eastern Salem County. Centerton is a busy crossroads with an old tavern (c. 1800-50). The northern lakeshore is a residential development (c. 1920-70).

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span T-beam bridge with reinforced-concrete balustrades and substructure is a representative example of at least 17 similar T-beam bridges built by Salem County between 1917 and 1944. The bridge replaced a New Jersey Bridge Co. steel truss (c. 1904). It is not historically or technologically significant.

INFOR MATION

PHOTO: 49:33a-34a (09/91) REVISED BY (DATE): QUAD: Elmer

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1701238 **CO** SALEM **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WILLOW GROVE-DEERFIELD ROAD OVER MUDDY RUN **FACILITY** WILLOW GROVE DEERFIELD ROAD (CR 690)

TOWNSHIP PITTSGROVE TOWNSHIP

TYPE T BEAM **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 31 ft **WIDTH** 31.3 ft

CONSTRUCTION DT 1939 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT Built into the upstream side of the two-lane bridge are wooden waste gates supported by concrete columns and beams. The gates create a small lake surrounded by summer cottages (c. 1920-90). The nearby area is predominately rural with fields, wooded lots, and residential developments. The structural association of bridges and dams is frequent in South Jersey.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The T-beam with reinforced-concrete balustrades and substructure is a representative example of at least 17 similar T-beam bridges built by Salem County between 1917 and 1944. The bridge replaced an earlier wood-stringer bridge. The T-beam bridge design enjoyed a period of popularity from the mid-1910s to the 1930s. The bridge is not historically or technologically significant.

INFOR MATION

PHOTO: 49:35a-37a (09/91) REVISED BY (DATE): QUAD: Elmer

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1701243 **CO** SALEM **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PALATINE-HUSTED STATION ROAD OVER INDIAN RUN **FACILITY** PALATINE-HUSTED STATION ROAD (CR 677)

TOWNSHIP PITTSGROVE TOWNSHIP

TYPE T BEAM **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 35 ft **WIDTH** 20.1 ft

CONSTRUCTION DT 1928 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** GEORGE A. CHARLESWORTH

SETTING / CONTEXT The two-lane bridge spans a small creek in a wooded area about 1/4 mile south of a farmhouse (c. 1900).

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span T-beam bridge with reinforced-concrete balustrades and substructure is a representative example of at least 17 similar T-beam bridges built by Salem County from 1917 to 1944. Contractor George A. Charlesworth of Elmer, NJ, constructed the T-beam, which replaced a wood stringer bridge. The bridge is not historically or technologically significant.

INFOR MATION

PHOTO: 49:42a-43a (09/91) REVISED BY (DATE): QUAD: Elmer

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1701252 **CO** SALEM **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED STATE PARK-WILLOW GROVE ROAD OVER MUDDY RUN **FACILITY** STATE PARK WILLOW GROVE ROAD (CR 645)

TOWNSHIP PITTSGROVE TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 2 **LENGTH** 54 ft **WIDTH** 30 ft

CONSTRUCTION DT 1941 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT UNKNOWN **BUILDER** CIVILIAN CONSERVATION CORPS

SETTING / CONTEXT The two-lane, two-span bridge is located within the boundaries of wooded Parvin State Park (c. 1933-41). It is structurally associated with the circular spillway and dam that creates 4/5 mile-long Parvin Lake, the park's central recreational feature. On the lake's north shore is a bath house and beach, and on the south nature areas, log cabins, and campgrounds. The early south Jersey park was developed as a CCC project.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Not Individually Eligible. Potential Parvin Lake Park Historic District. Contributing.

CONSULT DOCUMENTS SHPO Letter 11/22/95

SUMMARY The 2-span concrete slab bridge with concrete balustrades and substructure ranks as one of the most architectonic of its type in the region. The well-proportioned upstream wing walls with parapets set off the bridge from the circular concrete spillway/dam. Earlier and more historically distinguished examples of concrete-slab bridges exist in the state (e.g. 0809L02). Although not individually significant, the bridge is locally significant as a contributing resource to a potential historic district: the CCC-developed park.

INFOR MATION

SOURCES:
Condit, Carl W. American Build Art: The Twentieth Century. New York: Oxford University Press, 1961.
Salem County Board of Freeholders. Minute Books. July 11, 1923, and August 13, 1941.
Salem County Engineer. Bridge Cards. #1252.
Shuck, Albert C., et. al. "A Story of Salem County." Typescript. Salem City Public Library. 1938.

PHYSICAL DESCRIPTION The 54'-long, two-span concrete-slab bridge with concrete balustrades, concrete abutments, and concrete cutwater pier survives in a good state of preservation. The large upstream wing walls have concrete parapets with horizontal scoring. The parapets meet the bridge's balustrades and form a continuous railing for pedestrians. Extending between the upstream wing walls is the semi-circular concrete spillway/dam that forms Parvin Lake.

HISTORICAL AND TECHNOLOGICAL SIGNIFICANCE The concrete slab bridge is one of the largest and most distinguished of its type in the region. It is a central feature of Parvin State Park, one of the first state parks in South Jersey. It is also an excellent example of a New Deal public works project. The bridge is well-proportioned to provide bridge traffic with a view of the water cascading over the semi-circular spillway/dam.

A bridge has stood at the site since at least the mid-19th century. In 1867 Lemuel Parvin bought the surrounding property and constructed a saw mill, dam, and pond. In 1923 the county replaced the preexisting wood-stringer bridge with a concrete T-beam bridge. At the same time they built a concrete dam/spillway. In the 1920s the bridge was known as Ackley's Mill Pond Bridge after the then current owner of the saw mill. No physical above-ground evidence of the saw mill and its associated structures remains.

In 1933 the mill site and pond were acquired by the New Jersey Department of Conservation and Development as a Civilian Conservation Corps (CCC) camp and state park. The CCC was a New Deal work-relief program for young men. By June 1933, the CCC had 1,300 camps nation-wide and employed 300,000 men. The CCC did much to improve national and state parks. At Parvin State Park the Corps cleared picnic grounds, built cabins and a bath house, constructed roads and bridges, and dredged the pond. Most of these improvements still exist within the park. In the flood of September 1940, the 1923 T-beam bridge and spillway were destroyed. CCC workers built the new two-span concrete-slab bridge with materials provided by the county. The bridge was completed in August 1941.

PHOTO: 49:30a-32a (09/91) REVISED BY (DATE): QUAD: Elmer

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1701274 **CO** SALEM **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED GERSHEL AVE (CR 638) OVER MUDDY RUN **FACILITY** GERSHEL AVENUE (CR 638)

TOWNSHIP PITTSGROVE TOWNSHIP

TYPE STRINGER **DESIGN** HYBRID **MATERIAL** Steel

 # SPANS 3 **LENGTH** 122 ft **WIDTH** 30 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** CAMPBELL AND SON

SETTING / CONTEXT The two-lane bridge spans a wide but shallow stream in a forested section of the DEP's Union Lake Wildlife Management Area located near the Maurice River in eastern Salem County. The surrounding area is undeveloped.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The unaltered three-span bridge with reinforced-concrete substructure has T-beam approach spans and a steel-stringer center span with encased fascia stringers. The approaches have paneled concrete parapets and the center span has concrete balustrades. T-beams and steel-stringers are two common bridge types and account for 44 of the 56 existing pre-1946 bridges in Salem County. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 49:25a-26a (09/91) REVISED BY (DATE): QUAD: Millville

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1701320 **CO** SALEM **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED LOWER ALLOWAYS NECK ROAD OVER LONG BRANCH CREEK **FACILITY** LOWER ALLOWAYS NECK ROAD (CR 658)

TOWNSHIP LOWER ALLOWAYS CREEK TOWNSHIP

TYPE T BEAM **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 26 ft **WIDTH** 30 ft

CONSTRUCTION DT 1919 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** WILLIAM H. SHOUGH

SETTING / CONTEXT The two-lane bridge spans a narrow cut through an undeveloped marshy wetlands near the Salem Nuclear Power Plant entrance. About 2/5 mile to the east is the small village of Hancock's Bridge (c.1750-1900) which includes the National Register-listed Hancock House (c.1750). The bridge is not associated or contiguous with the historic property.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span T-beam bridge with reinforced-concrete substructure and pipe railing is an older example of at least 17 similar T-beam bridges built by Salem County from 1917 to 1944. Builder William H. Shough of Alloway constructed at least six T-beam bridges in the county. The bridge is not historically or technologically significant.

INFOR MATION

PHOTO: 46:44 (09/91) REVISED BY (DATE): QUAD: Salem

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NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1701399 **CO** SALEM **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED NEW BRIDGE (CR 623) OVER ALLOWAYS CREEK **FACILITY** NEW BRIDGE ROAD (CR 623)

TOWNSHIP LOWER ALLOWAYS CREEK TOWNSHIP

TYPE SWING SPAN **DESIGN** CENTER BEARING **MATERIAL** Steel

 # SPANS 2 **LENGTH** 151 ft **WIDTH** 14.8 ft

CONSTRUCTION DT 1905 **ALTERATION DT** 1976 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** NEW JERSEY BRIDGE COMPANY

SETTING / CONTEXT The single-lane bridge spans a tidal estuary in an undeveloped wetlands near the Delaware Bay. The surrounding area is rural with fields and scattered residences.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge is a center-bearing, steel-truss swing span with modified Warren pony truss approach span. The bridge was hand operated and the mechanism is in place, although the bridge has not been opened since the mid-1960s. It has ornamental finials, lattice work, and plaque on the tower. The bridge is the best example of its type in the southern part of the state. It is one of a small handful of documented surviving NJ Bridge Co. bridges in the United States.

INFORMATION

SOURCES:
Hool, George A. and W. S. Kinne, eds. Movable and Long Span Bridges. New York: McGraw-Hill, 1923.
Manasquan Chamber of Commerce. Manasquan, New Jersey. 1962.
Manasquan Historical Society. "New Jersey Bridge Company File."
Salem County Board of Chosen Freeholders. Minute Books. 1905.
Salem County Engineer. Plans and Bridge Cards. #1399.
Salem Sunbeam. Aug. 11, Aug. 16, and Sept. 20, 1905.

Physical Description: The bridge is a 110'-long, single-lane, wood-decked, center-bearing, steel through truss swing span with a 37'-long, 3-panel, riveted Warren pony truss span on the north side. The main span is a 9-panel truss with a central tower. At the first panel it is 8'-deep, and at the tower it is 22'-deep. The lower chord consists of angles with lacing, and the upper chord of channels with lacing and a cover plate. All connections are riveted. The verticals are laced angles or channels, and the diagonals are channels with battens. The central tower has latticed portals, lateral tie rods, and two of four original urn-shaped finials. Plaques on the tower portals read "1905. Built by New Jersey Bridge Co., Manasquan NJ."

The swing span is inoperable, but the operating mechanism remains extant. It is a center-bearing type, hand-powered by a crank attachment inset in the deck. The crank turned a pinion gear against a circular rack. The rack is mounted to the top of the center pier. The bridge was designed to open in either direction, and turns upon a center bearing. A box-shaped system of four girder with four balance wheels supported and balanced the bridge on the center pier when the bridge was in the open position. The south end of the bridge rests on steel rollers with axles perpendicular to the length of the bridge. They were hand operated by levers and designed to lift the bridge in the closed position, lock it in place, and provide it with a footing on the abutment. The swing span has timber pile fenders. It provided a 42'-channel to river navigation, and last opened in the mid-1960s.

Numerous alterations have been made to the substructure and the approach span, but none seriously compromise the bridge's overall integrity of design. The original piers and abutments were masonry. In 1925 the center pier was widened and reinforced with concrete. In 1942 the south abutment was rebuilt with concrete, and in 1957 the abutments were raised by approximately 12 inches. In 1966 the northern pier and abutment were reinforced with concrete. In 1976, following a vehicular accident, an end post and portion of the lower chord of the west side of the pony truss were replaced and repairs made to the panel points. A vertical on the east side of swing span was replaced, and the lattice railings were removed and beam guard rails added. In 1979 the approach span was strengthened with the addition of longitudinal steel stringers that effectively relieved the pony trusses of load bearing responsibility. In 1991 the single-lane bridge was closed to vehicular traffic due to safety concerns and structural inadequacies.

Historical and Technological Significance: The bridge is one of the few documented surviving examples of a bridge constructed by the New Jersey Bridge Company of Manasquan. Although never recognized as a major national bridge builder, the company was a significant in-state manufacturer of highway bridges. The swing span over Alloways Creek is a good representative example of a popular 20th-century movable span bridge technology that is becoming increasingly rare. It retains integrity of design and of setting.

A bridge has spanned Alloways Creek at the site of New Bridge since the early-19th century. In 1905 the Salem County Board of Freeholders decided to replace the worn-out wooden draw bridge with a new steel swing span. They drew specifications for the new bridge and advertised for bids. At a price of $10,200, the NJ Bridge Co. was the lowest bidder of seven companies.

The NJ Bridge Co. operated from 1890 to 1907. The company was started by two gentlemen from Canton, Ohio, Mr. Wyckoop and Mr. Braly. The built a 300'-deep, 100'-wide shop in Manasquan on Atlantic Avenue, adjacent the railroad tracks. At the height of their operation they employed 15 to 20 draftsmen and 100 men in the fabricating shop. A local history claims that the company "was the largest individual manufacturing facility ever to have existed in Manasquan." In 1904-1907 the company ran into financial difficulties after securing the contract to build a large swing span, Long Bridge over the Fore River, in Portland, Maine. Unable to meet its obligations and material deliveries, the company went out of business in 1907. The company went into bankruptcy at the end of an era of small, regional, independent, bridge manufacturers. The Manasquan Historical Society owns a series of photographs illustrating the company shops. No

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NJDOT updated data 03-01-2001.
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known company records survive.

According to a local history, many of the bridges built by the NJ Bridge Co. were erected in Middlesex and Monmouth Counties. The company had some national contracts; in addition to the Portland Bridge, which has been demolished, a Pratt truss has been identified in Grand Rapids, Michigan. It too is scheduled for replacement. In Salem County a slightly larger, less well-preserved, and similar movable bridge spans Oldmans Creek near Pedricktown (1700199). According to local records, in 1906 the New Jersey-West Virginia Bridge Co. constructed the Pedricktown Bridge based upon the same specifications prepared for the swing span at Alloways Creek. The relationship of the NJ Bridge Company to the NJ-WV Bridge Company is not known, except that it seems a reasonable assumption that the latter was a merger or buy-out intended to save the former from bankruptcy.

Boundary Description and Justification: Although the unspoiled setting contributes to the character of the well-preserved bridge, it is the structure itself that is evaluated as significant. The boundary is thus limited to the bridge, substructure and superstructure, of the approach span and the movable span themselves.

PHOTO: 46:4-8 (09/91) REVISED BY (DATE): QUAD: Salem

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1702154 **CO** SALEM **OWNER** NJDOT **MILEPOINT** 8.56

NAME & FEATURE INTERSECTED US 40 OVER SALEM CREEK **FACILITY** US 40

TOWNSHIP PILESGROVE TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 57 ft **WIDTH** 30.3 ft

CONSTRUCTION DT 1919 **ALTERATION DT** 1990 **SOURCE** NJDOT

DESIGNER/PATENT H. B. KEASBEY, CO. ENG. **BUILDER** UNKNOWN

SETTING / CONTEXT The two-lane bridge spans tree-lined Salem Creek near Richmans Dairy store (c. 1930) outside of Woodstown. The bridge is about 1/5 mile west of the busy commercial intersection of US 40 and CR 620. The area to the east is residential (c.1950).

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span, steel-stringer bridge with reinforced-concrete substructure has been extensively altered (c.1990). Beam guide rails and concrete barrier curbs have been added to the bridge. Concrete encasing has been removed from the fascia stringers but remains on the interior stringers. The original concrete balustrades have been removed. The county-built bridge was transferred to the state highway system in the 1950s. It is not historically or technologically distinguished.

INFOR MATION

PHOTO: 47:20-21 (09/91) REVISED BY (DATE): QUAD: Woodstown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1703152 **CO** SALEM **OWNER** NJDOT **MILEPOINT** 13.57

NAME & FEATURE INTERSECTED US 40 OVER BRANCH OF SALEM CREEK **FACILITY** US 40

TOWNSHIP PILESGROVE TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 24 ft **WIDTH** 40 ft

CONSTRUCTION DT 1929 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The two-lane bridge spans a small creek adjacent to a cow pasture and dairy farm (c. 1900) about two miles east of Woodstown. The surrounding area is rural with fields, wooded lots, and scattered 19th and 20th-century residences.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span encased stringer bridge with concrete balustrades and substructure is representative of many bridges built by the NJ State Highway Department in the 1920s and 1930s. Markers indicate the original route designation of the bridge was "State Highway Route 48." Beam guide rails have been added. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 48:13-14 (09/91) REVISED BY (DATE): QUAD: Woodstown

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BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1703156 **CO** SALEM **OWNER** NJDOT **MILEPOINT** 20.27

NAME & FEATURE INTERSECTED US 40 OVER ELMER LAKE **FACILITY** US 40

TOWNSHIP PITTSGROVE TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 38 ft **WIDTH** 40 ft

CONSTRUCTION DT 1929 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The two-lane bridge crosses Elmer Lake just to the east of the small village of Elmer (c. 1850-1950). Next to the bridge is a municipal baseball park and playground. Small businesses, gas stations, and a diner (c. 1950) line the stretch of US 40. The bridge approaches are earthen causeways built out into Elmer Lake.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span, encased steel-stringer bridge with reinforced-concrete balustrades and substructure is a representative example of many bridges designed by the State Highway Department in the 1920s and 1930s. Markers indicate the original route designation of the bridge was "State Highway Route 48" before the US 40 designation. Beam guide rails have been added. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 49:18a-19a (09/91) REVISED BY (DATE): QUAD: Elmer

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1704000 **CO** SALEM **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED POINTERS-AUBURN ROAD (CR 646) OVER SALEM CREEK **FACILITY** POINTERS AUBURN ROAD (CR 646)

TOWNSHIP PILESGROVE TOWNSHIP

TYPE DECK PLATE GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 225 ft **WIDTH** 29.8 ft

CONSTRUCTION DT 1931 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** CAMPBELL AND SON

SETTING / CONTEXT The two-lane, three-span steel deck girder crosses Salem Creek along a tree-lined stretch of county road. A small farm (c. 1900) sits next to the bridge, and the surrounding area is predominately rural with farmers' fields, wooded lots, and scattered houses. The bridge is popular with fishermen.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The three-span, deck plate girder bridge with floor beams and cantilevered sidewalks has a reinforced-concrete substructure. The pipe railings on the center span replaced the concrete balustrades lost as a result of a vehicular accident. In 1931 contractor Campbell and Son of Bridgeton constructed the bridge, which replaced an earlier movable span. The bridge is a representative example of the deck girder type. It is not historically or technologically distinguished.

INFOR MATION

PHOTO: 47:18-19 (09/91) REVISED BY (DATE): QUAD: Penns Grove

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1704136 **CO** SALEM **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED LOCUSON ROAD OVER BRANCH OF SALEM CREEK **FACILITY** LOCUSON ROAD (RENTER ROAD)

TOWNSHIP PILESGROVE TOWNSHIP

TYPE T BEAM **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 33 ft **WIDTH** 19.8 ft

CONSTRUCTION DT 1924 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** WILLIAM H. SHOUGH

SETTING / CONTEXT The two-lane bridge crosses a small creek on a dead-end road about 300 yards from a horse farm with numerous outbuildings (c. 1870-1950). The creek flows through pasture land.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span T-beam bridge with reinforced-concrete balustrades and substructure is a representative example of at least 17 similar T-beam bridges built by Salem County from 1917 to 1944. Builder William H. Shough of Alloway, NJ, constructed at least six T-beams in the county. The bridge is not historically or technologically significant.

INFOR MATION

PHOTO: 48:15 (09/91) REVISED BY (DATE): QUAD: Woodstown

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1704138 **CO** SALEM **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED AVIS MILL ROAD OVER SALEM CREEK **FACILITY** AVIS MILL ROAD

TOWNSHIP PILESGROVE TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 36 ft **WIDTH** 29.2 ft

CONSTRUCTION DT 1920 **ALTERATION DT** 1951 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT Avis Mill Road sits atop the earthen dam that creates Avis Mill Pond. The two-lane bridge crosses a spillway at the dam's southern end while another one-lane bridge (1704139) crosses another spillway at the dam's northern end. The lake and dam are part of the YMCA's Camp Carney (c. 1950). A semi-circular concrete spillway/dam extends between the bridge's abutments.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span, encased steel-stringer bridge with concrete substructure has been significantly altered. In 1951, when the dam was built, the county removed the original flood gates built into the bridge's upstream side. In 1964 the bridge was widened with a 16'-wide concrete slab addition on the downstream side. At the same time the original concrete balustrades were replaced with concrete barrier railings. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 48:16-17 (09/91) REVISED BY (DATE): QUAD: Woodstown

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NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1704139 **CO** SALEM **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED AVIS MILL ROAD OVER SALEM CREEK **FACILITY** AVIS MILL ROAD

TOWNSHIP PILESGROVE TOWNSHIP

TYPE T BEAM **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 27 ft **WIDTH** 18.3 ft

CONSTRUCTION DT 1917 **ALTERATION DT** 1951 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT Avis Mill Road runs atop the earthen dam that creates Avis Mill Pond. The single-lane bridge spans a spillway at the northern end of the dam while another two-lane bridge (1704138) spans a spillway at the southern end. The pond and dam are part of the YMCA's Camp Carney (c. 1950). A semi-circular concrete dam with metal sheathing extends from the bridge abutments.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span T-beam bridge with reinforced-concrete substructure and concrete balustrades has been significantly altered. In 1951, when the circular spillway was built, the original flood gates on the upstream side were removed, and an I-beam column and stringer were added for support. Thus while one of the oldest of at least 17 T-beams in the county, the bridge lacks integrity of design. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 48:18-19 (09/91) REVISED BY (DATE): QUAD: Woodstown

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1704150 **CO** SALEM **OWNER** NJDOT **MILEPOINT** 0.4

NAME & FEATURE INTERSECTED NJ 45 (MARKET STREET) OVER FENWICK CREEK **FACILITY** NJ 45 (MARKET STREET)

TOWNSHIP SALEM CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 75 ft **WIDTH** 30.8 ft

CONSTRUCTION DT 1923 **ALTERATION DT** Demolished **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The two-lane bridge spans a wide tidal pond on the outskirts of Salem City. The bridge's south approach is included in the boundaries of the Market Street Historic District (c. 1720-1900). Near the bridge are many significant late-18th and early-19th century homes. To the north is a modern office building owned by the New Jersey Department of Motor Vehicles. The Fenwick Bridge replaced the last covered bridge in Salem County.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Bridge was Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 4/30/91

SUMMARY The two-span, encased, steel-stringer bridge with reinforced-concrete substructure has concrete balustrades on the two spans and parapets on the long approaches. The Fenwick Bridge is next to the Market Street Historic District, but is not part of the district. The span's construction date is not within the district's period of significance. The bridge is a representative example of a common bridge type in New Jersey. It is not historically or technologically significant.

INFOR MATION

PHOTO: 46:33-34 (09/91) REVISED BY (DATE): QUAD: Salem

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1704151 **CO** SALEM **OWNER** NJDOT **MILEPOINT** 4.1

NAME & FEATURE INTERSECTED NJ 45 OVER MANNINGTON CREEK **FACILITY** NJ 45

TOWNSHIP MANNINGTON TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 22 ft **WIDTH** 30.7 ft

CONSTRUCTION DT 1915 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** WILLIAM H. SHOUGH

SETTING / CONTEXT The two-lane bridge spans a creek in a wetlands. The surrounding area is predominately rural with scattered houses, cow pastures, and farmers' fields. The Jedik Allen House approximately 1/4-mile to the west on Mannington Hill has been determined to be ineligible for inclusion in the National Register (SHPO Meeting 5/8/91). The bridge has been found ineligible by the SHPO Office (Finding 4/30/91).

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 4/30/91

SUMMARY The single-span, steel-stringer bridge has reinforced-concrete abutments and wing walls. Beam guide rails have been added. Builder William H. Shough of Alloway constructed at least six bridges in the county between 1915 and 1925. Steel-stringer bridges are a common pre-1946 bridge type in New Jersey. In Salem County alone, over 20 steel-stringer bridges were built between 1911 and 1941. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 47:14-15 (09/91) REVISED BY (DATE): QUAD: Salem

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1704152 **CO** SALEM **OWNER** NJDOT **MILEPOINT** 5.2

NAME & FEATURE INTERSECTED NJ 45 OVER CULLIERS RUN **FACILITY** NJ 45

TOWNSHIP MANNINGTON TOWNSHIP

TYPE STRINGER **DESIGN** JACK ARCH **MATERIAL** Steel

 # SPANS 1 **LENGTH** 23 ft **WIDTH** 30.1 ft

CONSTRUCTION DT 1911 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The two-lane bridge spans a small creek along a wooded stretch of state highway between Woodstown and Salem. The surrounding area is predominately rural with farmers' fields, wooded lots, and scattered residences (c. 1800-1990).

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 03/01/90

SUMMARY The short steel-stringer bridge with reinforced-concrete substructure and encased fascia stringers has concrete jack arches springing from the lower flanges of the stringers. Beam guide rails have replaced the original pipe railing. The bridge is one of three similar bridges in the region built in 1911-12 (0808F01, 0807D03), and although jack arches in concrete are not common, they are not rare. This example is not historically or technologically distinguished.

INFOR MATION

PHOTO: 47:12-13 (09/91) REVISED BY (DATE): QUAD: Salem

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NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1705150 **CO** SALEM **OWNER** NJDOT **MILEPOINT** 9.15

NAME & FEATURE INTERSECTED NJ 45 & US 40 OVER SALEM CREEK **FACILITY** NJ 45 & US 40 (WEST AVENUE)

TOWNSHIP WOODSTOWN BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 56 ft **WIDTH** 40 ft

CONSTRUCTION DT 1940 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The two-lane bridge spans Salem Creek on the eastern outskirts of Woodstown. The bridge is near a small municipal veterans' memorial park (c. 1950), a commercial strip, and an apartment housing complex (c. 1970).

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span, encased steel-stringer bridge with concrete balustrades and substructure is representative of many steel-stringer bridges designed by the State Highway Department between 1920 and 1940. The bridge is not technologically innovative or historically distinguished.

INFOR MATION

PHOTO: 47:10-11 (09/91) REVISED BY (DATE): QUAD: Woodstown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1705151 **CO** SALEM **OWNER** NJDOT **MILEPOINT** 10.1

NAME & FEATURE INTERSECTED NJ 45 OVER SALEM BRANCH OF CONRAIL **FACILITY** NJ 45 (MAIN STREET)

TOWNSHIP WOODSTOWN BOROUGH

TYPE THRU GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 68 ft **WIDTH** 30.9 ft

CONSTRUCTION DT 1923 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT PA-READING SEASHORE RAILROAD **BUILDER**

SETTING / CONTEXT The skewed, two-lane bridge crosses the Salem Branch of Conrail, the former Pennsylvania-Reading Seashore Lines Railroad. The bridge is located near the northern edge of town near a number of cold storage warehouses and a residential neighborhood (c. 1900-1920).

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span, thru-girder bridge with floor beams has reinforced-concrete substructure and cantilevered sidewalks. The sidewalk has original steel railing on the west elevation, but a chain-link fence has replaced the railing on the east elevation. The bridge has been redecked, and the inside face of the girders is protected by modern concrete barriers. The bridge is a representative example of a popular type of overpass. It is not historically or technologically significant.

INFOR MATION

PHOTO: 47:3-4 (09/91) REVISED BY (DATE): QUAD: Woodstown

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1705154 **CO** SALEM **OWNER** NJDOT **MILEPOINT** 12.45

NAME & FEATURE INTERSECTED NJ 45 OVER OLDMANS CREEK **FACILITY** NJ 45

TOWNSHIP PILESGROVE TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 35 ft **WIDTH** 31 ft

CONSTRUCTION DT 1920 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The two-lane bridge spans a small creek along a tree-lined section of state highway. The surrounding area is rural with scattered homes on large wooded lots, fields, and orchards. The bridge is located on the county line between Salem and Gloucester County.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span, encased steel-stringer bridge with concrete balustrades and substructure is a representative example of many steel-stringer bridges designed by the State Highway Department in the 1920s and 1930s. Beam guide rails have been added. Markers indicate the original route designation was "State Highway Route 6." The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 47:1-2 (09/91) REVISED BY (DATE): QUAD: Woodstown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1707150 **CO** SALEM **OWNER** NJDOT **MILEPOINT** 8.28
NAME & FEATURE INTERSECTED NJ 49 OVER SALEM RIVER **FACILITY** NJ 49
TOWNSHIP SALEM CITY
TYPE SINGLE LEAF BASCULE **DESIGN** STRAUSS OVERHEAD **MATERIAL** Steel
 # SPANS 5 **LENGTH** 381 ft **WIDTH** 30 ft

CONSTRUCTION DT 1927 **ALTERATION DT** **SOURCE** COUNTY ENGINEER
DESIGNER/PATENT STRAUSS BRIDGE COMPANY **BUILDER** PHOENIX BRIDGE COMPANY

SETTING / CONTEXT The two-lane bridge spans the Salem River on the outskirts of Salem City. On the south bank is a glass factory (c. 1880-1930), an oil storage facility, and other large industrial structures. On the north bank is a small marina. The bridge may be opened to navigation with 24 hours notice. It is a well-known local landmark. The bridge does not lie within Salem's Market Street Historic District.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No
CONSULT STATUS Individually Eligible.
CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge's main span is an operating, single-leaf, steel thru girder, patented Strauss overhead bascule lift bridge with steel tower and overhead counterweight. The four approach spans are encased steel thru girders with floor beams. The bridge has reinforced-concrete substructure and timber pile fenders. The Strauss Bridge Co. of Chicago was the nation's best known designer of movable spans. The bridge is a well-documented and an equally well-preserved example of its type.

INFORMATION

SOURCES:
Heston, Alfred M., editor. South Jersey: A History 1664-1924. New York: Lewis Historical Publishing Co., 1924.
Hool, George A. and W. S. Kinne, editors. Movable and Long Span Steel Bridges. New York: McGraw Hill, 1923.
New Jersey Department of Transportation, Bridge Plans File #1707150.
Plowden, David. Bridges: The Spans of North America. New York: W. W. Norton, 1974.
Salem County. County Engineer's Office. Bridge File #700.
Salem County. Minutes of the Board of Freeholders, 1924-1927.
Salem Standard and Jerseyman. December 7, 1927; June 9, 1932.
Salem Sunbeam. March 13, 1962; January 14, 1964.
Sparks, James S. Speech Given at Dedication of Penns Neck Bridge. Salem County Engineer Bridge Files, 1927.
Waddell, J. A. L. Bridge Engineering. New York: John Wiley, 1916.

PHYSICAL DESCRIPTION The bridge's main span is a single-leaf trunnion bascule of the overhead counterweight type designed by the Strauss Bascule Bridge Company of Chicago, Illinois. The four approach spans are encased through plate girders. Overall, the bridge is 381' long with 30' roadway.

The bascule span is constructed of two girders that span a distance of 80' from toe bearing to trunnion. The girders are tapered from approximately 12' depth at the trunnion to 6' depth at the toe. Floor beams of 15" depth frame into the girders. In addition, there are steel cross braces which act as stiffening members for the bascule span. The floor beams support steel stringers and a steel grid deck. Two 5'-wide wood-plank sidewalks with steel railing are supported by steel brackets and steel stringers on either side of the movable span. The overall width of the bascule span including sidewalks is 40'.

The counterweight is a steel frame that holds concrete block 13-1/2" x 13-1/2" x 9-1/2". According to plans, the average unit of weight of the counterweight is 148 lbs. per square foot. The counterweight is attached at the bottom by means of a laced steel channel strut and pin connection to the short arm of the bascule girders, and at the top by means of a counterweight link pin and laced steel channel arm to the top of the tower. The tower consists of two riveted laced steel channel legs and lateral bracing.

The bascule leaf is opened by a pinion gear engaging a rack of 10'8" radius on the short arm of the bascule girders. The pinion gears are operated by a electric motor. The bascule moves through a 79 degree angle from the closed to the fully open position. According to Waddell, in his well-known book entitled Bridge Engineering (1916:704), the unique system of counterweight connections in the patented Strauss system "provides for parallel movement of the counterweight at all times, and thus does not alter the ratio of lever arms nor displace the centre of gravity of the system, which is at the main trunnion of the bascule."

The movable span provides a navigational clearance of 60' with a minimum vertical clearance of 6' at mean high water. The bridge has timber-pile fenders. A two-story wood frame operator's house with asbestos siding and hipped roof stands next to the bascule span on the east side of the tower. The operator's house contains a 35 hp. General Electric Motor, an auxiliary gasoline engine, brake, clutch, and other operating machinery and controls. The operator's house rests on the concrete pier and is reached by means of a steel staircase leading down to the first story from the bridge walkway.

The approach spans consists of four concrete-encased, 74'9"-long through plate girder spans, two spans each to the north and the south of the main span. Each span consists of two girders made up of web plates and angles approximately 8' depth. Connecting the girders, which are on 34' centers, are 15 30-inch steel I beams. At the center of the roadway between the floor beams are reinforced-concrete struts and two 8" steel girders originally designed to support trolley tracks. Upon the floor beams rests a concrete slab deck.

The bridge foundations are reinforced concrete and consist of two abutments, four wing walls, and four piers.

HISTORY AND SIGNIFICANCE The Penns Neck Bascule Bridge (1925-1927) is an operating, well-preserved example of a significant bridge type that is becoming increasingly rare in New Jersey and the United States. The bridge was designed by the Strauss Bascule

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Bridge Company and utilizes details found on most other patented overhead counterweight type bascules. It was erected during the flourishing period of the Strauss Company. The bridge is one of the best preserved of fewer than seven remaining Strauss bascules in the state. Historic documentation at the county engineer's office is outstanding; the bridge was probably the most ambitious bridge project ever undertaken by Salem County. It is a local landmark located on one of the primary highway routes into Salem City.

The bascule is a type of movable bridge, a special structural type combining both civil and mechanical engineering technologies. They are erected where navigation demands vertical clearance and the surrounding landscape does not permit elevated approaches. Thus, they are commonly found in low-lying coastal areas, like South Jersey.

The modern type of bascule bridge developed in the United States during the 1890s in Chicago. The most prevalent types of bascule bridges were the Scherzer and Rall rolling lift bridges, the Chicago City, and the Strauss Trunnion Bascule types. According to Waddell, more Strauss Trunnion types were built than any other. Joseph B. Strauss, the founder of the Strauss Company, was an ambitious engineer who graduated from the University of Cincinnati in 1882. Two years later he started his own engineering firm and became famous as the inventor and designer of the trunnion type bascule, and as the founder of a company to build bascule bridge located in Chicago. Strauss undertook large bridge projects all over the world including Japan, Egypt, China, South America, and Russia, but he is probably best known for his final and largest project, the Golden Gate Bridge in San Francisco completed in 1937 (Plowden 1974:248-250; Waddell 1916:700-716; Hool and Kinne 1923:1-27.)

The current bascule lift is the fifth bridge that has spanned Salem River at or near the present site since ca. 1810. In that year the citizens of Lower Penns Neck Township and Salem requested the Board of Freeholders to build a bridge just below the forks with Fenwick Creek. The bridge has since been known as Penns Neck Bridge. The first bridge was a timber structure with "a lift draw in two sections, being cut diagonally from hinge to end, so that, when opened, two right-angled triangles stood on their bases on each side of the opening" (Sparks 1927:1). In ca. 1819, the first bridge had deteriorated and a second bridge, also with a lift draw, was built. In 1843, a third bridge was constructed after the earlier bridge had again deteriorated. The draw was a pivot, or swing type bridge.

In 1884, a fourth bridge, an iron truss with two stationary spans on the Salem side of the river, a swing draw on the Penns Neck side with two channel ways of 48' each, and a short-span pony truss connecting the swing span with the Penns Neck shore, was constructed by the county. The bridge had masonry abutments and piers, except for the swing span's central pier, which was timber cribbing. In 1914 an oil barge drifted into the stationary thru truss next to the movable span and knocked it from its foundations. A steel Pratt truss was erected by the Bridgeton Construction Company in its place, and the masonry piers were encased in concrete. In 1916 the short pony truss was replaced with a steel stringer span with concrete deck (Sparks 1927:1-2).

In July 1924 the Board of Freeholders faced the proposition of reconstructing the old bridge or building a new one. Mr. John L. Vogel, consulting engineer from Manasquan, NJ, was hired to prepare a report on the condition of the bridge. He concluded that the old structure was not of sufficient width of roadway and could not be strengthened properly to take care of heavy traffic, and recommended that the most economical decision was to build a new bridge. In October 1924, the Board agreed to build a new bridge and authorized the preparation of plans and specifications for a bridge having 30' roadway, two 5' sidewalks, and a movable span of the trunnion bascule type. For a number of years the Board had been setting aside money in the county's annual budget for repair or replacement of the Penns Neck Bridge. In 1925 there had already been raised approximately $200,000 toward the project (Sparks 1927:1-5; Salem Standard and Jerseyman 1927).

James B. Sparks, the assistant county engineer, was placed in charge of the design and construction of the bridge. He had studied engineering and land surveying by correspondence and had been hired as the county's first assistant engineer in 1916. He was active in local politics and was President of the Salem Chamber of Commerce in 1927. Sparks favored the Strauss Bascule design, and had been in correspondence with the Strauss Company from at least as early as 1916 when repairs were made to the Penns Neck Bridge. It was decided that the Strauss Company would provide plans and specifications for the new movable span, and bids would be accepted for a general contractor. The county advertised the project on October 27, 1924, and opened bids on November 8. The contract was awarded to Samuel B. Campbell of Pennsville, NJ for $356,580. Campbell was one of the area's largest contractors and had built numerous bridges in the county including the Quinton Bridge, Fenwick Bridge, Upper Canal Bridge, and Courses Landing Bridge (Sparks 1927:4; Salem Standard and Jerseyman 1932; Salem Sunbeam 1964.)

Work began immediately with preparation of plans, surveying of the site, and securing of the necessary permits. Sparks stated that "the overhead type of counterweight was adopted through necessity owing to the low elevation of the surrounding territory adjacent to the bridge, making it impossible to have an underneath counterweight without the construction of an expensive watertight counterweight pit. This overhead type is not as desirable from an esthetic point of view but just as satisfactory from a mechanical point. A double leaf bascule would have presented a more uniform appearance but would not have been economical" (Sparks 1927:12). The War Department, Corps of Engineers, gave its approval of the project, and the State Highway Commission approved the plans and awarded $25,000 toward construction. Subcontractors included the Phoenix Bridge Company for the structural steel, concrete counterweight, and machinery; Donald J. McCloskey for electrical engineering; Charles S. Wright for the electrical work; and, Robert W. Hunt Company for inspection of materials at the manufacturing plants. Construction began in 1925 and was completed in December 1927. Photographs and engineering notes on the bridge erection are at the Salem County Engineer's office (Bridge Files 1925-1927).

On December 3, 1927, the Penns Neck Bridge was opened to traffic and dedicated. The day's program began with a banquet at the Johnson Hotel with numerous speeches and toasts. Morris Goodkind, the Bridge Engineer of the State Highway Department, was in attendance and stated that "the county had a bridge that all should be very proud.... few counties in the state had expended a like amount on a single bridge construction, and the county is to be congratulated that it is being financed without bond issue and will be paid for before the tax payers realize it.... Mr. Sparks was wise in the selection of this type of bridge and... the county had received a splendid piece of workmanship" (Salem Standard and Jerseyman 1927.) The banquet was followed by a parade with bands and floats, more speech making, and a ceremonial opening of the bascule. Afterward, a committee of ladies served coffee and sandwiches to the paraders from the kitchen of the H. J. Heinz plant.

The bridge has survived with few alterations. In 1932 the trolley tracks and wiring were taken up after the Pennsgrove Traction Company stopped service to Salem. At the same time, the wood block flooring of the bascule span was replaced with a steel grid deck. In 1935, and again in 1948 and 1966, repairs were made to the fender system. In 1950 the bridge was transferred to the care of the New Jersey

Department of Transportation. In 1982 the concrete piers and counterweight were rehabilitated by the state highway department (Bridge Files and Plans).

Since the construction of the Penns Neck Bridge the maritime economy of Salem has declined. At one time the city boasted a fishing fleet and a cannery, and in 1917, 83,000 tons of water-borne commerce passed along the Salem River. In 1935 the Penns Neck Bridge opened to navigation 176 times; today, the bridge opens so infrequently that no full-time tender is required, and 24 hours notice must be given (Bridge Files 1936; Heston 1924:502).

PHOTO: 46:35-41 (09/91) REVISED BY (DATE): QUAD: Salem

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1708151 **CO** SALEM **OWNER** NJDOT **MILEPOINT** 12.4
NAME & FEATURE INTERSECTED NJ 49 OVER ALLOWAYS CREEK **FACILITY** NJ 49 (SALEM QUINTON ROAD)
TOWNSHIP QUINTON TOWNSHIP
TYPE SWING SPAN **DESIGN** CENTER BEARING **MATERIAL** Steel
 # SPANS 2 **LENGTH** 141 ft **WIDTH** 30 ft
CONSTRUCTION DT 1925 **ALTERATION DT** 1968ca **SOURCE** PLANS
DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER** SAMUEL CAMPBELL

SETTING / CONTEXT The two-lane bridge spans Alloways Creek at the center of the village of Quinton (c.1800-1990). Opposite the bridge is a lumber store and a parking lot. Just upstream can be seen a dock with a number of small pleasure craft. The surrounding residential and small commercial neighborhood lacks historic integrity and has many modern intrusions.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No
CONSULT STATUS Not Individually Eligible.
CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge's main span is a center-bearing, thru-girder, bobtail swing span with an encased steel stringer with concrete parapets approach span to the south. The bridge has not opened to navigation since the late-1960s, and electrical service and operator's shanty have been removed. The swing span is one of two similar bridges in the region (0601152), and better preserved and more historically and technologically distinguished examples of the swing bridge type exist in the state.

INFORMATION

SOURCES:
Hool, George A. and W. S. Kinne. Movable and Long-Span Steel Bridges. New York: McGraw Hill, 1923.
New Jersey State Highway Department Bridge Division. Bridge Plans File No. 1708151. 8 Sheets. 1925.
Salem Standard and Jerseyman. 18 February, 4 March, and 19 August 1925.
Waddell, J. A. L. Bridge Engineering. New York: John Wiley & Sons, 1916.

PHYSICAL DESCRIPTION The main span of the two-span bridge is a 100'-long, bobtail swing bridge providing a 30' channel for river navigation. The eastern approach span is a 41'-long encased steel-stringer bridge with paneled concrete parapets. The swing span's superstructure consists of two riveted plate girders, I-beam floor beams and stringers with riveted connections, lower lateral bracing, and steel-grid deck. A concrete counterweight with supporting steel-beam framework is underneath the deck on the shorter, eastern end of the span. A 6'-wide cantilevered sidewalk extends from the south side with original pipe railing and decorative lattice. The bridge has a reinforced-concrete substructure and timber pile fenders.

The swing span is a center-bearing type. The bridge has not opened to river navigation since the mid-1960s. The operating machinery remains extant, but the operator's shanty and all electrical service and controls have been removed. An electric motor is mounted to the floor beam system by brackets at the bridge's center. The motor turned a single pinion gear against a rack of approximately 10' radius. The center bearing is mounted to the top of the center pier. The bridge was designed to open in either direction. Four balance wheels are attached to the floor-beam system and roll on a circular track above the rack. These wheels are so adjusted that they carry no load, except when the bridge is out of balance. The whole bridge turns upon a center bearing. A box-shaped system of four cross girders supports the bridge's weight upon the bearing when the bridge is in the open position. A set of six wedges, two at each end of the bridge and two at the center pier, lift the bridge in the closed position and provide it with a seating on the piers and abutments. The wedges were operated by the electric motor and a system of direct-drive line shafting and gears.

The superstructure itself has not been significantly altered. A beam guide rail has been bolted to the interior of the thru girders, and a water pipe has been attached to the north elevation. In 1960 the state highway department added the steel-grid deck, which originally had been wood block pavement.

HISTORICAL AND TECHNOLOGICAL SIGNIFICANCE The center-bearing swing span over Alloways Creek at Quinton is a representative and late example of early 20th-century swing span technology. It is one of two similar bridges in the South Jersey area. The other bridge, NJ 47 over Menantico Creek in Cumberland County (0601152), is less well preserved, the stringer encasing has been removed from the approach span. The Alloways Creek bridge is not technologically innovative or noteworthy, as by 1925 both the type and the design were common technology. There are over 20 swing span bridges in New Jersey, with over half still operating.

The swing span is a type of movable bridge, a special structural type combining both civil and mechanical engineering technologies. Swing spans were one of the most prevalent types of movable bridges during the 19th and early-20th centuries. The NJ 49 over Alloways Creek bridge is a late example of movable-bridge technology employing girder superstructure, wedge end lifts, and electrification, all of which were improvements in swing span design during the period between 1890 and 1920.

A bridge has spanned Alloways Creek at Quinton since at least the late-eighteenth century. According to local lore, during the American Revolution colonists chopped away a bascule bridge at Quinton in an attempt to stay the advance of British soldiers through southern New Jersey. In 1892, the Berlin Iron Bridge Company of East Berlin, Connecticut, erected a pony-truss type swing span at the site. Plans for the 1892 bridge are in the bridge files at the New Jersey Department of Transportation. The current thru-girder type swing span replaced the 1892 bridge, which had become unsafe.

The State Highway Department designed the swing span over Alloways Creek as part of the state highway expansion and improvement campaign of the 1920s. Samuel Campbell, a contractor from Bridgeton, constructed the new bridge. Campbell was the general contractor for many bridges in Salem County including the Fenwick Bridge (1704150) and the substructure and approaches of the Penns Neck bascule (1707150) in Salem. In March 1925 the War Department, reviewing as a matter of course plans for all bridges over navigable

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waters, approved the swing span's design. In August 1925 the state opened the new bridge and the local paper proclaimed "it to be one of the most attractive of its kind in South Jersey." The swing span apparently never saw much navigational use, opening fewer than 30 times per year in the 1930s. The bridge was closed to river traffic in the mid-1960s, a testimony to the declining maritime economy of South Jersey.

PHOTO: 48:32-34 (09/91) REVISED BY (DATE): QUAD: Salem

NEW JERSEY DEPARTMENT OF TRANSPORTATION

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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1710109 **CO** SALEM **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WATSON'S MILL ROAD (CR 672) OVER COOL RUN **FACILITY** WATSON'S MILL ROAD (CR 672)

TOWNSHIP ALLOWAY TOWNSHIP

TYPE T BEAM **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 34 ft **WIDTH** 30.5 ft

CONSTRUCTION DT 1929 **ALTERATION DT** 1950ca **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** GEORGE A. CHARLESWORTH

SETTING / CONTEXT The two-lane bridge spans the spillway from a small lake in a rural section of Alloway Township. Camp Roosevelt, a Boy Scout camp (c. 1950), borders the lake. The semi-circular-shaped concrete spillway/dam with steel sheeting extends from the abutments. The association of dams and bridges is frequent in South Jersey.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span, T-beam bridge with reinforced-concrete substructure has concrete parapets with rectangular openings corresponding to the former position of flood gates on the upstream side. When the circular-shaped dam/spillway was built in about 1950, the gates were removed, and a supporting steel I-beam column and stringer were added. The bridge is one of 17 similar T-beams built by Salem County between 1917 and 1944. It is not historically or technologically distinguished.

INFOR MATION

PHOTO: 48:6-8 (09/91) REVISED BY (DATE): QUAD: Alloway

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1710152 **CO** SALEM **OWNER** NJDOT **MILEPOINT** 8.8
NAME & FEATURE INTERSECTED US 130 OVER OLDMANS CREEK **FACILITY** US 130
TOWNSHIP OLDMANS TOWNSHIP
TYPE VERTICAL LIFT **DESIGN** **MATERIAL** Steel
 # SPANS 4 **LENGTH** 228 ft **WIDTH** 40 ft
CONSTRUCTION DT 1936 **ALTERATION DT** 1968ca **SOURCE** NJDOT
DESIGNER/PATENT ASH, HOWARD, NEEDLES & TAMMEN **BUILDER** VARE CONSTRUCTION COMPANY

SETTING / CONTEXT The two-lane bridge spans Oldmans Creek about 7/10 mile east of the Delaware River. On the southeast creek bank is the original poured-concrete operator's house. The bridge no longer opens to river navigation. Nearby are numerous earthen dikes to protect farmer's fields from flooding. About 1 mile to the west on the horizon is a chemical factory.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes
CONSULT STATUS Individually Eligible.
CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge's main span is a vertical lift with a thru-girder deck, steel towers with portal bracing and lateral stiffening trusses, wire rope lift cables, concrete counterweights with plate girder frames, and central overhead machinery house. The three approach spans are encased steel stringers with concrete balustrades. The bridge is one of three similar Waddell-type, vertical-lift bridges on old NJ 44 in Gloucester and Salem counties. All three are eligible.

INFOR MATION

SOURCES:
New Jersey State Highway Commission, Division of Bridges, Oldmans Creek Bridge Plans, 1936.
Pulver, H. E. "Vertical Lift Bridges," in George A. Hool and W. S. Kinne, eds., Movable and Long-Span Bridges. New York: McGraw-Hill, 1923.
Waddell, J. A. Bridge Engineering. New York: John Wiley & Sons, 1916.

PHYSICAL DESCRIPTION: The two-lane bridge is a single-span movable Waddell-type vertical lift with three encased steel stringer approach spans. Its overall length is 228' with a 40' roadway. The main vertical lift span consists of a single, 92'-long toe-to-toe, 7'-deep thru girder with floor beams. The span is constructed to permit it being lifted vertically to a height of 64' clear above mean low water. At each end of the main span are steel towers approximately 96'-high. Each tower consists of two legs with horizontal and diagonal sway bracing. Between the tops of the opposite towers pass two trusses, and suspended between the trusses is the central overhead machinery house. The towers and bracing are all riveted angles, channels, and beams steel construction. Cantilevered off both sides of the main span are concrete deck sidewalks with sheet metal balustrades. The main span is no longer operable.

Power for lifting the bridge is supplied from the central overhead machinery house that contained an electric motor and a back-up gas engine. At the top of each of the four tower legs are sheaves over which pass steel-wire ropes. The ropes are attached at one end to counterweights and at the other to couplings attached to the roadway. Power was transmitted from the motor to the sheave coupling by means of direct drive line shafting and gears. The span moved up and down along a C-shaped guide on the interior of the tower legs. The machinery was equipped with electric motor brakes and clutch. The two counterweights consist of concrete blocks held within riveted steel plate frames on the exterior side of the tower legs.

The approach spans are concrete encased steel stringers with concrete balustrades and sidewalks. There are three approach spans, two to the north and one to the south of the main span, each approximately 45'-long. The bridge has a concrete substructure with cutwater piers. The fenders are timber piling. At each end of the main span are safety gates original to the bridge construction. East of the south approach is a square-plan, single-story, 2-bay, poured concrete operator's house with hipped roof.

HISTORICAL AND TECHNOLOGICAL SIGNIFICANCE: The vertical lift bridge across Oldmans Creek is a well-preserved, albeit no longer operable, example of a historically and technologically significant bridge type. The vertical lift type represented important advances in structural steel construction, and was an alternative to bascule and swing span type movable bridges. The Oldmans Creek Bridge is one of three vertical lifts along old New Jersey Highway Route 44 in Salem and Gloucester Counties. All three bridges, built between 1935 and 1940, have been recommended as eligible because they represent an increasingly rare early 20th-century bridge type.

Vertical lift bridges are a special bridge type combining both mechanical and civil engineering technologies. The first vertical lift bridge of importance in the United States was designed by well-known bridge engineer, J. A. L. Waddell. In 1894 he oversaw the construction of the South Halsted Street Bridge over the Chicago River in Chicago, Illinois. The bridge, which had overhead trusses between the towers and sheaves at the top of each tower leg, became known as the Waddell-type vertical lift. Beginning in 1908 vertical lift bridges were built in increasing numbers, often replacing swing-span type movable bridges. According to bridge engineer H. E. Pulver (1923) the advantages of the vertical lift included simplicity of design, rigidity, reliability, ease of operation, short time of operation (usually 40-50 seconds), power economy, cost of operation, and less chance of collision with boats. The bridge type was particularly suitable to long span crossings where high navigational clearance was required.

The Oldmans Creek Bridge was built in 1936 as part of the reconstruction of NJ Highway Route 44. The firm of Ash, Howard, Needles, and Tammen of New York and Kansas City acted as consulting engineers on the New Deal public works project. The bridge was sealed to navigation in the late 1960s when South Jersey's declining maritime economy no longer made a movable span on Oldmans Creek necessary. No record of repairs or alterations to the original bridge structure could be located. Plans indicate that the bridge was built with light standards and lanterns.

The Oldmans Creek Bridge is the second youngest of the three bridges on old NJ Highway Route 44. The oldest vertical lift bridge, NJ 44

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over Mantua Creek in Paulsboro (0806150), is nearly identical to the Oldmans Creek Bridge. It is still operable and has been outfitted with new operating machinery and operator's house. The youngest bridge, US 130 over Raccoon Creek (0807151) is also operable. It is of different construction and has been retrofitted with machinery and a new operator's house. As a group the bridges are neither the oldest or largest of their type in the United States, however, they are significant engineering achievements representing the application of vertical lift bridge technology to medium-span crossings.

PHOTO: 402:10-14 (09/91) REVISED BY (DATE): QUAD: Marcus Hook

NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1711111 **CO** SALEM **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED FRIENDSHIP CHURCH ROAD OVER MUDDY RUN **FACILITY** FRIENDSHIP CHURCH ROAD

TOWNSHIP UPPER PITTSGROVE TOWNSHIP

TYPE T BEAM **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 30 ft **WIDTH** 18.6 ft

CONSTRUCTION DT 1925 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** CLARENCE B. PLATT

SETTING / CONTEXT The narrow two-lane bridge spans a shallow creek along a tree-lined section of county highway. The surrounding area is rural with fields, wooded lots, and scattered residences (c. 1850-1980). The concrete abutment of an earlier bridge is just upstream. Fifty yards further upstream on the Pine Tavern-Elmer Road is a steel stringer bridge (1933) across Muddy Run.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span, T-beam bridge with reinforced-concrete substructure is a representative example of at least 17 existing T-beam bridges built by Salem County between 1917 and 1944. Beam guide rails have replaced the original pipe railings. The bridge is not historically or technologically significant.

INFOR MATION

PHOTO: 48:20-21, 49:15a (09/91) REVISED BY (DATE): QUAD: Elmer

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NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1712120 **CO** SALEM **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WILLOW GROVE-PORCHTOWN ROAD OVER MAURICE RIVER **FACILITY** WILLOW GROVE PORCHTOWN ROAD

TOWNSHIP PITTSGROVE TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 31 ft **WIDTH** 29.7 ft

CONSTRUCTION DT 1914 **ALTERATION DT** 1931 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** EDWARD STEELMAN

SETTING / CONTEXT The two-lane bridge spans the spillway from Willow Grove Lake leading into the Maurice River. Nearby are summer lakefront homes (c.1920-1950) and a canoe rental.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY In 1931, the original 1914 bridge, a single-lane, steel stringer with concrete parapets and substructure, was widened by the addition of four concrete-encased steel stringers with matching concrete parapets on the downstream side. The upstream fascia stringer supports concrete columns and wooden flood gates. Steel stringers are a common type of pre-1946 bridge in New Jersey. The two-stage bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 49:20a-22a (09/91) REVISED BY (DATE): QUAD: Newfield

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NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1716150 **CO** SALEM **OWNER** NJDOT **MILEPOINT** 5.57

NAME & FEATURE INTERSECTED NJ 56 OVER RAINBOW LAKE **FACILITY** NJ 56

TOWNSHIP PITTSGROVE TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 33 ft **WIDTH** 29 ft

CONSTRUCTION DT 1915 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The two-lane bridge spans the spillway from Rainbow Lake. The lake has residential developments (c. 1920-70) on its north and south shores. Extending between the upstream bridge abutments are a series of wood flood gates supported by concrete columns.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span, encased steel stringer bridge with reinforced-concrete substructure has been altered by the removal of the original railing and the addition of modern concrete barriers. The bridge was built by Salem County and transferred to the state highway system in the 1980s. Repair records for the bridge could not be located. Steel stringers are a common pre-1946 bridge type in New Jersey, and the bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 49:27a-29a (09/91) REVISED BY (DATE): QUAD: Millville

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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1716151 **CO** SALEM **OWNER** NJDOT **MILEPOINT** 7.5

NAME & FEATURE INTERSECTED NJ 56 OVER MAURICE RIVER **FACILITY** NJ 56

TOWNSHIP PITTSGROVE TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 3 **LENGTH** 78 ft **WIDTH** 30 ft

CONSTRUCTION DT 1932 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The two-lane bridge spans the Maurice River within the Department of Environmental Protection's Union Lake Wildlife Management Area near the intersection of NJ 56 and the NJ 55 freeway outside of Vineland. The Maurice River forms the border between Salem and Cumberland Counties. The area to the east is developed with a motel and residential neighborhood. The area to the west is less developed with a section of dense woods.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The three-span, steel-stringer bridge with concrete balustrades, encased fascia stringers, and reinforced-concrete substructure is a representative example of a common pre-1946 bridge type in New Jersey. Beam guide rails have been added. The bridge was built as a joint-county project by Salem and Cumberland Counties. It was transferred to the State Highway System in the 1980s. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 49:23a-24a (09/91) REVISED BY (DATE): QUAD: Millville

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1801150 **CO** SOMERSET **OWNER** NJDOT **MILEPOINT** 30.78

NAME & FEATURE INTERSECTED US 22 EB OVER STATION ROAD (CR 637) **FACILITY** US 22 EASTBOUND

TOWNSHIP BRANCHBURG TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 59 ft **WIDTH** 35 ft

CONSTRUCTION DT 1942 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HIGHWAY DEPT. **BUILDER**

SETTING / CONTEXT The bridge carries the eastbound lanes of US 22 over Station Road north of North Branch Station village. The bridge is paired with a similar bridge (1801151) which carries the westbound lanes of US 22 over Station Road to the north. The two bridges share the same concrete abutments and are separated by a 48' median. The US 22 and Station Road intersection is a busy modern highway interchange in an area of moderate suburban residential and commercial development.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed, single-span bridge is an encased steel stringer with concrete balustrades and substructure. The balustrade end posts and abutments have Moderne vertical scoring. Beam guide rails have been added. The bridge was constructed in 1942 as part of the NJ Highway Route 28 improvement. In 1953 the highway was redesignated US 22. The bridge is a representative example of a common NJ Highway Department bridge type. It is not historically or technologically distinguished.

INFOR MATION

PHOTO: 406:2a,4a (01/08/92) REVISED BY (DATE): QUAD: Raritan

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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1801151 **CO** SOMERSET **OWNER** NJDOT **MILEPOINT** 30.67

NAME & FEATURE INTERSECTED US 22 WB OVER STATION ROAD (CR 637) **FACILITY** US 22 WESTBOUND

TOWNSHIP BRANCHBURG TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 59 ft **WIDTH** 35 ft

CONSTRUCTION DT 1942 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HIGHWAY DEPT **BUILDER**

SETTING / CONTEXT The bridge carries the westbound lanes of US 22 over Station Road north of North Branch Station village. The bridge is paired with a similar bridge (0801150) which carries the eastbound lanes of US 22 over Station Road to the south. The two bridges share the same concrete abutments and are separated by a 48' median. The US 22 and Station Road intersection is a busy modern highway interchange in an area of moderate suburban residential and commercial development.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed, single-span bridge is an encased steel stringer with concrete balustrades and substructure. The balustrade end posts and abutments have Moderne vertical scoring. Beam guide rails have been added. The bridge was constructed in 1942 as part of the NJ Highway Route 28 improvement. In 1953 the highway was redesignated US 22. The bridge is a representative example of a common NJ Highway Department bridge type. It is not historically or technologically distinguished.

INFOR MATION

PHOTO: 406:3a,5a (01/08/92) REVISED BY (DATE): QUAD: Raritan

NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1801153 **CO** SOMERSET **OWNER** NJDOT **MILEPOINT** 30.78

NAME & FEATURE INTERSECTED US 22 EB OVER NORTH BRANCH RARITAN RIVER **FACILITY** US 22 EASTBOUND

TOWNSHIP BRIDGEWATER TOWNSHIP

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 3 **LENGTH** 206 ft **WIDTH** 35 ft

CONSTRUCTION DT 1942 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER** ELL DORER CONTRACTING CO.

SETTING / CONTEXT The bridge carries two lanes of eastbound US 22 over the North Branch of the Raritan River south of the early-19th century village of North Branch. It is paired with a similar 3-span arch bridge (1801154) that carries opposing traffic. The 2 are considered one resource. US 22 is a busy highway in a moderately developed suburban residential and commercial area with some older villages and farms. Next to the bridge is a municipal ball field and park and a 19th-century farmhouse.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge is a three-span reinforced concrete arch with concrete balustrades and pylons. The bridge is distinguished by its concrete pylons with numerous decorative tile mosaics. The mosaics depict sea animals, landscapes, and abstract designs. Except for the removal of lanterns, the bridge and its adjacent twin span are well preserved. Taken together the spans are two of the more elaborately ornamented and well-proportioned 1940s highway bridges in New Jersey.

INFOR MATION

SOURCES:
New Jersey Department of Transportation. Bridge Plans 1801153, 1930.
New Jersey Department of Transportation. The Development of Transportation in New Jersey, 1972.
New Jersey Department of Transportation. Straight Line Diagrams, 1988.
Fox, Robert. Interview with Mary McCahon at Trenton, NJ, 4/7/92.

PHYSICAL DESCRIPTION US 22, a median-divided 4-lane arterial route, is carried over the North Branch of the Raritan River by two skewed three-span reinforced concrete arch bridges, one carrying the eastbound lanes (1801153) and the other the westbound lanes (1801154). The elliptical arch bridges parallel each other and are approximately 48' apart. They share common continuous concrete abutments. Structurally the bridges are mirror-image twins. Both have concrete balustrades with plain hexagonal balusters and vertically-scored posts that are expressed as shallow pilasters at the abutments and piers, molded spandrel walls, and pylons above the exterior balustrade end posts. The most striking feature of the bridge is the tile and mosaic work on the balustrades and pylons that mark the approaches to the spans. The Moravian Tile Works-like mosaics depict sea creatures, landscapes, sail boats, and abstract designs. Except for the removal of original luminaries from the pylons, both bridges are well preserved. Beam guide rails have been added.

HISTORICAL AND TECHNOLOGICAL SIGNIFICANCE The mirror-image pair of reinforced concrete arch bridges built in 1942 is historically distinguished as a major State Highway Department-designed bridge at a major crossing that reflects the departmental emphasis of integrated aesthetics into sound engineering solutions (criterion C). The faience tile work and mosaics in tandem with the elegant proportions of the arches to make the bridge stand apart from its contemporaries. The bridges were constructed as part of the NJ Highway Route 28 improvements. The 4-lane highway bypassed old NJ 28 (the Easton Turnpike) to the north, and was graded and constructed with the help of Works Progress Administration workers during the Depression. The New Jersey State Highway Department prepared plans for the 4-lane highway as early as 1930, but the project was completed in stages, the bridges over the North Branch of the Raritan River being some of the last work finished.

No records have been located to determine the manufacturer of the tiles and mosaics. The plans called for the tiles to be of "frost proof faience tile on plastic clay base of selected grade and equivalent to that manufactured by the Mosaic Tile Co., Zanesville, Ohio, and New York, N.Y., or the Mueller Mosaic Co., Trenton, N.J." It is not known whether either of these companies received the contract to provide the tile. The tiles and the concrete molding of the bridge show superior workmanship.

The bridges were designed by the State Highway Department bridge division headed by Morris Goodkind (1888-1968), chief bridge engineer for the state from 1925 until 1955, when he went into private practice. He oversaw the department during its period of greatest expansion. Goodkind was noted for advocating the use of concrete, both as a primary material and as encasement for protecting steel primary members, and he won several important awards over his lifetime for his bridges, including the College Bridge over the Raritan River at New Brunswick. The bridge, which carries US 1, was renamed in his honor in 1969. Aesthetics was a very important aspect of bridge design to Goodkind, and he worked with Arthur Lichtenberg, who studied architectural engineering at Pratt Institute and was the first head of the architectural section of the department. Mr. Lichtenberg retired about 1970. The collaboration resulted in the high quality designs that distinguished the bridges built on state routes between the two world wars. According to Robert Fox, a longtime coworker of Mr. Lichtenberg, it was Mr. Lichtenberg who designed the faience tile decoration. Such detailing was not used after the second world war because of its expense. Mr. Fox also stated that major bridge designs were site specific to blend with their setting. The US 22 bridges over the North branch Raritan River reflects the union of aesthetics and sound engineering that is the hallmark of the department.

Boundary Description and Justification: The pair of bridges is considered as one resource. The area between the two spans is considered as part of the resource. The boundary extends to the upstream most and downstream most fascias of the bridge. It includes both spans and the river and riverbank between them.

PHOTO: 110:2a-5a (01/08/92) REVISED BY (DATE): QUAD: Raritan

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1801154 **CO** SOMERSET **OWNER** NJDOT **MILEPOINT** 31.08

NAME & FEATURE INTERSECTED US 22 WB OVER NORTH BRANCH RARITAN RIVER **FACILITY** US 22 WESTBOUND

TOWNSHIP BRIDGEWATER TOWNSHIP

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 3 **LENGTH** 206 ft **WIDTH** 35 ft

CONSTRUCTION DT 1942 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER** ELL DORER CONSTRUCTION CO

SETTING / CONTEXT The bridge carries two lanes of westbound US 22 over the North Branch of the Raritan River south of the early-19th century village of North Branch. The bridge is paired with a similar 3-span arch bridge (1801153) carrying the opposing lanes. The 2 are evaluated as one resource. It is in a moderately developed suburban residential and commercial area with some older villages and farms. Next to the bridge is a municipal ball field and park, and a 19th-century farm with outbuildings.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge is a 3-span reinforced concrete arch with concrete balustrades and paneled posts. The bridge is distinguished by its high end pylons with faience tile mosaics depicting sea animals, landscapes, and abstract designs. Except for the removal of luminaries, the bridge and its adjacent twin span are well preserved. Together they reflect the emphasis on aesthetics that was the hallmark of the State Highway Dept. at that time. The handsome spans are historically distinguished.

INFOR MATION

SOURCES:

New Jersey Department of Transportation. Bridge Plans 1801153, 1930.
New Jersey Department of Transportation. The Development of Transportation in New Jersey, 1972.
New Jersey Department of Transportation. Straight Line Diagrams, 1988.
Fox, Robert. Interview with Mary McCahon at Trenton, NJ, 4/7/92.

PHYSICAL DESCRIPTION US 22, a median-divided 4-lane arterial route, is carried over the North Branch of the Raritan River by two skewed three-span reinforced concrete arch bridges, one carrying the eastbound lanes (1801153) and the other the westbound lanes (1801154). The elliptical arch bridges parallel each other and are approximately 48' apart. They share common continuous concrete abutments. Structurally the bridges are mirror-image twins. Both have concrete balustrades with plain hexagonal balusters and vertically-scored posts that are expressed as shallow pilasters at the abutments and piers, molded spandrel walls, and pylons above the exterior balustrade end posts. The most striking feature of the bridge is the tile and mosaic work on the balustrades and pylons that mark the approaches to the spans. The Moravian Tile Works-like mosaics depict sea creatures, landscapes, sail boats, and abstract designs. Except for the removal of original luminaries from the pylons, both bridges are well preserved. Beam guide rails have been added.

HISTORICAL AND TECHNOLOGICAL SIGNIFICANCE The mirror-image pair of reinforced concrete arch bridges built in 1942 is historically distinguished as a major State Highway Department-designed bridge at a major crossing that reflects the departmental emphasis of integrated aesthetics into sound engineering solutions (criterion C). The faience tile work and mosaics in tandem with the elegant proportions of the arches to make the bridge stand apart from its contemporaries. The bridges were constructed as part of the NJ Highway Route 28 improvements. The 4-lane highway bypassed old NJ 28 (the Easton Turnpike) to the north, and was graded and constructed with the help of Works Progress Administration workers during the Depression. The New Jersey State Highway Department prepared plans for the 4-lane highway as early as 1930, but the project was completed in stages, the bridges over the North Branch of the Raritan River being some of the last work finished.

No records have been located to determine the manufacturer of the tiles and mosaics. The plans called for the tiles to be of "frost proof faience tile on plastic clay base of selected grade and equivalent to that manufactured by the Mosaic Tile Co., Zanesville, Ohio, and New York, N.Y., or the Mueller Mosaic Co., Trenton, N.J." It is not known whether either of these companies received the contract to provide the tile. The tiles and the concrete molding of the bridge show superior workmanship.

The bridges were designed by the State Highway Department bridge division headed by Morris Goodkind (1888-1968), chief bridge engineer for the state from 1925 until 1955, when he went into private practice. He oversaw the department during its period of greatest expansion. Goodkind was noted for advocating the use of concrete, both as a primary material and as encasement for protecting steel primary members, and he won several important awards over his lifetime for his bridges, including the College Bridge over the Raritan River at New Brunswick. The bridge, which carries US 1, was renamed in his honor in 1969. Aesthetics was a very important aspect of bridge design to Goodkind, and he worked with Arthur Lichtenberg, who studied architectural engineering at Pratt Institute and was the first head of the architectural section of the department. Mr. Lichtenberg retired about 1970. The collaboration resulted in the high quality designs that distinguished the bridges built on state routes between the two world wars. According to Robert Fox, a longtime coworker of Mr. Lichtenberg, it was Mr. Lichtenberg who designed the faience tile decoration. Such detailing was not used after the second world war because of its expense. Mr. Fox also stated that major bridge designs were site specific to blend with their setting. The US 22 bridges over the North branch Raritan River reflects the union of aesthetics and sound engineering that is the hallmark of the department.

Boundary Description and Justification: The pair of bridges is considered as one resource. The area between the two spans is considered as part of the resource. The boundary extends to the upstream most and downstream most fascias of the bridge. It includes both spans and the river and riverbank between them.

PHOTO: 110:6a-8a (01/08/92) REVISED BY (DATE): QUAD: Raritan

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1802152 **CO** SOMERSET **OWNER** NJDOT **MILEPOINT** 35.07

NAME & FEATURE INTERSECTED US 22 EB OVER ROSS BROOK **FACILITY** US 22 EASTBOUND

TOWNSHIP BRIDGEWATER TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 22 ft **WIDTH** 44 ft

CONSTRUCTION DT 1929 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries 3-lanes of eastbound US 22 over Ross Brook. Next to the bridge is a car dealership. US 22 is a busy commercial strip, and nearby is the intersection of US 22 and US 202/206, and the Bridgewater Commons Mall. The bridge is separated from the westbound lanes of US 22 by a grass median.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed, single-span, concrete slab bridge has concrete substructure. Beam guide rails have been added. The bridge was constructed in 1929 as part of the NJ Highway Route 28 improvements. In 1953 the highway was redesignated US 22 and expanded to a divided highway. The bridge is a representative example of a common NJ State Highway Department bridge type. It is not historically or technologically distinguished.

INFOR MATION

PHOTO: 111:2a-3a (01/25/92) REVISED BY (DATE): QUAD: Bound Brook

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1803150 **CO** SOMERSET **OWNER** NJDOT **MILEPOINT** 37.62

NAME & FEATURE INTERSECTED US 22 OVER MIDDLE BROOK **FACILITY** US 22

TOWNSHIP BRIDGEWATER TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 65 ft **WIDTH** 88 ft

CONSTRUCTION DT 1929 **ALTERATION DT** 1953 **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The 4-lane bridge with median and two sidewalks spans Middle Brook north of the town of Bound Brook. The surrounding area is mixed suburban residential and commercial. US 22 is a busy commercial strip. Next to the bridge is a car dealership.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased stringer bridge was widened in 1953 by a stringer addition on the upstream side. The bridge has concrete balustrades and substructure. The original stringer section was constructed in 1929 and finished with a paneled fascia. It was part of the NJ Highway Route 29 improvements. In 1953 the bridge was widened to a divided highway and redesignated US 22. The bridge is a representative example of a common type and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 404:1-4,44 (01/05/92) REVISED BY (DATE): QUAD: Bound Brook

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1803156 **CO** SOMERSET **OWNER** NJDOT **MILEPOINT** 44.62

NAME & FEATURE INTERSECTED US 22 OVER STONY BROOK **FACILITY** US 22

TOWNSHIP NORTH PLAINFIELD BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 45 ft **WIDTH** 75 ft

CONSTRUCTION DT 1929 **ALTERATION DT** 1938 **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries 6-lanes of highway traffic over Stony Brook in the town of North Plainfield. US 22 is a busy commercial strip, and next to the bridge is a car dealership. The surrounding area is densely developed suburban residential and commercial.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed, single-span, encased steel stringer bridge with sidewalks and median barrier has concrete balustrades, concrete substructure, and paneled fascia stringers. The bridge was constructed in 1929 as part of the NJ 29 improvements, and was widened on the upstream side in 1938 with a matching encased steel stringer addition. In 1953 the highway was redesignated US 22. The bridge is a common NJ Highway Dept. bridge type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 112:26-27 (01/25/92) REVISED BY (DATE): QUAD: Chatham

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1803159 **CO** SOMERSET **OWNER** NJDOT **MILEPOINT** 46.82

NAME & FEATURE INTERSECTED US 22 OVER GREEN BROOK **FACILITY** US 22

TOWNSHIP WATCHUNG BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 44 ft **WIDTH** 78 ft

CONSTRUCTION DT 1929 **ALTERATION DT** 1938 **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries 6-lanes of highway traffic across Green Brook, which forms the border between Somerset County and Union County. US 22 is a busy commercial strip, and next to the bridge is a large shopping center. The surrounding area is densely developed suburban residential and commercial.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span, encased steel stringer bridge with 2 sidewalks and median barrier has concrete balustrades, concrete substructure, and paneled fascia stringers. The bridge was constructed in 1929 as part of the NJ Highway Route 29 improvements, and widened on the northern side in 1938 with a matching encased steel stringer addition. In 1953 the highway was redesignated US 22. The bridge is a common NJ Highway Dept. bridge type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 112:28-29 (01/25/92) REVISED BY (DATE): QUAD: Chatham

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1807153 **CO** SOMERSET **OWNER** NJDOT **MILEPOINT** 19.5

NAME & FEATURE INTERSECTED US 202 OVER HOLLAND BROOK **FACILITY** US 202

TOWNSHIP BRANCHBURG TOWNSHIP

TYPE DECK ARCH **DESIGN** BARREL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 47 ft **WIDTH** 97 ft

CONSTRUCTION DT 1933 **ALTERATION DT** 1959 **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries 4-lanes of US 202 over Holland Brook. The surrounding area is moderately developed suburban residential with some remaining undeveloped wooded lots.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span, reinforced concrete arch bridge with concrete balustrades and grass median has been widened with a matching concrete arch addition on the northern side. The original bridge was built in 1933 as part of the NJ Hwy. Rte. 29 improvements. In 1959 the highway was redesignated US 202, and the bridge widened. Beam guide rails have been added. The bridge is a representative example of a fairly common type, is altered, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 406:34a-35a (01/12/92) REVISED BY (DATE): QUAD: Raritan

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1807155 **CO** SOMERSET **OWNER** NJDOT **MILEPOINT** 21.72

NAME & FEATURE INTERSECTED US 202 OVER NORTH BRANCH OF RARITAN RIVER **FACILITY** US 202

TOWNSHIP BRANCHBURG TOWNSHIP

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 3 **LENGTH** 199 ft **WIDTH** 87 ft

CONSTRUCTION DT 1934 **ALTERATION DT** 1959 **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries 4-lanes of US 202 over the North Branch of the Raritan River. The surrounding area is moderately developed with modern office complexes and suburban residences. The river flood plain is undeveloped and wooded.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The well-proportioned 3-span, reinforced-concrete arch bridge has been widened with a matching addition on the north side. The abutments and piers have Moderne detailing and paneling, as well as faience tile accents. The bridge was built as part of NJ 29, and was widened in 1959. Although representative of the arch spans produced by NJDOT in the 1930s and 1940s, this span has less integrity than others of its type in the region (1801154) and is thus not a significant example of the type.

INFOR MATION

PHOTO: 406:40a-42a (01/12/92) REVISED BY (DATE): QUAD: Raritan

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1807156 **CO** SOMERSET **OWNER** STATE AGENCY **MILEPOINT** 37.8

NAME & FEATURE INTERSECTED RARITAN VALLEY LINE (NJT) OVER US 202 **FACILITY** RARITAN VALLEY LINE (NJT)

TOWNSHIP BRIDGEWATER TOWNSHIP

TYPE THRU GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 4 **LENGTH** 128 ft **WIDTH** 29 ft

CONSTRUCTION DT 1934 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge carries one track of the Raritan Valley Line (NJT), formerly the Central New Jersey Railroad main line, over 4 highway lanes and median of US 202. The surrounding area is heavily developed, and next to the bridge are a number of modern office complexes.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS NJT HBS 03/12/91. SHPO Letter 6/30/95.

SUMMARY The skewed, 4-span, multi thru girder with floor beams bridge has 3 built-up girders, concrete abutments, ballasted deck and riveted and laced steel channel bents. The bridge currently carries one railroad track but is wide enough to accommodate a second track. It was built in 1934 as part of the NJ 29 improvements. The bridge is a representative example of a common railroad overpass type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 406:43a-44a (01/12/92) REVISED BY (DATE): QUAD: Raritan

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1808150 **CO** SOMERSET **OWNER** NJDOT **MILEPOINT** 24.86

NAME & FEATURE INTERSECTED US 202 & US 206 OVER PETERS BROOK **FACILITY** US 202 & US 206

TOWNSHIP SOMERVILLE BOROUGH

TYPE DECK ARCH **DESIGN** BARREL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 56 ft **WIDTH** 74 ft

CONSTRUCTION DT 1929 **ALTERATION DT** 1948 **SOURCE** NJDOT

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The 4-lane bridge spans Peters Brook south of the intersection of US 202/206 and US 22. The bridge is north of the Somerville Circle and the surrounding area is heavily developed with shopping centers and the Bridgewaters Common Mall. Next to the bridge is a gas station and the NJ State Police barracks.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed, single-span, reinforced-concrete arch bridge with concrete balustrades and vertically-scored abutments has been widened with a matching concrete arch addition on the western side. The bridge was originally built in 1929 as part of the NJ 29 improvements, and widened in 1948 to accommodate a divided highway. Beam guide rails and median barriers have been added. The bridge is an altered example of a fairly common type and is not technologically nor historically distinguished.

INFOR MATION

PHOTO: 404:27-28 (01/08/92) REVISED BY (DATE): QUAD: Bound Brook

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1808167 **CO** SOMERSET **OWNER** NJDOT **MILEPOINT** 30.99

NAME & FEATURE INTERSECTED US 202 & US 206 OVER NORTH BRANCH RARITAN RIVER **FACILITY** US 202 & US 206

TOWNSHIP BEDMINSTER TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 93 ft **WIDTH** 92.4 ft

CONSTRUCTION DT 1922 **ALTERATION DT** 1965 **SOURCE** NJDOT

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The 6-lane bridge spans the North Branch of the Raritan River near the interchange of I-287 and US 202/206. The surrounding area is suburban with some remaining open fields and older farmhouses. East of the bridge is AT&T's Long Line Headquarters.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The original two-span steel stringer bridge with concrete substructure is located between an addition of prestressed concrete beams on the east side and encased steel stringers on the west side. Modern concrete median barriers and parapets topped with chain link fence have been added. The altered bridge was originally built in 1922 as part of the NJ 16 improvements, and widened in 1965 with the I-287 interchange construction. It is not historically or technologically distinguished.

INFOR MATION

PHOTO: 104:37 (09/01/91) REVISED BY (DATE): QUAD: Gladstone

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1809150 **CO** SOMERSET **OWNER** NJDOT **MILEPOINT** 32.78

NAME & FEATURE INTERSECTED US 202 OVER NORTH BRANCH OF RARITAN RIVER **FACILITY** US 202

TOWNSHIP BEDMINSTER TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 118 ft **WIDTH** 30 ft

CONSTRUCTION DT 1922 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The two-lane highway bridge spans the North Branch of the Raritan River between the villages of Bedminster and Far Hills. The surrounding area is mixed use with residences, businesses, recreational fields, and wooded lots.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 3-span encased steel stringer bridge has concrete balustrades, abutments, and cutwater piers. A modern beam guide rail has been added. The bridge was constructed in 1922 as part of the NJ highway 16 improvements. In 1953 the highway was redesignated US 202. The bridge is a representative example of a common NJ State Highway Department bridge type. It is not historically or technologically distinguished.

INFOR MATION

PHOTO: 103:2-3 (09/01/91) REVISED BY (DATE): QUAD: Gladstone

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1809153 **CO** SOMERSET **OWNER** STYLE **MILEPOINT** 36.4

NAME & FEATURE INTERSECTED US 202 OVER BRANCH OF MINE BROOK **FACILITY** US 202

TOWNSHIP BERNARDSVILLE BOROUGH

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 20 ft **WIDTH** 27.5 ft

CONSTRUCTION DT 1910ca **ALTERATION DT** Unknown **SOURCE** NJDOT RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The two-lane bridge spans a small brook downstream from the Twin Lakes Private Community, a residential development of bungalows dating from the first third of the 20th century. South of the bridge is a steepled Christian Scientist church.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The short originally unadorned concrete deck arch bridge appears to have been built ca. 1910 as part of the county's development of the road from the Morris County line to Bedminster Crossroads. Plans for that road are not dated. It became part of the state system in 1922. Several nearby bridges were widened then, and it is possible that the rubble stone veneer was added at that time. A concrete wingwall on the upstream side is modern. The bridge is not technologically noteworthy.

INFOR MATION

PHOTO: 405:25-28 (11/29/91) REVISED BY (DATE): QUAD: Bernardsville

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1809158 **CO** SOMERSET **OWNER** NJDOT **MILEPOINT** 39.07

NAME & FEATURE INTERSECTED US 202 OVER PASSAIC RIVER **FACILITY** US 202

TOWNSHIP BERNARDS TOWNSHIP

TYPE THRU GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 78 ft **WIDTH** 30 ft

CONSTRUCTION DT 1924 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The two-lane bridge spans the Passaic River, which forms the border between Somerset and Morris Counties. The bridge is south of the Franklin Corners Historic District and the Van Doran Mill (c. 1840), but does not lie within the district boundaries. The neighborhoods to the south and east are mixed-use with restaurants, modern office buildings, and residences.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span, skewed, encased thru girder with floor beams bridge has reinforced concrete substructure. Beam guide rails have been added. The bridge is not within the boundaries of the nearby Franklin Corners Historic District and was not built within the district's period of significance. The bridge was constructed in 1924 as part of the NJ 16 improvements. The bridge is a historically or technologically undistinguished example of a common NJ State Highway Dept. bridge type.

INFOR MATION

PHOTO: 405:29-30 (11/29/91) REVISED BY (DATE): QUAD: Bernardsville

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1810153 **CO** SOMERSET **OWNER** NJDOT **MILEPOINT** 60.28

NAME & FEATURE INTERSECTED US 206 OVER BACK BROOK **FACILITY** US 206

TOWNSHIP MONTGOMERY TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 29 ft **WIDTH** 40 ft

CONSTRUCTION DT 1927 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries two lanes of US 206 over a small tree-lined brook. The surrounding area is sparsely developed with scattered residences.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed, single-span, reinforced-concrete slab bridge has concrete balustrades and abutments with horizontal scoring. Beam guide rails have been added. The bridge was constructed in 1927 as part of the NJ 16 improvements. In 1953 the highway was redesignated US 206. The bridge is a representative example of a common NJ State Highway Dept. bridge type. It is not historically or technologically distinguished.

INFOR MATION

PHOTO: 100:31-32 (09/30/91) REVISED BY (DATE): QUAD: Rocky Hill

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1810155 **CO** SOMERSET **OWNER** NJDOT **MILEPOINT** 61.83

NAME & FEATURE INTERSECTED US 206 OVER CRUSERS BROOK **FACILITY** US 206

TOWNSHIP MONTGOMERY TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 3 **LENGTH** 69 ft **WIDTH** 30 ft

CONSTRUCTION DT 1925 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The two-lane bridge spans Crusers Brook 1/4 mile north of the crossroads village of Harlingen. The bridge is next to the Montgomery Township Municipal Building (c. 1970). The surrounding area is mixed-use suburban commercial and residential.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed, 3-span concrete slab bridge has concrete balustrades, abutments, and cutwater piers. The bridge is in poor condition and spalling. The bridge was built in 1925 as part of the NJ 16 improvements. In 1953 the highway was redesignated US 206. The bridge is a representative example of a common NJ State Highway Dept. bridge type. It is not historically or technologically distinguished.

INFOR MATION

PHOTO: 100:29-30 (09/30/91) REVISED BY (DATE): QUAD: Rocky Hill

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1810156 **CO** SOMERSET **OWNER** NJDOT **MILEPOINT** 62.8

NAME & FEATURE INTERSECTED US 206 OVER CONRAIL (N.Y. BRANCH) **FACILITY** US 206

TOWNSHIP MONTGOMERY TOWNSHIP

TYPE THRU GIRDER **DESIGN** JACK ARCH (CONCRETE) **MATERIAL** Steel

 # SPANS 1 **LENGTH** 85 ft **WIDTH** 29.8 ft

CONSTRUCTION DT 1918 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT UNKNOWN **BUILDER** PHOENIX BRIDGE COMPANY

SETTING / CONTEXT The two-lane overpass spans a single track of Conrail (former Reading RR) at Belle Mead Station. The bridge is located at a sharp curve in US 206. To the northwest of the bridge are concrete steps leading down to track level and an abandoned station (c. 1910). Belle Mead consists of a small number of late-19th and 20th century commercial and residential structures, most of which have modern additions and alterations. The surrounding area is suburban with scattered residences.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span thru girder bridge has encased floor beams, concrete jack arches, and two cantilevered sidewalks with lattice railing. The bridge has concrete abutments and wing walls with brick accenting. It is 1 of 7 thru girder highway bridges crossing Conrail within 4 miles. The station is in deteriorated condition and is not one of the county's 5 National Register listed stations. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 103:1,42-44 (09/30/91) REVISED BY (DATE): QUAD: Rocky Hill

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1810158 **CO** SOMERSET **OWNER** NJDOT **MILEPOINT** 63.37

NAME & FEATURE INTERSECTED US 206 OVER PIKE RUN **FACILITY** US 206

TOWNSHIP HILLSBOROUGH TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 34 ft **WIDTH** 40 ft

CONSTRUCTION DT 1927 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries 2-lanes of US 206 and sidewalks over Pike Run. The area is moderately developed with suburban residential and commercial buildings. Next to the bridge are some undeveloped wooded lots.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span encased steel stringer bridge has concrete balustrades and substructure. Beam guide rails have been added. The bridge was built in 1927 as part of the NJ Hwy. Rte. 16 improvements. In 1953 the highway was redesignated US 206. The bridge is a common NJ State Highway Dept. bridge type. It is not historically or technologically distinguished.

INFOR MATION

PHOTO: 102:26-27 (10/31/91) REVISED BY (DATE): QUAD: Rocky Hill

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1810160 **CO** SOMERSET **OWNER** NJDOT **MILEPOINT** 65.0

NAME & FEATURE INTERSECTED US 206 OVER BRANCH OF ROYCES BROOK **FACILITY** US 206

TOWNSHIP HILLSBOROUGH TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 48 ft **WIDTH** 40 ft

CONSTRUCTION DT 1927 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries 2-lanes of US 206 and sidewalks over a Branch of Royces Brook. A residential development (c. 1950-70) is to the west of the bridge, and a wooded lot is to the east.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed, single-span, encased steel stringer bridge has concrete balustrades and substructure. Beam guide rails have been added. The bridge was built in 1927 as part of the NJ 16 improvements. In 1953 the highway was redesignated US 206. The bridge is a representative example of a common New Jersey State Highway Dept. bridge type. It is not historically or technologically distinguished.

INFOR MATION

PHOTO: 102:34-35 (10/31/91) REVISED BY (DATE): QUAD: Rocky Hill

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1810164 **CO** SOMERSET **OWNER** NJDOT **MILEPOINT** 66.36

NAME & FEATURE INTERSECTED US 206 OVER BRANCH OF ROYCES BROOK **FACILITY** US 206

TOWNSHIP HILLSBOROUGH TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 30 ft **WIDTH** 30 ft

CONSTRUCTION DT 1923 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries 2-lanes of traffic over a Branch of Royces Brook. The neighborhood is moderately developed with single-family homes and apartments.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed, single-span, encased steel stringer bridge has concrete balustrades and substructure. Beam guide rails have been added. The bridge was built in 1923 as part of the NJ 16 improvements. In 1953 the highway was redesignated US 206. The bridge is a representative example of a common NJ State Highway Dept. bridge type. It is not historically or technologically distinguished.

INFOR MATION

PHOTO: 406:22a-23a (01/12/92) REVISED BY (DATE): QUAD: Raritan

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1810165 **CO** SOMERSET **OWNER** NJDOT **MILEPOINT** 67.57

NAME & FEATURE INTERSECTED US 206 OVER BRANCH OF ROYCES BROOK **FACILITY** US 206

TOWNSHIP HILLSBOROUGH TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 37 ft **WIDTH** 30 ft

CONSTRUCTION DT 1923 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries two lanes of US 206 over a small brook. The neighborhood is moderately developed suburban residential and commercial with some older farm buildings and undeveloped wooded lots.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed, single-span, encased steel stringer bridge has concrete balustrades and substructure. Beam guide rails have been added. The bridge was built in 1923 as part of the NJ Highway Route 16 improvements. In 1953 the highway was redesignated US 206. The bridge is a common NJ State Highway Dept. bridge type. It is not historically or technologically distinguished.

INFOR MATION

PHOTO: 406:20a-21a (01/12/92) REVISED BY (DATE): QUAD: Raritan

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1810168 **CO** SOMERSET **OWNER** RAILROAD **MILEPOINT** 38.21

NAME & FEATURE INTERSECTED LEHIGH VALLEY MAIN LINE RR OVER US 206 **FACILITY** LEHIGH VALLEY MAIN LINE RAILROAD

TOWNSHIP HILLSBOROUGH TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 4 **LENGTH** 148 ft **WIDTH** 59 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge carries two tracks of ConRail's Lehigh Valley Mainline over two lanes and two sidewalks of US 206 south of Somerville. US 206 is a busy and heavily developed commercial strip.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge is a skewed, 4-span, concrete slab overpass with ballasted deck and paneled concrete parapets. The concrete substructure consists of horizontally-scored abutments and concrete columns with arched struts with scoring. The bridge was constructed in 1930 as a grade elimination project. Concrete slab bridges are not an uncommon bridge type for overpasses built during the 1930s. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 406:18a-19a (01/12/92) REVISED BY (DATE): QUAD: Bound Brook

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1810169 **CO** SOMERSET **OWNER** NJDOT **MILEPOINT** 69.9

NAME & FEATURE INTERSECTED US 206 OVER DUKES BROOK **FACILITY** US 206

TOWNSHIP HILLSBOROUGH TOWNSHIP

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 44 ft **WIDTH** 30.3 ft

CONSTRUCTION DT 1911 **ALTERATION DT** **SOURCE** NR NOMINATION

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries two lanes and shoulders of US 206 over Dukes Brook south of Somerville. The west fascia of the bridge is part of the Duke estate, which is surrounded by a stone wall that passes across the bridge on the upstream side. The estate was developed 1893-1925 by tobacco magnate James B. Duke as his gentleman's farm. The some 1,250-acre estate has been found eligible by the SHPO in a 9/16/83 finding. US 206 r-o-w is the east boundary, and most of the bridge is not included.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. West elevation element of the Duke Estate. Contributing.

CONSULT DOCUMENTS SHPO Finding 09/16/83, Letter 03/12/01. DOE 02/12/85.

SUMMARY The bridge is a skewed, reinforced-concrete deck arch. The east side is finished with a plain concrete spandrel wall and a railing with concrete posts that once held pipe rails. The west side has a stone fascia finished in the same style as the rubble coursed stone wall that encloses the Duke estate. It was finished to conform to Duke's architectural scheme. While the structure is not individually eligible for listing in the National Register of Historic Places , the west elevation (only) of the bridge, because of its historical and physical association, is a contributing element of the National Register listed Duke Estate under Criteria A and C.

INFOR MATION

SOURCES:
James B. Duke Estate, National Register Nomination. Office of New Jersey Heritage. 1987.
Jenkins, John Wilbur. James B. Duke, Master Builder. New York: George H. Doran Co., 1927.
New Jersey Department of Transportation. Bridge Plans, 1911.

PHYSICAL DESCRIPTION: The bridge is a single-span, skewed, reinforced concrete elliptical deck arch. The east side of the bridge is finished with a plain concrete spandrel walls with concrete posts that once held a pipe railing. The west side of the bridge is within the Duke's Farm historic district, and it is finished with the same rubble coursed masonry used throughout the estate. It is the same as the stone wall that defines the limits of the estate along US 206. The wall is separated from the roadway by a grass berm. The wall and west spandrel wall are constructed of undressed weathered rocks of various sizes, shapes, and coloration's. Rounded flat buttresses mark the limits of the span and add relief to the structure. The wall is approximately 2 ½' thick and stands over 6' high. The west side of the bridge is not visible from the right-of-way nor is it accessible from the right-of-way.

The eastern extrados shows numerous concrete patches and is bowing outward. A beam guide rail has been added. The estate wall is in excellent condition.

HISTORICAL AND TECHNOLOGICAL SIGNIFICANCE: The western side of the bridge was designed and finished to conform with the overall architectural scheme of James B. Duke's estate, Duke's Farm. The estate is considered National Register eligible for its association with tobacco magnate Duke, and for its architectural significance as an outstanding example of a Gilded Age country estate built in a romanticized style. The landscaping, including the boundary walls, bridges, and series of drives are significant contributing elements to the estate's historic integrity. The "boulder-style" boundary wall along the west side of US 206 serves as the boundary of the historic district, as specified in the 1987 draft nomination, may have been built in direct response to the county's improvement of the roadway that eventually became a state highway and then US 206. Part of that improvement was the building of a bridge over Duke's Brook.

Tobacco magnate James B. Duke had purchased the Hillsborough Township land in 1893 and was developing the it according to his ideas of a grand gentleman's farm. In 1903 he hired landscape architects Buckenham and Miller of New York City to carry out a romantic landscaping plan that included numerous lakes, pathways, bridges, fountains, well-houses, and buildings. Part of the plan included surrounding the estate with a rusticated stone wall, an idea that may have been given impetus in 1911 when the county announced its plans to build the highway and bridge along the eastern boundary. Duke requested that the county allow his architects a say in the bridge design so that it conformed with his overall scheme. The wall, which was incorporated into the west side of the bridge, was an example of the boulder style, which appealed to the Victorian-period aesthetic sense of the romantic in the natural environment. The wall was constructed by two teams of Italian masons from Long Island, Curcio Brothers and Barone and Darienco. The bolder style finish is limited to just that portion of the bridge that is visible from within the estate, not the other side. Thus Duke's contribution and involvement with the span appears to have been the finish on his property, not the overall appearance of the bridge.

The 1911 bridge is a reinforced concrete deck of the type and style that was first used by the county in 1910. It is one of over fifteen built by the county in the 1910s. The span is not technologically or historically distinguished save for the west facade which is part of the proposed National Register historic district.

Boundary Description and Justification: The west elevation of the bridge is contiguous with the stone wall that marks the east boundary of the Duke's Farm Historic District, a proposed historic district. The estate was determined eligible by the SHPO in 1983, and a draft nomination with specific boundaries was prepared in 1987, but no determination by the National Park Service has been rendered. The significant portion of the bridge is limited to the stone-faced west elevation. it does not extend to the portion of the structure that is part of the r-o-w of US 206.

PHOTO: 406:16a-17a (01/11/92) REVISED BY (DATE): QUAD: Bound Brook

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1810170 **CO** SOMERSET **OWNER** NJDOT **MILEPOINT** 69.76

NAME & FEATURE INTERSECTED US 206 OVER RARITAN RIVER **FACILITY** US 206

TOWNSHIP SOMERVILLE BOROUGH

TYPE ARCH **DESIGN** OPEN SPANDREL **MATERIAL** Reinforced Concrete

 # SPANS 4 **LENGTH** 382 ft **WIDTH** 40 ft

CONSTRUCTION DT 1929 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries 4-lanes of US 206 over the Raritan River south of Somerville. South of the bridge is near the public entrance to the Duke Estate gardens. The entire estate has been determined eligible for the National Register by the NPS (9/16/83). The bridge is not on the estate, but it is contiguous to the estate. The area along the river is wooded.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 4-span, open spandrel, barrel arch bridge is one of over 10 well-detailed and handsomely proportioned example of its type built by the State Highway Dept. in the late-1920s and 1930s. It is finished with a concrete balustrades with exedrae, and pylons that originally carried classically-inspired luminaries (removed). The bridge is well preserved and is representative of the handsome spans the state designed for major crossings on its rapidly expanding road network.

INFORMATION

Bibliography:
Condit, Carl W. American Building Art. 1961.
Proceedings of the American Society of Civil Engineers. August 1930.
Hess, Jeffrey A. and Frame, Robert M. Wisconsin Stone arch and Concrete Arch Bridges. 1986.
Plowden, David Bridges: The Spans of North America. 1974.

Physical Description: The well-proportioned 4-span open-spandrel reinforced concrete arch bridge is 382' long. The graceful elliptical arches spring from well-detailed bullnose concrete piers, and the spans are articulated by paneled posts that extend from the piers into the paneled posts of the concrete balustrades that frame the sidewalks. The spandrels over the elliptical main span arches are filled with full-width columns. Original standards and luminaries have been replaced with modern aluminum posts and lights. Guide rails have been added at the curblines. With the exception of the modern lights, the bridge remains as it was originally designed.

Historical and Technological Significance: The well-proportioned and well-detailed open-spandrel arch bridge built in 1929-1930 is significant because it represents the quality designs that Morris Goodkind(1869-1968) produced throughout his career as the State Bridge Engineer for the New Jersey State Highway Department. The US 206 bridge is one of the earliest of the approximately 8 open-spandrel arch bridges in New Jersey, a bridge type that defines the highest level of refinement in reinforced concrete arch technology. The well-preserved bridge represents Goodkind's emphasis in the New Jersey State Highway Department Bridge Division to create aesthetically pleasing concrete structures prior to World War II. The moldable qualities of the material were used to create an architectural masterpiece at the same time that its structural qualities were used to efficiently carry a major highway across a wide river. The reinforced concrete arch was capable of relatively long spans while providing graceful and dynamic forms (Criterion C).

Around the turn of the century, reinforced concrete arches were generally limited to relatively short and often single span bridges. The dead load carried by the arches was reduced with the introduction of open spandrel arches. The lighter structures were capable of longer spans and more aesthetically pleasing large bridges. The Walnut Lane bridge (1906-8) over Wissahickon Creek in Philadelphia was a forerunner of the type. A massive structure, the open spandrel arches span 233 feet with virtually no steel reinforcement in the two ribs. In the first two decades of the 20th century, railroads began using reinforced concrete to construct large viaducts across rivers and valleys to eliminate steep grade changes. The length and number of spans increased to create massive structures that dominated the landscape. The Tunkhannock Viaduct (completed 1915 and designed by A. Burton Cohen (1883-1956) of the Delaware Lackawanna & Western RR in Nicholson, Pennsylvania remains one of the greatest bridges in America. It is a ten-span open spandrel reinforced concrete arch, 2375 feet in total length, each span 180 feet in clear span, and rising 240 feet above the creek bed in the valley floor.

The US 206 bridge was completed 14 years later in 1929, but is comparable in beauty and technological significance.

Morris Goodkind, designer of the bridge, was a graduate of Columbia University. He worked for the New York City Public Service Commission in the development of the subway system before working on bridge designs for engineering firms and Mercer County, NJ. In 1922 he joined the New Jersey Highway Department, and became the Chief Bridge Engineer in 1925, a post he held through 1955 when he retired to private practice.

The 1920s and 1930s were a time of great expansion of the state's highway system required many bridges to be built. Goodkind emphasized the need for aesthetically pleasing as well as structurally sound bridges. He brought in Arthur Lichtenberg to develop an architectural section in the Bridge Department. Many of the grade elimination bridges of the 1930s and 1940s in congested areas were detailed with Moderne and Deco pilasters and entablature due to the influence of Goodkind and Lichtenberg. The same structures had encased stringers, the most common type built during Goodkind's term. He emphasized the encasement for protection of the steel from the elements, a valid assertion considering the number and condition of such structures remaining in New Jersey.

While working for the state, he served as a consultant on bridge construction for the War Department. Upon his retirement as Chief Bridge Engineer, Goodkind became a consultant with the firm of Goodkind and O'Dea in Manhattan. He was internationally known and respected for his bridge engineering. He had been active in local and national engineering societies, and won several awards for the

designs of bridges. Goodkind was awarded the Phoebe Hobson Fowler Architectural Award by the American Society of Civil Engineers for the design of the US 1 bridge in New Brunswick (1203150).

Boundary Description and Justification: The bridge is evaluated as individually significant. Independent of its historical and technological significance is the fact that it is situated on a road (US 206) that forms the east boundary of the D.O.E. Duke's Farm Historic District. The 1987 draft nomination uses the middle of river as the boundary. Thus the bridge, located at a northeast corner of the district, is partially within the district. The property bordering the southwest quadrant of the bridge has been determined to be historic, but the property bordering the others has not. The history and significance of the bridge is not related to the history and significance of Duke's Farm.

PHOTO: 3:24-26,406:14A (01/11/92) REVISED BY (DATE): QUAD: Bound Brook

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1810173 **CO** SOMERSET **OWNER** STATE AGENCY **MILEPOINT** 35.4

NAME & FEATURE INTERSECTED RARITAN VALLEY LINE (NJT) OVER US 206 **FACILITY** RARITAN VALLEY LINE (NJT)

TOWNSHIP RARITAN BOROUGH

TYPE THRU GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 2 **LENGTH** 100 ft **WIDTH** 55 ft

CONSTRUCTION DT 1934 **ALTERATION DT** **SOURCE** NJT BRIDGE SURVEY

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries two tracks of the Raritan Valley Line (NJT), the former Central New Jersey Railroad main line, over US 206 in the town of Raritan. The surrounding area is heavily developed with commercial and residential structures.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS NJT HBS 3/12/91. SHPO Letter 6/30/95.

SUMMARY The two-span steel through plate girder bridge is supported by concrete abutments and a single row of steel bents. The bridge has already been evaluated by the 1991 NJT Historic Railroad Bridge Survey as a representative example of the bridge type.

INFOR MATION

PHOTO: No Photo (01/09/92) REVISED BY (DATE): QUAD: Raritan

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1850160 **CO** SOMERSET **OWNER** UNKNOWN **MILEPOINT**

NAME & FEATURE INTERSECTED CAMP MEETING ROAD OVER CONRAIL (N.Y BRANCH) **FACILITY** CAMP MEETING ROAD

TOWNSHIP MONTGOMERY TOWNSHIP

TYPE PONY TRUSS **DESIGN** HOWE **MATERIAL** Ferrous

 # SPANS 3 **LENGTH** 104 ft **WIDTH** 14 ft

CONSTRUCTION DT 1889 **ALTERATION DT** 1914 **SOURCE** CONRAIL RECORDS

DESIGNER/PATENT CHIEF ENG. OFF. P&R RR **BUILDER** UNKNOWN

SETTING / CONTEXT The narrow bridge carries one lane of traffic over 2 active tracks of ConRail's main freight line known as the New York Branch. The right-of-way was developed by the Reading Railroad in the mid-1870s. It is located in a sparsely developed rural portion of the county in an area known as Skillman, location of the state's "epileptic village." A station was located on the south side of the bridge. When it was removed is not known, but it is depicted on a 1995 county map.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The rivet-connected skewed 3-span Howe pony truss with counters overpass on ashlar abutments and 1914 steel bents is an example of an uncommon truss type. It is an unconventional design with small spacer panels added to each truss to compensate for the skew. The floor beams are perpendicular to the road. Even though all but a few of the built-up floor beams and the flooring system have been replaced, the 1889 bridge survives as a good example and unusual example of its type.

INFOR MATION

Bibliography:
Conrail Records.
NJDOT Plan File: 6118 (45.95).
Gibb, Hugh. "Brotherly Love - Philadelphia Style," Bulletin of the National Railway Historical Society, 39, No. 6, 1974, pp. 21-43.

Physical Description: The skewed three-span rivet-connected Howe pony truss bridge is supported on ashlar abutments and metal bents composed of toe-out angles. The lateral bracing on the bents was added in 1914. A Howe truss works on the opposite principle of the more common Pratt truss. The verticals are in tension, and the diagonals and counters are the compression members. The chords, verticals, and diagonals are composed of toe-out angles while the counters are dimensioned plate. The original floor beams, which have been replaced at least twice, were built up. The floor beams are perpendicular to the roadway, not the abutments. The most unusual design detail of the trusses is the use of a small panel at either end of each truss which allowed for equal sizing of each pair of skewed trusses. The bridge has been strengthened with welded knee braces on the inside of the trusses and plate welded to the top chord. The stringers and flooring were originally wood, but they have been replaced with steel stringers and an asphalt wearing surface. A modern beam guard rail protects the inner face of the trusses.

Historical and Technological Significance: The Howe pony truss bridge was designed by the Philadelphia & Reading Railroad Chief Engineer's Office in 1889. In addition to being one of the few documented example of a Howe pony truss bridge in the state, it ranks as the oldest railroad-related span in Somerset County. Why a Howe truss was used is not documented, but it may relate to the decision to reuse the existing substructure which divided the bridge into three spans. The use of the small panels at the end of each truss in order keep each pair of trusses the same length is also an unusual design detail. In 1914 the bracing between the bent posts was added as were the concrete piers, and in 1982 most of the floor beams and stringers were replaced. Despite its over 100 years of active service, the bridge is extremely well preserved and ranks as one of the distinctive pony truss spans in the state.

The bridge was constructed for the Philadelphia and Reading Railroad (Reading) at Skillman, site of the state's epileptic village. A non-extant station was located to the southwest of the bridge. The rail right-of-way was chartered in 1870 and built as the Delaware & Bound Brook Railroad by the Central Railroad of New Jersey in 1873-1875 as an alternative double-track route between New York and Philadelphia. The line was acquired by the Reading Railroad, and was used for both freight and passenger service until the 1970s when the line went bankrupt. The right-of-way passed to Conrail which found it useful for freight service displaced from Amtrak's Northeast Corridor which is the old Camden & Amboy (Pennsylvania Railroad after 1873) route. The Skillman Road overpass is also one of the oldest grade crossing elimination bridges in the region. This is at least the second bridge at the crossing.

Boundary Description and Justification: The bridge is evaluated as individually distinguished for its technological significance. It is adjacent to the campus of the State's Skillman Training School for Boys, but it is not near historic buildings associated with the early history of that facility. The boundary is limited to the substructure and superstructure of the bridge itself.

PHOTO: 101:29-37 (10/10/91) REVISED BY (DATE): QUAD: Rocky Hill

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1850161 **CO** SOMERSET **OWNER** UNKNOWN **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED HARLINGEN ROAD (CR 604) OVER CONRAIL (N.Y. BRANCH) **FACILITY** HARLINGEN ROAD (CR 604)

TOWNSHIP HILLSBOROUGH TOWNSHIP

TYPE THRU GIRDER **DESIGN** PARTIALLY ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 103 ft **WIDTH** 24 ft

CONSTRUCTION DT 1926 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT **BUILDER** MCCLINTIC-MARSHALL CO.

SETTING / CONTEXT The bridge carries a two-lane county road over a single active track of ConRail's main freight line known as the New York Branch. The right-of-way was developed by the Reading Railroad in the mid-1870s. The bridge is located in a sparsely developed area of Montgomery Township with scattered 19th and 20th-century residences, farms, and open fields.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY Built by the McClintic-Marshall Co. of Pittsburgh, the skewed, single-span, thru girder with partially encased floor beams is an example of a common railroad overpass bridge type. It is 1 of 7 early 20th-century thru girder highway bridges over Conrail within 4 miles. The abutments consist of older roughly-coursed masonry capped by concrete. The concrete portions of the abutments are seriously deteriorated. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 406:24a-27a (01/12/92) REVISED BY (DATE): QUAD: Rocky Hill

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1850163 **CO** SOMERSET **OWNER** UNKNOWN **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED HILLSBOROUGH ROAD OVER CONRAIL (N.Y. BRANCH) **FACILITY** HILLSBOROUGH ROAD

TOWNSHIP HILLSBOROUGH TOWNSHIP

TYPE THRU GIRDER **DESIGN** JACK ARCH (CONCRETE) **MATERIAL** Steel

 # SPANS 1 **LENGTH** 72 ft **WIDTH** 24 ft

CONSTRUCTION DT 1917 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane county road over two active rails of ConRail's main freight line known as the New York Branch. The right-of-way was developed by the Reading Railroad in the mid-1870s. The bridge is located west of the US 206 commercial corridor. East of the bridge are undeveloped wooded lots and fields.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span, skewed, steel thru girder bridge has encased floor beams, concrete jack arches, and concrete abutments and wingwalls scored to appear like masonry. The approaches have concrete parapets. The bridge is an example of a common railroad overpass bridge type, and is 1 of 7 early 20th-century thru girders spanning ConRail's NY Branch within 4 miles. It is in poor condition with spalling and rust, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 102:30-31 (10/31/91) REVISED BY (DATE): QUAD: Rocky Hill

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1850164 **CO** SOMERSET **OWNER** UNKNOWN **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED HOMESTEAD ROAD OVER CONRAIL (N.Y. BRANCH) **FACILITY** HOMESTEAD ROAD

TOWNSHIP HILLSBOROUGH TOWNSHIP

TYPE THRU GIRDER **DESIGN** JACK ARCH (CONCRETE) **MATERIAL** Steel

 # SPANS 1 **LENGTH** 72 ft **WIDTH** 24 ft

CONSTRUCTION DT 1918 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane county road over 2 active rails of ConRail's main freight line known as the New York Branch. The right-of-way was developed by the Reading Railroad in the mid-1870s. The bridge is located west of the heavily developed US 206 commercial corridor. The area to the east is sparsely developed with open fields and wooded lots.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed, single-span, thru plate girder bridge has encased floor beams, concrete jack arches, and concrete substructure scored to appear like masonry. The approaches have concrete parapets. The bridge is an example of a common railroad overpass bridge type, and is 1 of 7 thru girders spanning ConRail's NY Branch within 4 miles. The bridge is in poor condition with spalling and rust, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 102:28-29 (10/31/91) REVISED BY (DATE): QUAD: Rocky Hill

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NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1850165 **CO** SOMERSET **OWNER** UNKNOWN **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED AMWELL ROAD (CR 514) OVER CONRAIL (N.Y. BRANCH) **FACILITY** AMWELL ROAD (CR 514)

TOWNSHIP HILLSBOROUGH TOWNSHIP

TYPE THRU GIRDER **DESIGN** JACK ARCH (CONCRETE) **MATERIAL** Steel

 # SPANS 1 **LENGTH** 71 ft **WIDTH** 24 ft

CONSTRUCTION DT 1917 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a two-lane county road over a single active track of Conrail' main freight line known as the New York Branch. The right-of-way was developed by the Reading Railroad in the mid-1870s. The bridge is located in a moderately developed area of suburban residences with scattered older homes appearing to date from ca. 1850-1930, open fields, and wooded lots.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed, single-span, thru girder bridge has encased floorbeams and concrete jack arches. The abutments and wing walls are scored to appear like masonry, and have been reinforced with steel piles at the southerly corners. The bridge is an example of a common overpass bridge type, and is 1 of 7 thru girders over ConRail's NY Branch within 4 miles. The bridge is in poor condition with spalling and rust, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 102:36-27 (10/31/91) REVISED BY (DATE): QUAD: Rocky Hill

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1850166 **CO** SOMERSET **OWNER** UNKNOWN **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED HAMILTON ROAD OVER CONRAIL (N.Y. BRANCH) **FACILITY** HAMILTON ROAD

TOWNSHIP HILLSBOROUGH TOWNSHIP

TYPE THRU GIRDER **DESIGN** JACK ARCH (CONCRETE) **MATERIAL** Steel

 # SPANS 1 **LENGTH** 98 ft **WIDTH** 18.3 ft

CONSTRUCTION DT 1918 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT UNKNOWN **BUILDER** AMERICAN BRIDGE COMPANY

SETTING / CONTEXT The bridge carries 2-lanes of traffic over a single active track of ConRail's main freight line known as the New York Branch. The right-of-way was originally developed by the Reading Railroad in the mid-1870s. The bridge is located east of the US 206 commercial corridor. The area east of the bridge is less developed with scattered 19th- and 20th-century houses, open fields, and wooded lots.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed, single-span, thru-girder bridge has encased floor beams, concrete jack arches, and concrete abutments and wing walls scored to appear like masonry. The approaches are marked by concrete parapets. Fabricated by the American Bridge Company, the bridge is an example of a common railroad overpass bridge type, and is the largest of 7 thru girders over ConRail's NY Branch within 4 miles. It is has no significant historical or technological significance.

INFOR MATION

PHOTO: 102:38-40 (10/31/91) REVISED BY (DATE): QUAD: Bound Brook

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1850167 **CO** SOMERSET **OWNER** UNKNOWN **MILEPOINT** 56.66
NAME & FEATURE INTERSECTED BRIDGE STREET OVER CONRAIL (N.Y. BRANCH) **FACILITY** BRIDGE STREET
TOWNSHIP MANVILLE BOROUGH
TYPE THRU TRUSS **DESIGN** WARREN **MATERIAL** Steel
 # SPANS 1 **LENGTH** 121 ft **WIDTH** 24 ft

CONSTRUCTION DT 1918 **ALTERATION DT** **SOURCE** PLANS
DESIGNER/PATENT CHIEF ENG.OFFICE READING RR **BUILDER** THE PHOENIX BRIDGE CO.

SETTING / CONTEXT The bridge carries a 2-lane residential street and one sidewalk over 6 active tracks of the former Reading Railroad Delaware & Bound Brook line. Manville is a company town that grew up around the Johns-Manville Corporation beginning in 1913. Most of the homes are modest Colonial Revival dwellings. They have been too altered (window replacement, modern sidings, etc.) to possess historic district potential.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes
CONSULT STATUS Individually Eligible.
CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The massive 8-panel Warren thru truss is the only example of its type in the county. It is supported on scored concrete abutments and has concrete jack arches between the stringers. The bridge was built to replace a private farm road overhead crossing by the Reading Railroad in 1918, and the truss type is a frequent although not common pre-1940 selection for a long, wide bridges. The bridge is well preserved and is historically important to Manville's development.

INFOR MATION

Bibliography:
Gibb, Hugh. "Brotherly Love - Philadelphia Style," in Bulletin of the National Railway Society, v. 39, No. 6, 1974, pp. 21-43.
Mustin, M. ed., Somerset County, New Jersey 1688-1930. Somerville: Somerset County Board of Chosen Freeholders, 1930. p. 13.
New Jersey Dept. of Transportation. Bridge Plans and Cards, #1850167. Trenton, NJ.
Poor's Manual of the Railroads, various years. Waddell, J.A.L. Bridge Engineering. New York: John Wiley & Sons, 1925.

PHYSICAL DESCRIPTION: The single-span, 8-panel Warren with verticals thru truss bridge is 116'-5" long from end bearing to bearing and 28'-wide from truss center to center. It is of riveted construction and is in a good state of preservation with only minor alterations and deterioration. The design of the bridge reflects the 20th century advance of truss designs to address secondary stresses. The bridge carries a 2-lane residential street over 6 active tracks of Conrail's main freight line known as the New York Branch. A cantilevered sidewalk with lattice railing extends from the southern truss elevation.

The bridge members consist of the following steel elements: the upper chords and inclined end posts are channels with cover plates and lacing; the verticals, which pick up floor beams, and diagonals are laced angles; the upper laterals are laced angles with bracing, except for the portals which have lattice bracing; the stringers are I-beams with concrete jack arches and encased (some has failed) tie rods. The concrete abutments and wing walls are scored and inscribed with the Reading Railroad diamond logo and the date 1918. The high banked approaches have concrete parapets.

The bridge is in good condition with some spalling and deterioration of the concrete encasing, jack arches, and abutments. Some of the upper chord and lower chord riveted connections have been repaired with bolts. Concrete has been poured in the gap formed between the diagonals and the gusset plate connections at the lower chord.

Historical and Technological Significance: The well-preserved riveted Warren with verticals thru truss bridge is the only example of its type in the county. It is a type associated with the railroads, and while not uncommon in the state (there are five in Union County built between 1907 and 1926 and several in Hudson County the were also built by the CNJ), this is one of the few Warren thru truss highway bridges in the middle portion of the state making. The bridge type was favored by the railroad where a long span with reasonably high load capacity was needed. The bridge is historically important to the development of Manville, a company town started in 1913. It connected the central downtown commercial and industrial area with residential development on the east side of the railroad tracks (criteria A, C).

The railroad right-of-way spanned by the bridge was originally developed in the mid-1870s by the Reading Railroad as its Delaware and Bound Brook Line. Completed in 1875, the line was begun to provide an alternative route between New York and Philadelphia to the Pennsylvania Railroad's acquisition of the old Camden and Amboy right-of-way. The Reading Railroad route left the Central New Jersey Railroad's main line at Bound Brook and headed south across the Raritan River to Manville and on to Philadelphia. In 1976, Conrail acquired the bankrupt Reading Railroad, and has continued to use the route for freight trains.

In 1913, the Johns-Manville Corporation established its largest factory in the company town of Manville. By 1930, the 282 acre plant employed over 1,700 and produced a wide array of asbestos products including textiles, packing, brake linings, and shingles. Prior to the construction of Johns-Manville, a private farm bridge had provided an overhead crossing of the Reading Railroad at, or near, the location of Bridge Street. With the establishment of the town, it was proposed to make the private road public, and the Reading Railroad made plans to improve the crossing. Initially, a thru girder bridge was proposed, but this was set aside for an alternative thru truss design. Plans for the concrete substructure were prepared by the Philadelphia and Reading RR, and the Phoenix Bridge Co. of Phoenixville, PA fabricated the superstructure. The Phoenix Bridge Co. was the sister company of the Phoenix Steel Co., and one of the nation's largest, oldest, and most prestigious bridge builders, specializing in the manufacture of steel structural components and the erection of bridges of many types. In 1918 bridge construction was completed.

Boundary Description and Justification: Although the bridge is located in Manville, a corporate town with historical significance, the area adjacent to the span does not possess the integrity necessary to be evaluated as a potential historic district. Thus, the bridge is

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individually significant, and the boundary is limited to the superstructure and substructure of the span itself.

PHOTO: 107:27a-34a (10/10/91) REVISED BY (DATE): QUAD: Bound Brook

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1851160 **CO** SOMERSET **OWNER** RAILROAD **MILEPOINT** 45.07

NAME & FEATURE INTERSECTED FARM ROAD (PRIVATE) OVER H-CONRAIL **FACILITY** FARM ROAD (PRIVATE)

TOWNSHIP HILLSBOROUGH TOWNSHIP

TYPE PONY TRUSS **DESIGN** WARREN **MATERIAL** Metal

 # SPANS 3 **LENGTH** 82 ft **WIDTH** 13.2 ft

CONSTRUCTION DT 1905ca **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The single-lane bridge spans H-Conrail (former Lehigh Valley Line) west of Neshanic Station. The bridge is closed to traffic, and was once used to connect farmer's fields on either side of the track. The surrounding area is rural with scattered residential development. The bridge is similar to the 1901 pony truss section of 2151161 in Warren County, also built for the Lehigh Valley RR over a farm crossing. The Warren County example is better preserved.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The timber-decked bridge has a 5-panel, riveted Warren pony truss main span and two timber-stringer approach spans. The main span rests on timber-pile bents and the approach spans on timber pile abutments. The main span has welded repairs to the lower chord, and has been lengthened by one panel by the riveted addition of uneven sized angles and channels. Repair and construction records for the bridge have not been located. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 403:32-33 (12/23/91) REVISED BY (DATE): QUAD: Raritan

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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1851161 **CO** SOMERSET **OWNER** RAILROAD **MILEPOINT** 44.83

NAME & FEATURE INTERSECTED BLACK POINT ROAD OVER H-CONRAIL **FACILITY** BLACK POINT ROAD

TOWNSHIP HILLSBOROUGH TOWNSHIP

TYPE PONY TRUSS **DESIGN** WARREN **MATERIAL** Metal

 # SPANS 1 **LENGTH** 70 ft **WIDTH** 19 ft

CONSTRUCTION DT 1905ca **ALTERATION DT** **SOURCE** STYLE

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The single-lane bridge spans H-Conrail (former Lehigh Valley Line) west of Neshanic Station. The bridge has been closed to all traffic. The surrounding area is rural with fields and scattered 19th- and 20th-century residences. The span is similar to the pony truss portion of 2151161 in Warren County. That span is documented as having been built for the Lehigh Valley RR in 1901.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The wood-decked, rivet-connected Warren pony truss bridge with original outriggers and pipe railing has built-up floor beams. Although well preserved, the deteriorating span composed primarily of laced and batten-connected angles does not exhibit any significant design details. Repair and construction records for the bridge have not been located. One of over 9 Warren pony truss bridges in the county, the closed bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 403:6-7 (12/23/91) REVISED BY (DATE): QUAD: Raritan

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1851162 **CO** SOMERSET **OWNER** RAILROAD **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MILL LANE OVER H-CONRAIL **FACILITY** MILL LANE

TOWNSHIP HILLSBOROUGH TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 41 ft **WIDTH** 18 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The single-lane bridge spans an inactive single track of Conrail (former Lehigh Valley Line) east of Neshanic Station. The road is closed to vehicular traffic. Immediately to the north, the abandoned right-of-way of the New Jersey Central RR parallels the active Conrail (LVRR) line. An eligible Pratt truss bridge with Phoenix Columns (c.1890) carries Mill Road over the abandoned right-of-way. The surrounding area is rural with scattered 19th- and early 20th-century residences.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed, single-span steel stringer bridge is in poor condition. The wood deck is deteriorated and the railing missing. The coursed stone abutments, which probably date from an earlier superstructure, have been significantly altered with concrete and timber additions. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 102:3-5 (12/23/91) REVISED BY (DATE): QUAD: Raritan

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1852160 **CO** SOMERSET **OWNER** RAILROAD **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MILL LANE OVER SOUTH BRANCH CENTRAL RR OF NJ **FACILITY** MILL LANE

TOWNSHIP HILLSBOROUGH TOWNSHIP

TYPE THRU TRUSS **DESIGN** PRATT **MATERIAL** Wrought Iron

 # SPANS 1 **LENGTH** 71 ft **WIDTH** 10.3 ft

CONSTRUCTION DT 1879 **ALTERATION DT** 1894ca **SOURCE** PHOENIX CO. RECORDS

DESIGNER/PATENT CLARKE, REEVES, & CO. **BUILDER** CNJ RR

SETTING / CONTEXT The one-lane bridge is located on an abandoned road over the abandoned right-of-way of the former South Branch of the Central Railroad of New Jersey. The surrounding area is wooded, and the old road and bridge serve as a pedestrian way. The active Conrail freight line on the Lehigh Valley line is immediately southeast of the bridge. A stringer bridge carries the abandoned road over that line. The thru truss bridge is only seasonally visible from Mill Lane.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed Pratt thru truss bridge is fabricated with the patented Phoenix columns for the top chord, inclined end posts, verticals, and struts. Despite its deteriorated condition, the bridge, on ashlar abutments that date to 1869, has not lost its integrity. It is the only extant Phoenix column span in the county, which is known to have had many. The Mill Lane bridge is thus the sole survivor of the earliest type of metal truss bridge built in Somerset County. It is technologically notable.

INFOR MATION

Bibliography:
Conrail. Bridge File 241-2.
Waddell, J.A.L. Bridge Engineering. New York: John Wiley & Sons, Inc., 1925.
Hagley Museum & Library. Phoenix Bridge Co. Records: Clarke Reeves & Co. 1874-1884, Order Books (boxes 363-367).

Physical Description: The 10-degree skew, 5-panel, pin-connected, half hip Pratt thru truss bridge is composed of wrought iron Phoenix-sections for the compression members. The top chord, inclined end posts, portal struts, and verticals are the patented built-up Phoenix columns. Phoenix columns are made up of four rolled wrought segmental sections with flanges that are then riveted together. The individual built-up column sections are then joined by patented cast iron connecting pieces and feet or bearings also produced by the Phoenix Iron Company. The diagonals and full-length floor beam hangers are rectangular rods with loop forged eyes. The floor beams are rolled I section and are not original to the bridge, although they are attached by means of the traditional floor beam suspenders at the lower panel point pin. Despite its deteriorating condition, the single-lane bridge appears to be capable of supporting load, although the high ashlar abutment is failing. The large modern rolled I-section welded to the bottom flange of the floor beams was the first step in an uncompleted attempt to jack up the bridge.

Historical and Technological Significance: The 1879 bridge built by Clarke, Reeves & Co. for the Hibernia Mine Railroad is historically and technologically significant as an early and documented example of rail-carrying bridge built with the patented Phoenix section (criterion C). The Phoenix section, patented in 1862 by Samuel Reeves, President of the Phoenix Iron Company, was one of the most significant developments in the advancement of metal truss bridges in the 1870s. Originally applied to buildings, the company recognized the value of its use in bridges about 1868. The section was also used in early elevated street railway lines in New York City and vicinity. In 1872 Clarke, Reeves & Company was formed to handle the bridge building side of the business, and Clarke, Reeves & Company concentrated primarily on railroad rather than highway bridges. The railroads were by far the largest user of metal truss spans and viaducts through the 1870s and early 1880s. Because railroad bridges with Phoenix sections represent first-generation railroad bridge technology, and thus an era when rolling stock and loads were not what they would become in the 1890s and 1900s, few railroad Phoenix-column bridges survive. They were replaced by stiffer, stronger bridges. The history of this span is recorded in the Clarke, Reeves & Company order books preserved at the Hagley Museum and Library. With the exception of the removal of the original floor system, with its stringers and rail chairs related to its original railroad use, the span is complete, and it illustrates that overall there was no difference between some Phoenix-section railroad and the highway bridges.

The skewed through truss bridge was moved to this location by 1894, and it was installed as a grade crossing elimination by the Central Railroad of New Jersey on its South Branch. Railroad records indicate that "this bridge was transferred from the Hibernia (Mine) Railroad," a short line chartered in 1863 and operated by the CNJ. What is meant by "transferred" is not known, but it is assumed to mean moved. The span is the oldest metal truss bridge in the county and one of the oldest thru truss spans in the entire state. It is the second oldest of the eleven surviving bridges with Phoenix columns in the state and the only one built as a railroad bridge. It is the only one that was built by Clarke, Reeves & Company, the successor of the Phoenix Bridge Company (organized in 1884).

Boundary Description and Justification: The bridge is evaluated to be individually significant. While the setting is not devoid of history, it the technological and historical importance of the bridge that sets it apart. The boundary is limited to the superstructure. The substructure is too deteriorated to possess the integrity of original design needed to be evaluated as significant. The railroad right-of-way that the span crosses has been abandoned. It is overgrown.

PHOTO: 102:41-2 (10/10/91) REVISED BY (DATE): QUAD: Raritan

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US
November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1860154 **CO** SOMERSET **OWNER** STATE AGENCY **MILEPOINT** 31.15

NAME & FEATURE INTERSECTED RARITAN VALLEY LINE (NJT) OVER MIDDLE BROOK **FACILITY** RARITAN VALLEY LINE (MP 31.15)

TOWNSHIP BOUND BROOK BOROUGH

TYPE DECK GIRDER **DESIGN** OPEN DECK **MATERIAL** Steel

 # SPANS 4 **LENGTH** 165 ft **WIDTH** 47 ft

CONSTRUCTION DT 1902 **ALTERATION DT** **SOURCE** NJT BRIDGE SURVEY

DESIGNER/PATENT CENTRAL NEW JERSEY RR **BUILDER** AMERICAN BRIDGE COMPANY

SETTING / CONTEXT The bridge carries 2 active tracks of New Jersey Transit's Raritan Valley Line (formerly the Central New Jersey, Central Division Main Line) over Middle Brook west of the town of Bound Brook. The surrounding area is commercial and heavily developed. To the west is an elevated section of I-287.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS NJT HBS 3/12/91. SHPO Letter 6/30/95.

SUMMARY The four-span, open-deck, deck girder bridge has reinforced concrete substructure except for the ashlar south abutment. The bridge is a representative example of a common type and is not historically or technologically distinguished. It has been rated not eligible by the NJT Historic Bridge Survey.

INFOR MATION

PHOTO: 109:30-33 (11/30/91) REVISED BY (DATE): QUAD: Bound Brook

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1861159 **CO** SOMERSET **OWNER** STATE AGENCY **MILEPOINT** 39.2

NAME & FEATURE INTERSECTED RIVER ROAD OVER RARITAN VALLEY LINE (NJT) **FACILITY** RIVER ROAD

TOWNSHIP BRANCHBURG TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Wood

 # SPANS 3 **LENGTH** 81 ft **WIDTH** 14 ft

CONSTRUCTION DT 1886 **ALTERATION DT** 1949 **SOURCE** RAILROAD RECORDS

DESIGNER/PATENT **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a single-lane over a single track of New Jersey Transit's Raritan Valley Line, formerly the Central New Jersey Railroad. The right-of-way was developed in the late 1840's by the Somerville and Easton Railroad. West of the bridge is the village of North Branch Station, which developed around the railroad in the mid-19th century. The surrounding area is residential with early homes, most of which have been altered.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS NJT HBS 3/12/91. SHPO Letter 6/30/95.

SUMMARY The bridge has been rated not eligible by the NJT Historic Bridge Survey due to the undistinguished nature of the timber stringer superstructure which was built in 1949 when the vertical clearance was raised. What is of technological merit are two pairs of well-detailed cast iron bents composed of hexagonal columns and cross bracing. They appear to be monolithic castings. Although the bridge itself is insignificant, the bents are exceptionally unusual and significant structural elements.

INFOR MATION

Bibliography:
DeLeuw, Cather, and Company. New Jersey Transit Historic Bridge Survey, 1991.
New Jersey Department of Transportation. Bridge Plans, 1949.

Physical Description: The single-lane 81'-long bridge is three span resting on stone abutments and impressive monolithic cast-iron column bents on ashlar plinths. The center span of the superstructure, placed in 1949 has rolled steel I beam fascia stringers and interior wood stringers. Two rolled section floor beams are hung from the fascia stringers. The shorter end spans are exclusively wood stringers. The superstructure has been raised from its original elevation and the stone abutments and pier bases have concrete caps. The bridge has a timber deck, timber curbing, and wood railings.

The handsome cast-iron column bents consist of two sets of paired columns with lateral and diagonal cross bracing. The columns are octagonal in cross section and are tapered and finished with pedestals and capitals. The lateral and diagonal bracing are x-shaped in cross section, except for the top and bottom laterals which are t-shaped. The bents appear to be monolithic, one-piece castings. The number "10" is cast in the eastern piers, and the number "12" is cast in the western piers.

Historical and Technological Significance: Although the bridge has been altered by the 1949 rebuilding of the superstructure, the two cast-iron columns bents are exceptionally significant examples of a very rare type of bridge structural element. According to Central Railroad of New Jersey records, the overpass bridge was initially constructed in 1886, and the superstructure was raised in 149 with the original bents remaining. The railroad right-of-way was originally developed in 1848 by the Somerville and Easton Railroad and later taken over by the Central Railroad of New Jersey. The cast-iron bents appear to be monolithic castings, and they are highly crafted. No other bents of this type have been identified to date. Much of the early success and eventual general acceptance of metal bridges and related structural elements is directly attributable to the skill of foundry men. These bents stand as a record of their knowledge and ability. Cast iron came into increasing use as a structural element in the early-19th century but was replaced with other materials such as wrought-iron, steel, and concrete by the end of the century.

The NJT Bridge Survey incorrectly identified the piers as "Phoenix Columns," which were always segmental, riveted, wrought-iron structural elements patented and manufactured by the Phoenix Bridge Company of Phoenixville, Pennsylvania. In the 1880s the Phoenix Bridge Company produced many other types of wrought-iron, cast-iron and steel structural elements. The NJT Bridge Survey recommends a status of not eligible for the bridge; because of the rarity of the cast-iron bents, A. G. Lichtenstein recommends a status of eligible.

Boundary Description and Justification: The boundary is limited to the bents. The other portions of the bridge are not significant.

PHOTO: 110:20-23 (01/18/92) REVISED BY (DATE): QUAD: Raritan

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1864150 **CO** SOMERSET **OWNER** STATE AGENCY **MILEPOINT** 31.69

NAME & FEATURE INTERSECTED GLADSTONE BRANCH (NJT) OVER SOUTH FINLEY AVENUE **FACILITY** GLADSTONE BRANCH (NJT)

TOWNSHIP BERNARDS TOWNSHIP

TYPE THRU GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 47 ft **WIDTH** 16 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT DL&W RR OFFICE OF ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a single track of the New Jersey Transit's Gladstone Line, formerly the Delaware, Lackawanna, and Western RR, over a two-lane road. The right-of-way was developed in the early 1870s by the West Line Railroad. Just north of the bridge is the operating Lyons commuter rail train station, a National Register listed property. The surrounding area is heavily developed suburban residential and commercial. To the west of the bridge is a shopping center.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The ballasted deck thru girder with floor beams bridge is supported on a concrete substructure. It has concrete parapets as the approaches while the span itself is enclosed by a simple metal railing. While not technology distinguished in its own right. It was built at the same time as the Lyons Railroad station, which is listed in the National Register, but the bridge does not fit the theme of the station listing. The span is a late and representative example of its type and is not notable.

INFOR MATION

PHOTO: 110:19a-20a (01/18/92) REVISED BY (DATE): QUAD: Bernardsville

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1864152 **CO** SOMERSET **OWNER** STATE AGENCY **MILEPOINT** 33.27

NAME & FEATURE INTERSECTED GLADSTONE BRANCH (NJT) OVER OAK STREET **FACILITY** GLADSTONE BRANCH (NJT)

TOWNSHIP BERNARDSVILLE BOROUGH

TYPE THRU GIRDER **DESIGN** OPEN DECK **MATERIAL** Steel

 # SPANS 1 **LENGTH** 46 ft **WIDTH** 11 ft

CONSTRUCTION DT 1907 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT UNKNOWN **BUILDER** FORT PITT BRIDGE WORKS

SETTING / CONTEXT The bridge carries a single track of New Jersey Transit's Gladstone Branch, formerly the Delaware, Lackawanna, and Western RR, over a two-lane residential street in the suburban community of Basking Ridge. The railroad right-of-way was historically developed by the West Line Railroad in the early 1870s. A cemetery is to the northwest of the bridge, and a private school to the southeast.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The open deck, steel thru girder bridge rests on concrete abutments. Constructed in 1907 by the Fort Pitt Bridge Works of Pittsburgh, PA, the bridge is a technologically representative example of a common railroad overpass bridge type. It is a replacement span that is not historically associated with the development of the Gladstone Branch. It is not historically or technologically distinguished.

INFOR MATION

PHOTO: 110:16a-18a (01/18/92) REVISED BY (DATE): QUAD: Bernardsville

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1865150 **CO** SOMERSET **OWNER** STATE AGENCY **MILEPOINT** 37.94

NAME & FEATURE INTERSECTED GLADSTONE BRANCH (NJT) OVER MINE BROOK **FACILITY** GLADSTONE BRANCH (MP 37.94)

TOWNSHIP FAR HILLS BOROUGH

TYPE THRU GIRDER **DESIGN** OPEN DECK **MATERIAL** Wrought Iron

 # SPANS 1 **LENGTH** 48 ft **WIDTH** 4.7 ft

CONSTRUCTION DT 1890 **ALTERATION DT** **SOURCE** NJT BRIDGE SURVEY

DESIGNER/PATENT DL&W RR ENGINEERING **BUILDER** PASSAIC ROLLING MILL COMPANY

SETTING / CONTEXT The bridge carries a single track of New Jersey Transit's Gladstone Branch, originally the Delaware, Lackawanna, and Western RR, over a small stream. The bridge is located in an isolated area south of US 202, next to a horse pasture.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS NJT HBS 03/12/91.

SUMMARY The single-span, open-deck, thru girder bridge with stringers and ashlar abutments is a rare survivor of wrought iron construction. According to the NJT Historic Bridge Survey the bridge is original to the Gladstone Line's construction from Bernardsville to Gladstone in 1890. The Passaic Rolling Mill Co. of Paterson also made the thru girders at mileposts 40.82 and 41.99, which are similar in material, type, and date. The bridge is historically and technologically significant.

INFOR MATION

PHOTO: 405:22-24 (11/30/91) REVISED BY (DATE): QUAD: Bernardsville

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1865161 **CO** SOMERSET **OWNER** STATE AGENCY **MILEPOINT** 41.87

NAME & FEATURE INTERSECTED PARK AVENUE OVER PEAPACK BROOK **FACILITY** PARK AVENUE

TOWNSHIP PEAPACK AND GLADSTONE BOROUGH

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 2 **LENGTH** 60 ft **WIDTH** 14.2 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The single-lane bridge spans Peapack Brook in the village of Gladstone. The bridge is downstream from a municipal park with pond and spray fountain. It is just east of a grade crossing of the NJT Gladstone Line. The surrounding 19th-century village has many modern intrusions.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span, steel stringer bridge has a timber deck and wood railing. It is built on ashlar abutments and piers, which may predate the steel stringer construction. Steel stringers are a common bridge type in New Jersey. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 104:33-34 (09/30/91) REVISED BY (DATE): QUAD: Gladstone

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18A0601 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED HIGGINSVILLE ROAD OVER SOUTH BRANCH RARITAN RIVER **FACILITY** HIGGINSVILLE ROAD

TOWNSHIP BRANCHBURG TOWNSHIP

TYPE THRU TRUSS **DESIGN** PRATT HALF HIP **MATERIAL** Metal

 # SPANS 1 **LENGTH** 102 ft **WIDTH** 15.2 ft

CONSTRUCTION DT 1890 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT MILLIKEN BROS. OF NY **BUILDER** MILLIKEN BROS. OF NY

SETTING / CONTEXT The one-lane bridge is located in a picturesque rural section on the county line with Hunterdon. It carries a quiet country road over the river. A similar Pratt thru truss bridge over the flood plain is located immediately southwest (18A0605), the two spans share a common earth-filled pier. Few bridges in the county are as nicely sited as this important pair of early trusses. The unspoiled crossroads settlement of Higginsville (Hunterdon County) is just west of the bridges.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 7-panel pin-connected half hip Pratt thru truss bridge is not only one of the most complete examples of the popular late-19th century bridge type in the region, but it is a rare example of the New York City fabricator Milliken Bros. that operated from 1891 until 1907 when the business failed. Few of their bridges have been documented. The design itself appears to be undistinguished from the host of other Pratt trusses of the era, but the pristine condition of the bridge is remarkable.

INFOR MATION

Bibliography:
The National Cyclopaedia. pp. 110-111.

Physical Description: The 7-panel pin-connected half hip Pratt thru truss is supported on ashlar abutments. Composed of standardized rolled sections, the bridge has a built-up box member for the top chord and inclined ends posts while the verticals are toe-out angles joined by lacing. The original built-up floor beams are connected to the verticals by U-shaped hangers while the endmost floor beams are carried on full-length hangers, an arrangement mandated by the half hip panel. The latticed portal brace carries the makers plaque. The only apparent alteration to the original design is the replacement of the original railing with modern beam guard rails. It is not known if the bridge is composed of steel and/or iron members. The bridge is extremely well preserved.

Technological and Historical Significance: The Pratt truss was the most common late-19th century bridge type, but few examples in the region are as complete as the Higginsville Road span. It survives in basically unaltered condition and is thus an important example of 19th-century technology and construction techniques. The bridge works in tandem with the 1893 Pratt thru truss (18A0605) fabricated by the Wrought Iron Bridge Company of Canton, Ohio. That span is immediately north, and the two share a common large earth-filled abutment.

The bridge was designed and fabricated by the Milliken Brothers of Brooklyn, New York (1887-1907). There are few documented examples of their work which increases the historical importance of the Higginsville Road span. Milliken Brothers was established in 1887 by brothers Foster and Edward Milliken as the successor to their father's Brooklyn company, Milliken, Smith & Co., agent for the Phoenix Iron Works. In addition to representing the Phoenix Iron Works, the brothers took on structural iron and steel work for buildings, and in 1893, they dropped their association with the Phoenixville company in order to concentrate on fabricating and erecting their own design. Foster Milliken was a structural engineer trained at Columbia University. The company flourished primarily on its structural steel and building operations with branch offices located all over the world. Because of its phenomenal growth, the brothers moved their operation from Brooklyn to a 175-acre plant complete with an open-hearth steel mill on Staten Island in 1903-06. The expansion proved to costly and ambitious, and the firm failed in 1907. Edward Milliken died in 1906, and Foster went on to work for the construction firm of Charles T. Wills.

Milliken Bros. is representative of the many small designers/fabricators who dominated 19th-century bridge construction. They obviously learned the trade serving as representatives for another company, and then went off on their own. The pattern is not unusual. Their corporate history is a significant contributor to the understanding of how early metal truss bridges were designed, marketed, and built.

Boundary Description and Justification: This span and the adjacent span (18A0605) are considered as one 2-span resource that is individually distinguished. The boundary is limited to the superstructure and substructure of the 2-span bridge, although the bucolic character of the setting does enhance the context.

PHOTO: 103:28-33 (10/10/91) REVISED BY (DATE): QUAD: Flemington

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18A0605 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED HIGGINSVILLE ROAD OVER SOUTH BRANCH RARITAN RIVER **FACILITY** HIGGINSVILLE ROAD

TOWNSHIP BRANCHBURG TOWNSHIP

TYPE THRU TRUSS **DESIGN** PRATT HALF HIP **MATERIAL** Metal

 # SPANS 1 **LENGTH** 103 ft **WIDTH** 15.1 ft

CONSTRUCTION DT 1893 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT WROUGHT IRON BRIDGE CO. **BUILDER** WROUGHT IRON BRIDGE CO.

SETTING / CONTEXT The southernmost of the pair of similar early bridges, this span carries a narrow country road over flood plain and auxiliary channel of the river. It enjoys an unspoiled picturesque rural setting just east of an equally pristine crossroads settlement that sprang up around a water-powered mill (Higgins Mill). The surrounding land use is predominantly agricultural. The two bridges (18A0601) share a common earthen abutment, and they are on the county line.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 7-panel pin-connected half hip Pratt thru truss bridge is one of the most complete examples of its type in Somerset County. It is supported on ashlar abutments. The verticals are composed of laced channels while the top chord and end posts are built-up box members. The most distinctive construction detail is the 4-prong basket loop on the bottom of the floor beam hangers for making the connection at the pin. The bridge is eligible because of its age and integrity of setting and design.

INFOR MATION

Bibliography:
Darnell, Victor. Directory of American Bridge Building Companies 1840-1900. Washington, DC: Society for Industrial Archeology, 1984.
Hunterdon County Engineer Records. Field Book No. 17. R183S.
Simmons, David. "Bridge Preservation in Ohio." Ohio Cities and Villages, Vol. 26, No. 8, August 1978, pp. 13-18.
Wrought Iron Bridge Company. Illustrated Pamphlet of Wrought Iron Bridges Built By Wrought Iron Bridge Company, Canton, Ohio. Canton, OH: Wrought Iron Bridge Co., 1885.

PHYSICAL DESCRIPTION: The 7-panel pin-connected half hip Pratt thru truss bridge carries a single lane roadway over the flood plain and auxiliary channel of the South Branch of the Raritan River. Composed of rolled sections, the top chords and end posts consist of a built-up box member, and the lower chords are paired eye bars. The verticals are toe-in channels with lacing, except for the hip vertical which is a bar. The diagonals are paired bars and the counters single bars. The I-beam floor beams are connected to the verticals by U-shaped hangers. One of the most distinctive features of the bridge is the 4-prong basket loop on the bottom of the hip verticals for making the connection to the pin. The upper struts are I-beams, and the upper laterals are rods with turnbuckles. The portal bracing, which is composed of angles, carries a makers plaque. The bridge shows few signs of alterations except for the replacement of some riveted connections with bolts along the lower chord, and the replacement of the original railing with a beam guide rail. Bridge cards from the Hunterdon County engineer's office indicate no major repairs between 1940 and 1960 except for the routine replacement of the deck. It is not known whether the bridge is composed of steel and/or iron members. The bridge is exceptionally well preserved.

HISTORICAL AND TECHNOLOGICAL SIGNIFICANCE: The Pratt truss was the most common late-19th century truss bridge type, but few examples in the region are as complete as the Higginsville Road span. It survives in basically unaltered condition and is thus an important example of 19th-century technology and construction techniques. The bridge works in tandem with the 1890 Pratt thru truss fabricated by Milliken Brothers of New York City. That span (18A0601) is immediately northeast, and the two share a common large earth-filled abutment.

The bridge was designed and fabricated by the Wrought Iron Bridge Company of Canton, Ohio. Organized in 1864 by David Hammond, the company was one of the first wrought iron truss manufacturers, and continued in existence for 36 years before being absorbed by the giant American Bridge Company in 1900. The company claimed in its promotional literature to have constructed trusses in 30 states, mostly east of the Mississippi River. In Canton, the fabricator had shops for the drafting, laying out, shearing, drilling, punching, and riveting of truss members, but did not roll its own iron or steel. The Wrought Iron Bridge Company was recognized as one of the most significant regional manufacturers of iron and steel trusses because of its workmanship and prolificacy. Unlike many of its competitors, the Wrought Iron Bridge Company did not specialize in one truss type, but constructed a wide diversity of small and large, inexpensive and expensive truss types, depending upon local preferences. According to the company's 1885 trade catalogue, at least 10 other Wrought Iron Bridge Company trusses were built in New Jersey prior to 1885, six in Middlesex County, three in Mercer County, and one in Union County. One other Wrought Iron Bridge Co. bridge is known to survive in Somerset County, the well-preserved Nevius Street Bridge (1886), a two-span double-intersecting Pratt thru truss across the Raritan River in the town of Raritan.

The Wrought Iron Bridge Co. was one of the most successful of the many small designers/fabricators who dominated 19th-century bridge construction. The Higginsville Road Bridge is an important example of their craftsmanship, as well as a locally significant example of a bridge type that was once common in Somerset County.

Boundary Description and Justification: This span and the adjacent span (18A0601) are considered as one 2-span resource that is individually distinguished. The boundary is limited to the superstructure and substructure of the 2-span bridge, although the bucolic character of the setting does enhance the context.

PHOTO: 103:34-41 (10/10/91) REVISED BY (DATE): QUAD: Flemington

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18B0301 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED ZION ROAD OVER ROCK BROOK (ROCK BROOK BRIDGE) **FACILITY** ZION ROAD

TOWNSHIP MONTGOMERY TOWNSHIP

TYPE STONE ARCH **DESIGN** ARCH WITH STRINGER **MATERIAL** Stone

 # SPANS 3 **LENGTH** 43 ft **WIDTH** 15.3 ft

CONSTRUCTION DT 1800ca **ALTERATION DT** Demolished **SOURCE** NR NOMINATION

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The single-lane bridge spans Rock Brook in a rural section of western Montgomery Township near the 18th- and 19th-century crossroads village of Zion.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Bridge was Individually Eligible. Listed. Early Stone Arch Bridges of Somerset County Multiple Property Listing. 02/17/1994.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The three-span bridge (c.1800) has two masonry arch spans and one metal stringer span. The stringers were added after a flood in 1892 washed out a span. A beam guide rail has been added. The Rock Brook Bridge is the only surviving example of an 19th-century combination span in the county, and it is significant for its historical and technological associations. It is part of a Multiple Property Documentation Form National Register nomination for early stone arch bridges in the county.

INFOR MATION

PHOTO: 108:19-20 (09/30/91) REVISED BY (DATE): QUAD: Rocky Hill

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18B0401 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WERTSVILLE ROAD OVER TRIBUTARY OF NESHANIC RIVER **FACILITY** WERTSVILLE ROAD

TOWNSHIP HILLSBOROUGH TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 24 ft **WIDTH** 16 ft

CONSTRUCTION DT 1922 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT H. VAN EMBURGH, CO. ENG. **BUILDER** SUTTON & ERNEST

SETTING / CONTEXT The two-lane bridge spans a small creek in a rural section of western Hillsborough Township. Next to the bridge is a horse farm with a late-19th century wood frame farm house. The surrounding area has scattered 19th- and 20th-century residences.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span, encased steel-stringer bridge has concrete parapets and a concrete substructure. The bridge is in poor condition with spalling and cracks in the abutments and encasing. It is one of at least 17 similar surviving encased stringer bridges built in the county from 1915 to 1929. It is not historically or technologically distinguished.

INFOR MATION

PHOTO: 403:11-13 (10/31/91) REVISED BY (DATE): QUAD: Hopewell

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18B0404 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WERTSVILLE ROAD OVER TRIBUTARY OR NESHANIC RIVER **FACILITY** WERTSVILLE ROAD

TOWNSHIP HILLSBOROUGH TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 28 ft **WIDTH** 20 ft

CONSTRUCTION DT 1923 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT H. VAN EMBURGH, CO. ENG. **BUILDER** SUTTON & ERNEST

SETTING / CONTEXT The two-lane bridge spans a small creek in rural western Hillsborough Township near the intersection of Werstville Road and Black Point Road. Next to the bridge is a dairy farm with barn, silo, and outbuildings.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span, encased steel-stringer bridge has concrete parapets and substructure. The bridge is spalling and appears to be in poor condition. It is 1 of at least 17 similar surviving encased steel stringer bridges built in the county from 1915 to 1929. It is not historically or technologically distinguished.

INFOR MATION

PHOTO: 103:26-27 (09/30/91) REVISED BY (DATE): QUAD: Hopewell

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18B0405 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BLACK POINT ROAD OVER TRIBUTARY OF NESHANIC RIVER **FACILITY** BLACK POINT ROAD

TOWNSHIP HILLSBOROUGH TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 52 ft **WIDTH** 21 ft

CONSTRUCTION DT 1927 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT O. SMITH, JR., CO. ENG. **BUILDER** A. H. CONYNE

SETTING / CONTEXT The two-lane bridge spans a small creek in a rural section of western Hillsborough Township 1/4-mile north of the 19th-century crossroads village of Montgomery. The bridge is at a sharp curve in the road. Next to the bridge are wooded lots and a farm with outbuildings (c.1870-1950). The plaque on the bridge indicates that it is known locally as Montgomery Bridge for the nearby village of the same name.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed, encased steel-stringer bridge has concrete paneled parapets and concrete substructure. It is 1 of at least 17 similar surviving short-span encased steel stringer bridges built in the county from 1915 to 1929. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 103:24-25 (09/30/91) REVISED BY (DATE): QUAD: Hopewell

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18B0505 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BLACK POINT ROAD OVER NESHANIC RIVER **FACILITY** BLACK POINT ROAD

TOWNSHIP HILLSBOROUGH TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 2 **LENGTH** 104 ft **WIDTH** 26.1 ft

CONSTRUCTION DT 1928 **ALTERATION DT** 1984 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The two-lane bridge spans Neshanic Creek in a rural section of western Hillsborough Township south of the intersection of Black Point Road and Amwell Road. The surrounding area is wooded. Nearby is a log cabin summer home.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span, skewed, steel-stringer bridge has been significantly altered. The original 1928 structure was an encased steel-stringer bridge with concrete balustrades and substructure. In 1984 the county rebuilt the bridge and reused the old stringers and substructure. A modern steel-grid deck and railing was added. Steel stringers are a common bridge type in Somerset County, and the bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 103:22-23 (09/30/91) REVISED BY (DATE): QUAD: Hopewell

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18B0507 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED AMWELL ROAD (CR 514) OVER NESHANIC RIVER **FACILITY** AMWELL ROAD (CR 514)

TOWNSHIP HILLSBOROUGH TOWNSHIP

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 2 **LENGTH** 158 ft **WIDTH** 23.6 ft

CONSTRUCTION DT 1915ca **ALTERATION DT** **SOURCE** STYLE

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The two-lane bridge spans Neshanic River in the western section of Hillsborough Township. Along Amwell Road are numerous 19th- and 20th-century residences, most with modern alterations (aluminum siding, additions, new windows, etc.)

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span, reinforced-concrete arch bridge has paneled concrete parapets and concrete substructure. Spalling has revealed the twisted-pattern deformed rebar reinforcing. Although construction records could not be located, the bridge is similar in style to at least 7 other extant reinforced-concrete arch bridges built in the county from 1911 to 1917. The undocumented bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 102:10-12 (09/30/91) REVISED BY (DATE): QUAD: Hopewell

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18B0508 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BLACK POINT ROAD OVER SOUTH BRANCH OF RARITAN RIVER **FACILITY** BLACK POINT ROAD

TOWNSHIP BRANCHBURG TOWNSHIP

TYPE PONY TRUSS **DESIGN** WARREN **MATERIAL** Steel

 # SPANS 2 **LENGTH** 114 ft **WIDTH** 18.8 ft

CONSTRUCTION DT 1915 **ALTERATION DT** **SOURCE** FREEHOLDERS MINUTES

DESIGNER/PATENT JOSHUA DOUGHTY, CO. ENG. **BUILDER** UNKNOWN

SETTING / CONTEXT The two-lane bridge spans the South Branch of the Raritan River near the confluence with Neshanic Creek. The area is rural with fields on the north bank, and a mid 19th-century house on the south bank. The southern approach to the bridge curves sharply from the west.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span, 4-panel, riveted Warren pony truss bridge has masonry abutments and pier. It is 1 of 10 riveted Warren pony truss highway bridges built in the county between 1915 and 1927. Although well-preserved, the bridge does not exhibit any distinctive construction or design details. It is composed of primarily latticed angle members. The bridge is a representative example of a once-common bridge type. Other examples within the county have been evaluated as significant (18C0605).

INFOR MATION

PHOTO: 102:7-9 (12/23/91) REVISED BY (DATE): QUAD: Raritan

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18B0510 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WOODFERN ROAD OVER SOUTH BRANCH RARITAN RIVER **FACILITY** WOODFERN ROAD

TOWNSHIP HILLSBOROUGH TOWNSHIP

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 76 ft **WIDTH** 19.3 ft

CONSTRUCTION DT 1916 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT JOSHUA DOUGHTY, CO. ENG. **BUILDER** SUTTON & ERNEST

SETTING / CONTEXT The single-lane bridge spans the flood plain of the South Branch of the Raritan River. The bridge abutments rest on a low-lying area which is currently used as a cow pasture. North of the bridge are two eligible Pratt thru trusses (18B0511 & 18B0512) spanning the main channel of the river. The surrounding area is sparsely developed with some 19th- and 20th-century residences.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span, reinforced concrete arch bridge has concrete parapets and substructure. It is in poor condition with repairs and patches to the arch barrel. The bridge is 1 of at least 7 similar surviving reinforced-concrete arch bridges built in the county from 1911 to 1917. It is not historically or technologically distinguished.

INFOR MATION

PHOTO: 26:22-24 (10/31/91) REVISED BY (DATE): QUAD: Flemington

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18B0511 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WOODFERN ROAD OVER SOUTH BRANCH OF RARITAN RIVER **FACILITY** WOODFERN ROAD

TOWNSHIP BRANCHBURG TOWNSHIP

TYPE THRU TRUSS **DESIGN** PRATT HALF HIP **MATERIAL** Metal

 # SPANS 1 **LENGTH** 101 ft **WIDTH** 13.1 ft

CONSTRUCTION DT 1902 **ALTERATION DT** 1980 **SOURCE** FREEHOLDERS MINUTES

DESIGNER/PATENT J. DOUGHTY, CO. ENG. **BUILDER** JOHN W. SCOTT

SETTING / CONTEXT The bridge is one of two single-lane thru truss bridges that carry a country road over the river. The setting is sparsely developed rural with fields and pastures and some 19th- and 20th-century residential development. The two bridges share a common earth-filled masonry pier. Immediately south of the pair of trusses is a third span, a concrete arch (18B0510), constructed in 1916.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed single-span Pratt thru truss has masonry abutments. Built in 1902, the bridge and its companion span (18B0512) are the youngest of 4 surviving Pratt thru truss highway bridges built in the county between 1885 and 1902. John W. Scott was a local bridge builder from Flemington, and Joshua Doughty, Jr. was Somerset's first county engineer. The upper portion of the bridge has been modified, but it is significant as part of the 2-span crossing.

INFORMATION

Bibliography:

Comp, T. Allan, and Donald Jackson. Bridge Truss Types: A Guide to Dating and Identifying. Nashville, TN: American Association for State and Local History, 1977.
Condit, Carl W. American Building Art: The Nineteenth Century. New York, NY: Oxford University Press, 1960.
Map of Hillsborough Township. Collection of Somerset County Library, Somerville, NJ. 1860.
Snell, James P. Compiler. History of Hunterdon and Somerset Counties, New Jersey. Philadelphia: Everts and Peck, 1881.
Somerset County. 7th Book of Minutes of the Board of Chosen Freeholders of the County of Somerset. 1899-1902. _____.
County Engineer Records and Plans. 18B0511.

Physical Description: The skewed, 101'-long, single-span, pin-connected, five-panel half-hip Pratt thru truss bridge, one of a pair of nearly identical spans that share a common large ashlar mid-channel pier, carries a single-lane road over the main channel of the South Branch of the Raritan River. Comprised of rolled sections, the bridge has built-up box member top chords and end posts. The lower chords are paired eye bars. The verticals are angles with lacing, except for the hip verticals which are paired rods. The diagonals are paired eye bars, and the counters are single rods. The portal struts and bracing are angles with decorative lattice and builders plaques. The top struts are back-to-back angles with steel rod lateral bracing. The I-beam floor beams are supported from the lower chord panel points by U-shaped hangers. The bridge abutments, wing walls, and pier are roughly-coursed red sandstone masonry, probably quarried locally.

A number of repairs have been made to the superstructure. In 1980 the county removed the original riveted cover plates of the inclined end posts and upper chords and replaced them with welded cover plates. The lattice verticals at the three middle panel points were cut and welded connecting plates added. In addition, the upper lateral struts and top lateral bracing were removed and replaced in an inverted position. The portal bracing, struts and lattice were also removed and rebuilt with new welded connections to the end posts. Other alterations and damages to the truss include a broken vertical with a welded connecting patch; a broken counter with a welded connecting patch; a snapped lower lateral brace; the removal of the original railing and the addition of modern steel guard rail; and rebuilding of the masonry abutment with a reinforced-concrete seat underneath the northeast truss shoe.

Historical and Technological Significance: The Woodfern Road Bridge across the South Branch of the Raritan River is technologically and historically significant as one of a pair of pin-connected thru truss bridges that represent bridge-building technologically from the local perspective at the turn of the century (criterion C). Erected in 1902, the Pratt thru truss with its nearly identical companion truss to the south (18B0512) are the youngest of 4 surviving Pratt thru-truss highway bridges built in Somerset County between 1885 and 1902, and the 9th youngest of 10 surviving thru trusses of all types. The Woodfern Road bridges retain integrity of design and has been in continuous use at the present site since the time of its construction. In the last decades of the 19th century, the Pratt truss type was widely used, and it played a prominent part in the advance of a reliable network of overland transportation. It was well regarded by engineers for its simplicity of design and easily determined structural action, and by the 20th century, the truss type had gained almost universal acceptance for both railroad and highway spans. The Woodfern Road bridges were erected by John W. Scott, a small bridge manufacturer from Flemington.

A bridge has spanned the South Branch of the Raritan River at the site since at least the mid-19th century. A 1860 map shows the bridge, and the minute books of the Board of Freeholders record repairs to the bridge as early as the 1880s. The proximity of the Old York Road, Somerset's main east-west road from the 17th to the 19th century, and Neshanic Station, established by the South Branch of the Central Railroad of New Jersey in the 1870s, made the crossing an important link in the rural transportation network.

The two trusses at Woodfern Road Bridge were built under two separate contracts by the same builder, John W. Scott. The southernmost truss (18B0512) was completed first in April 1902. Two weeks after the completion of the first truss span, the Freeholders decided to build a second to replace a bridge at the site of the existing northern skewed truss. They voted to build a 100' long span and quickly solicited bids. Bidders for the second truss included Scott, the Dover Boiler Works (Morris County), the Frank R. Long Company (Bergen County), the Berlin Construction Company (Connecticut), the William Kirk Company, and the American Bridge Company. The bids were closely spaced, but Scott received the contract because "his plans submitted were for a heavier bridge than the plans of the lower bidders." The price was $2400. The second truss was finished and accepted in September 1902. Both spans are believed to have replace wood truss

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NJDOT updated data 03-01-2001.
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covered bridges.

J.W. Scott was a bridge fabricator who resided in Flemington (Hunterdon County). In 1899 he appears as a bidder on at least one other bridge project in Somerset County, but he did not receive the contract. Two nearly identical idiosyncratic pony trusses were erected by Scott in Hunterdon County 1900-1903 (100D390, 100D388). Scott appears to be typical of many small bridge builders who remain largely anonymous to history except for the bridge's they built, making the Woodfern Road bridges all the more significant.

Because the spans share a common pier, they are evaluated as one structure. Both spans are significant.

Boundary Description and Justification: The two-span bridge is evaluated as individually significant. The boundary is limited to the structure itself, including the superstructures and substructures of both spans.

PHOTO: 26:25,27,28,31 (09/30/91) REVISED BY (DATE): QUAD: Flemington

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18B0512 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WOODFERN ROAD OVER SOUTH BRANCH OF RARITAN RIVER **FACILITY** WOODFERN ROAD

TOWNSHIP BRANCHBURG TOWNSHIP

TYPE THRU TRUSS **DESIGN** PRATT HALF HIP **MATERIAL** Metal

 # SPANS 1 **LENGTH** 84 ft **WIDTH** 15.7 ft

CONSTRUCTION DT 1902 **ALTERATION DT** 1990 **SOURCE** FREEHOLDERS MINUTES

DESIGNER/PATENT JOSHUA DOUGHTY, CO. ENG. **BUILDER** JOHN W. SCOTT

SETTING / CONTEXT The bridge is one of two single-lane thru trusses that carry a country road across the river. The setting is sparsely developed rural with fields and scattered 19th- and 20th-century residences. The two trusses share a common masonry and earth-filled masonry pier. Immediately to the south of the pair of trusses is a third span, a concrete arch (18B0510), constructed in 1916.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span Pratt thru truss has masonry abutments. Built in 1902, the truss and its companion span (18B0511) are the youngest of 4 Pratt thru-truss highway bridges built in the county between 1885 and 1902. Builder John W. Scott was a small, a local fabricator from Flemington. Joshua Doughty was Somerset's first county engineer. The bridge is a well-preserved example of a historically significant type. It is the more complete of the 2 truss bridges at the crossing.

INFOR MATION

Bibliography:
Comp, Allan, and Donald Jackson. A Guide to Dating and Identifying. Nashville, TN: American Association for State and Local History, 1977.
Condit, Carl W. American Building Art: The Nineteenth Century. New York, NY: Oxford University Press, 1960.
Map of Hillsborough Township. Collection of Somerset County Library, Somerville, NJ. 1860.
Snell, James P. Compiler. History of Hunterdon and Somerset Counties, New Jersey. Philadelphia: Everts and Peck, 1881.
Somerset County. 7th Book of Minutes of the Board of Chosen Freeholders of the County of Somerset. 1899-1902. _____.
County Engineer Records and Plans. 18B0511.

PHYSICAL DESCRIPTION: The 84'-long, single-span, pin-connected, five-panel half-hip Pratt thru truss carries a single-lane road over the South Branch of the Raritan River and its flood plain. It is the southernmost of two nearly identical spans at the crossing. Comprised of rolled sections, the bridge has built-up box member top chords and end posts. The lower chords are paired eye bars. The verticals are angles with lacing, except for the hip verticals which are paired rods. The diagonals are paired eye bars, and the counters are single rods. The portal struts and bracing are angles with decorative lattice and builders plaques. The top struts are T-beams with steel rod lateral bracing. The I-beam floor beams are supported from the lower chord panel points by U-shaped hangers. The bridge abutments, wing walls, and pier are roughly-coursed red sandstone masonry, probably quarried locally. The bridge shares its northern pier with a similar skewed Pratt thru truss (18B0511).

The bridge retains its integrity of design, although a number of minor repairs have been made to the superstructure. In 1980 the county cut the lattice verticals at the three lower-middle panel points and added welded connecting plates. Steel angles were welded to the floor beams at the intersection with the stringers. Other alterations included the removal of the original railing (railing hangers still extant) and the addition of modern beam guide rails; the shifting of the southeast truss shoe from the roller plate; and a welded patch on the riveted cover plate of the southeast inclined end post. This span is more complete than the northern span.

HISTORICAL AND TECHNOLOGICAL SIGNIFICANCE: The Woodfern Road Bridge across the South Branch of the Raritan River is significant for engineering and method of construction (Criterion C). Built in 1902, the Pratt thru truss with its nearly identical companion truss to the north are the youngest of 4 surviving pin-connected Pratt thru-truss highway bridges built in Somerset County between 1885 and 1902, and the 9th youngest of 10 surviving thru trusses of all types. The Woodfern Road bridges retain integrity of design and has been in continuous use at the present site since the time of its construction. In the last decades of the 19th century, the Pratt truss type was built widely, and played a prominent part in the advance of a reliable network of overland transportation. It was well-regarded by engineers for its simplicity of design and easily determined structural action, and by the 20th century had gained almost universal acceptance for both railroad and highway spans. The Woodfern Road Bridge was constructed by John W. Scott, a small, locally-active bridge manufacturer from Flemington (Hunterdon County).

A bridge has spanned the South Branch of the Raritan River at the site since at least the mid-19th century. A 1860 map shows the bridge, and the minute books of the Board of Freeholders record repairs to the bridge as early as the 1880s. The proximity of the Old York Road, Somerset's main east-west road from the 17th to the 19th century, and Neshanic Station, established by the South Branch of the Central Railroad of New Jersey in the 1870s, made the crossing an important link in the rural transportation network.

The two trusses at Woodfern Road Bridge were built under two separate contracts by the same builder, John W. Scott. In July 1901 the Freeholders viewed the bridge and carried a motion to replace the southernmost truss (18B0512) with a new iron bridge "to be 80 ft. between abutments with 18 ft. roadway and of sufficient capacity to carry a 15 ton roller." Action was taken quickly: bids were advertised, prepared, and received within two weeks. Bidders on the project included Scott, the Easton Foundry and Machine Co., the Canton Bridge Co., W. Kirk, and the Berlin Construction Co. Scott was the low bidder on the project and received the contract at a price of $1600. In April 1902 the southernmost truss was completed. Two weeks after its completion, the Freeholders decided to also replace the northernmost span at Woodfern Road with a 100'-span bridge (18B0511). Scott again received the contract because "his plans submitted were for a heavier bridge than the plans of the lower bidders." The second truss was completed and accepted in September 1902.

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
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John W. Scott appears as a bidder on at least one other bridge project in Somerset County in 1899, but did not receive the contract. He is documented as having fabricated two idiosyncratic pony truss spans in Hunterdon County in 1901-1903 (100D388, 100D390). Scott appears to be typical of many small bridge builders who remain largely anonymous to history except for the bridge's they built, making the Woodfern Road bridges all the more significant.

Boundary Description and Justification: The two-span bridge is evaluated as individually significant. The boundary is limited to the structure itself, including the superstructures and substructures of both spans.

PHOTO: 26:26,29,30,33 (09/30/91) REVISED BY (DATE): QUAD: Flemington

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18B0603 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PLEASANT RUN ROAD OVER PLEASANT RUN **FACILITY** PLEASANT RUN ROAD

TOWNSHIP BRANCHBURG TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 48 ft **WIDTH** 30 ft

CONSTRUCTION DT 1940 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT O. SMITH, JR., CO. ENG. **BUILDER** J. W. ROGERS

SETTING / CONTEXT The bridge carries a 2-lane road over a small stream in a rural area undergoing suburban development. Near the bridge are open fields and an early-19th century farmhouse.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed, single-span, encased steel stringer bridge with concrete balustrades and substructure is a representative example of a common bridge type in New Jersey. During the 1940s, Joseph W. Rogers, a contractor from Succasunna, NJ, built many bridges in the state. It is not historically or technologically distinguished.

INFOR MATION

PHOTO: 406:29a-30a (01/12/92) REVISED BY (DATE): QUAD: Raritan

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18C0104 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PROVINCE LINE ROAD OVER BEDENS BROOK **FACILITY** PROVINCE LINE ROAD

TOWNSHIP MONTGOMERY TOWNSHIP

TYPE THRU TRUSS **DESIGN** WARREN **MATERIAL** Metal

 # SPANS 1 **LENGTH** 79 ft **WIDTH** 15.4 ft

CONSTRUCTION DT 1888 **ALTERATION DT** Demolished **SOURCE** COUNTY RECORDS

DESIGNER/PATENT **BUILDER** NJ STEEL & IRON CO.

SETTING / CONTEXT The bridge is located in a wooded, rural setting and carries one-way traffic over a small stream. It is on a quiet rural road that historically marked the division between East and West New Jersey. The bridge is on the line between Mercer and Somerset counties, and it was constructed as a joint-county project.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Bridge was Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 12/05/90, Letter 6/30/95

SUMMARY The 6-panel rivet-connected Warren thru truss span on ashlar abutments is composed solely of angles, and is significant as an early example of both the truss type and method of fabrication. According to county records, floor beams are replacements, and the bearings were reinforced, but the trusses appear unaltered. The bridge is important in chronicling the evolution of metal truss bridge technology in the region. New Jersey Steel & Iron Co. of Trenton was a major bridge fabricating firm.

INFOR MATION

PHOTO: 100:6-9 (10/10/91) REVISED BY (DATE): QUAD: Rocky Hill

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18C0208 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BELLE MEAD ROAD OVER ROCK BROOK **FACILITY** BELLE MEAD ROAD

TOWNSHIP MONTGOMERY TOWNSHIP

TYPE PONY TRUSS **DESIGN** WARREN **MATERIAL** Steel

 # SPANS 1 **LENGTH** 54 ft **WIDTH** 29.8 ft

CONSTRUCTION DT After 1940 **ALTERATION DT** **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a two-lane road over a small stream in a sparsely developed portion of the county. It is located within the bounds of the Blawenburg Historic District. The bridge is contiguous to the grounds of the Skillman Epileptic Village that is now the state's neuropsychiatric institute. The campus is a mix of 19th- and 20th-century buildings.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. NJ State Village for Epileptics / NJ Neuro-Phychiatric Institute Historic District, Eligible. Listed. Blawenburg Historic District. 12/14/1990. Noncontributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95, 106 Comments 10/22/97 5/15/98 7/29/98.

SUMMARY The 4-panel welded pony truss bridge is composed entirely of modern rolled sections and I-beams. It is supported on the ashlar abutments of an earlier span. In the 1990 Blawenburg Historic District nomination, this bridge was incorrectly identified as old and listed as a contributing resource. County records indicate that an 18'-wide low iron truss was at the crossing about 1940. When this span was built is not documented, but it was in place by 1964. It is too new to be contributing.

INFOR MATION

PHOTO: 101:21-22 (10/01/91) REVISED BY (DATE): QUAD: Rocky Hill

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18C0209 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CAMP MEETING AVENUE OVER ROCK BROOK **FACILITY** CAMP MEETING AVENUE

TOWNSHIP MONTGOMERY TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 56 ft **WIDTH** 24.1 ft

CONSTRUCTION DT 1917 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The two-lane bridge spans tree-lined Rock Brook in western Montgomery Township. The surrounding area has modern residential developments.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span, encased steel-stringer bridge has concrete parapets and substructure. The abutments and piers have been repaired with new footing extensions. The bridge is in poor condition with spalling and rust. The bridge is 1 of at least 17 similar surviving encased steel stringer bridges built in the county between 1915 and 1929. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 101:27-28 (09/30/91) REVISED BY (DATE): QUAD: Rocky Hill

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18C0302 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED HOLLOW ROAD OVER BRANCH OF ROCK BROOK **FACILITY** HOLLOW ROAD

TOWNSHIP MONTGOMERY TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 2 **LENGTH** 43 ft **WIDTH** 30 ft

CONSTRUCTION DT 1934 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The two-lane bridge spans a seasonal stream in western Montgomery Township. The surrounding area is sparsely developed with 19th- and 20th-century residences. Next to the bridge is an older house with aluminum siding and modern additions.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span, skewed, concrete slab bridge has concrete parapets and substructure. It is in poor condition and spalled. The bridge is a common type and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 101:24-25 (09/30/91) REVISED BY (DATE): QUAD: Rocky Hill

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18C0601 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 677 (ELM STREET) OVER SOUTH BRANCH OF RARITAN RIVER **FACILITY** CR 667 (ELM STREET)

TOWNSHIP BRANCHBURG TOWNSHIP

TYPE THRU TRUSS **DESIGN** LENTICULAR **MATERIAL** Metal

 # SPANS 2 **LENGTH** 285 ft **WIDTH** 13.7 ft

CONSTRUCTION DT 1896 **ALTERATION DT** 1983 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT BERLIN IRON BRIDGE CO. **BUILDER** BERLIN IRON BRIDGE CO.

SETTING / CONTEXT The bridge carries a single lane over the river in the late-19th century community of Neshanic Station. The original setting of the bridge is well preserved. It is a contributing element in the Neshanic Mills Historic District. The lenticular truss bridge is in full view of another historically significant span, the 1896 pin-connected Pratt thru truss that carries the South Branch of the Central Railroad of New Jersey over the river.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible. Listed. Neshanic Mills Historic District. 01/09/1978. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 2-span lenticular truss bridge is one of the best surviving examples of the late-19th century truss type that was successfully marketed nationally by the Berlin Iron Bridge Company of Connecticut. It is a variation on the Pratt truss and is distinguished by its polygonal top and bottom chords. The end posts have been encased in concrete, and the bridge was strengthened in 1983, but it retains its integrity of original design. It is also a contributing element in a historic district.

INFOR MATION

PHOTO: 408:8-10 (10/10/91) REVISED BY (DATE): QUAD: Raritan

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18C0605 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED OPIE ROAD OVER SOUTH BRANCH OF RARITAN RIVER **FACILITY** OPIE ROAD

TOWNSHIP BRANCHBURG TOWNSHIP

TYPE PONY TRUSS **DESIGN** WARREN **MATERIAL** Steel

 # SPANS 2 **LENGTH** 152 ft **WIDTH** 16.6 ft

CONSTRUCTION DT 1919 **ALTERATION DT** Moved **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** F. W. SCHWIERS

SETTING / CONTEXT The single-lane bridge spans the river in a picturesque rural section of Branchburg Township. On either side of the river are fields, pastures, and 19th-century farmhouses.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Bridge was Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 2-span, riveted, Warren pony truss has one span deeper than the other. The eastern span is a 67'-long, 5-panel truss, and the western span is a 85'-long and six panels. The bridge rests on preexisting rubble-coursed stone abutments and pier which may account for the unequal spans. It is technologically distinguished as a well-preserved example of its type because of its state of preservation and multi span configuration. It is one of 9 Warren pony truss spans in the county built 1910-1927.

INFOR MATION

Bibliography:
Condit, Carl. American Building Art: The 19th Century. New York: Oxford University Press, 1960. p. 118.
Somerset County. County Engineer Records. Bridge Card C0605.
Somerville County Democrat. "Freeholders Award Bridge Contracts." June 27, 1919.

Physical Description: The two-span, rivet-connected, Warren pony truss has spans of unequal lengths and depths. The eastern span is a 67'-long, five-panel Warren truss, and the western span is a 85'-long, six panel Warren truss. Both trusses consist of rolled steel members: the lower chords are angles with battens; the upper chords are box beam members with cover plates; the inward inclined diagonals are angles with lacing, and the outward inclined diagonals are angles with battens; and, the verticals are angles with battens. The abutments and pier are roughly-coursed masonry with rebuilt concrete seats. The bridge retains its original pipe railing, however a modern beam guide rail has also been added. Except for a few minor welded patches and repairs, the bridge has not been significantly altered.

Historical and Technological Significance: The Opie Road Bridge is the longest and best-preserved of at least six rivet-connected Warren pony truss highway bridges constructed in Somerset County built between 1915 and 1927. The Warren truss bridge type was patented in 1848 by two British engineers, James Warren and Willoughby Monzani. It differed from other trusses in that it did not have a vertical (compression) member and that alternate diagonals slope in opposite directions. Because some of those diagonals are compression members, the design was not well suited for pinned connections. With the perfection of the portable pneumatic equipment in the late-19th century, field riveting was possible, and the simple but rigid Warren truss come to the fore during the 1890s. During the early 20th century, steel Warren trusses appeared in rapidly growing numbers, and were used for both highway and railroad spans. The Opie Road bridge is a good representative example of Warren truss construction and engineering that made a significant contribution to the widespread use of metal truss bridges in the state.

The Opie Road bridge was constructed in 1919 by the F. W. Schwiers, Jr., Company of New York. It replaced an earlier bridge and was built on the preexisting masonry abutments and pier, accounting for the unequal lengths of the spans. In 1988, the county replaced the plank deck with an asphalt roadway and installed the beam guide rail.

Boundary Description and Justification: The bridge is evaluated as individually distinguished. The boundary is limited to the span itself, the superstructure and substructure.

PHOTO: 403:29-31 (12/23/91) REVISED BY (DATE): QUAD: Raritan

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18C0607 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED OPIE ROAD OVER SOUTH BRANCH OF RARITAN RIVER **FACILITY** OPIE ROAD

TOWNSHIP BRANCHBURG TOWNSHIP

TYPE PONY TRUSS **DESIGN** PRATT **MATERIAL** Steel

 # SPANS 2 **LENGTH** 180 ft **WIDTH** 18.2 ft

CONSTRUCTION DT 1921 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The narrow two-lane bridge spans a wide section of the river in the western part of the county. The area is rural with fields, pastures, and a farmhouse (c. 1820) to the west. A housing development (c. 1990) is being built to the east, but out of sight of the bridge.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span, six-panel, riveted Pratt pony truss bridge has concrete abutments and cutwater pier. The bridge is one of the least altered of over 15 pony trusses built between ca. 1900 and 1927, and it is the only rivet-connected Pratt pony truss in the county. It is a well-preserved example of a historically and technologically significant type that is becoming increasingly rare in the state. The riveted Pratt is not a common 20th-century pony truss type, which adds to the value of the span.

INFOR MATION

Bibliography:
Condit, Carl. American Build Art: The 19th Century. New York: Oxford University Press, 1960.
Waddell, J. A. L. Bridge Engineering. New York: John Wiley and Son, 1916.

Physical Description: The 180'-long bridge consists of two six-panel half-hip Pratt pony trusses of equal length. The trusses are rivet-connected rolled steel sections. The upper chords and inclined end posts are built-up box beams with cover plates. The lower chords, verticals, and diagonals are angles with lacing. In addition, the bridge has angle outriggers. The floor beams and stringers are I-beams. The abutments and cutwater pier are concrete.

The bridge is well-preserved, and has not been significantly altered. The lower panel points and floor beam hangers have been repaired with bolts. A modern beam guide rail has been added.

Historical and Technological Significance: The Opie Road Bridge is one of the least altered of over 15 pony trusses remaining in the county from between ca.1900 and 1940. While this is the example that is a riveted Pratt pony truss bridge, it is a late example of riveted pony truss bridge technology, and it exhibits no unusual or noteworthy construction details. The Pratt truss bridge type was patented in 1844 by Thomas and Caleb Pratt of Boston, but did not gain popularity until the last half of the 19th century when it became one of the most common American truss types. Many engineers favored the Pratt truss type because of its easily determined structural action, simplicity and economy of metal. Others, like the opinionated J. A. L. Waddell, recommended its use for thru trusses, but did not recommend its use for pony trusses because of the lack of upper lateral support of the top chord. The perfection of riveted field connections brought the ascendancy of the Warren truss for pony truss spans after the turn of the century, and they are much more common than 20th century riveted Pratt trusses. This span is technologically significant because of it is an uncommon example of a rivet-connect Pratt pony truss span. It is also well preserved (criterion C).

No local records have been located to determine the builder or engineer for the Opie Road Bridge.

Boundary Description and Justification: The bridge is evaluated as individually significant. The boundary is limited to the span itself, including the substructure.

PHOTO: 403:27-28 (12/23/91) REVISED BY (DATE): QUAD: Raritan

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18C0704 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED HOLLAND BROOK ROAD OVER HOLLAND BROOK **FACILITY** HOLLAND BROOK ROAD

TOWNSHIP BRANCHBURG TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 24 ft **WIDTH** 20.2 ft

CONSTRUCTION DT 1919 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT J. DOUGHTY, CO. ENG. **BUILDER** SNOOK AND SONS

SETTING / CONTEXT The bridge carries a 2-lane road over a small tree-lined brook in a moderately-developed suburban residential area. The bridge is near the intersection of US 202 and Holland Brook Road.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span, concrete-encased steel stringer bridge has concrete parapets and substructure. It is a representative example of at least 17 other surviving short-span encased steel stringer bridges built in the county between 1915 and 1929. It is not historically or technologically distinguished.

INFOR MATION

PHOTO: 406:36a-37a (01/12/92) REVISED BY (DATE): QUAD: Raritan

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18C0705 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED OLD YORK ROAD OVER HOLLAND BROOK **FACILITY** OLD YORK ROAD

TOWNSHIP BRANCHBURG TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 46 ft **WIDTH** 28 ft

CONSTRUCTION DT 1931 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT O. SMITH, JR., CO. ENG. **BUILDER** RICHARDS & GASTON

SETTING / CONTEXT The bridge carries a 2-lane road over a small stream in a moderately developed suburban residential area. The surrounding area has some remaining older farmhouses and open fields.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The most distinguishing feature of the skewed single-span, encased steel stringer bridge with concrete substructure is the reticulated pattern of the concrete parapets. The reticulated feature is also seen on another early 1930s bridge in Somerset County (18K0903), and is not an infrequent detail on 20th-century bridges. In all other respects, the bridge is a representative example of a common bridge type. It has no significant historical or technological details or associations.

INFOR MATION

PHOTO: 406:38a-39a (01/12/92) REVISED BY (DATE): QUAD: Raritan

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18C0806 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED READINGTON ROAD OVER TRIBUTARY OF CHAMBERS BROOK **FACILITY** READINGTON ROAD

TOWNSHIP BRANCHBURG TOWNSHIP

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 37 ft **WIDTH** 26 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT O. SMITH, JR., CO. ENG. **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane road over a small stream in a moderately developed suburban residential area west of the village of North Branch Station.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY Built in 1930, the short, single-span concrete arch bridge with concrete balustrades is a representative example of a common bridge type. It is in poor condition with spalling, and has had utility pipes added to both the downstream and upstream elevations. Other examples of the bridge type exist in the county, and this one is not historically or technologically distinguished based on its date, size, and detailing.

INFOR MATION

PHOTO: 310:28-29 (01/18/92) REVISED BY (DATE): QUAD: Raritan

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18C1001 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED RIVER ROAD OVER LAMINGTON RIVER **FACILITY** RIVER ROAD

TOWNSHIP BEDMINSTER TOWNSHIP

TYPE PONY TRUSS **DESIGN** WARREN **MATERIAL** Steel

 # SPANS 1 **LENGTH** 79 ft **WIDTH** 14.8 ft

CONSTRUCTION DT 1910ca **ALTERATION DT** **SOURCE** STYLE

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a quiet country road over a small stream in a sparsely developed scenic wooded setting in a rural area. A golf course is to the southeast of the bridge.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 5-panel rivet-connected Warren with verticals pony truss bridge is supported on concrete abutments. The top chord and end posts are built up box members while the verticals and diagonals are composed of channels. The undocumented bridge exhibits standard details, and it is representative of a truss and construction type that is fairly common in the county. Some welded repairs have been made to the end posts. It is one of 9 riveted Warren pony truss bridges in the county and is not notable.

INFOR MATION

PHOTO: 104:25-28 (10/10/91) REVISED BY (DATE): QUAD: Gladstone

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18C1301 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BLACK RIVER ROAD OVER HERZOG BROOK **FACILITY** BLACK RIVER ROAD

TOWNSHIP BEDMINSTER TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 23 ft **WIDTH** 21.9 ft

CONSTRUCTION DT 1921 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The two-lane bridge spans a brook in western Bedminster Township near the village of Pottersville. The surrounding area is rural with rolling farm land and well-maintained 19th- and 20th-century residences.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 11/22/91

SUMMARY The single-span, encased steel-stringer bridge has concrete parapets and substructure. It is in poor shape with spalling, cracked concrete, and a wing wall that has moved outward. The bridge is 1 of at least 17 similar surviving short-span encased steel stringer bridges built in the county from 1915 to 1929. It is not historically or technologically distinguished.

INFOR MATION

PHOTO: 105:7-8 (09/30/91) REVISED BY (DATE): QUAD: Gladstone

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18C1303 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED POTTERSVILLE ROAD (CR 512) OVER HERZOG BROOK **FACILITY** POTTERSVILLE ROAD (CR 512)

TOWNSHIP BEDMINSTER TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 36 ft **WIDTH** 32.1 ft

CONSTRUCTION DT 1921 **ALTERATION DT** **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The two-lane bridge spans Herzog Brook east of the village of Pottersville in northwestern Bedminster Township. The surrounding area is rural with rolling hills. It is not located within the National Register-listed Pottersville Historic District.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span bridge has been significantly altered. Records for the bridge are incomplete, but the physical evidence suggests that the bridge began in 1910 as a thru girder with encased floor beams. In 1921 the bridge was widened with the addition of encased stringers, and the two girders were probably replaced with steel stringers. Beam guide rails have been added. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 104:5-6 (09/30/91) REVISED BY (DATE): QUAD: Gladstone

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18D0203 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CHERRY HILL ROAD OVER BEDEN'S BROOK **FACILITY** CHERRY HILL ROAD

TOWNSHIP MONTGOMERY TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 51 ft **WIDTH** 15.2 ft

CONSTRUCTION DT 1910 **ALTERATION DT** 1980 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The single-lane bridge spans a small brook in a sparsely developed residential area of southwestern Montgomery Township.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span bridge was substantially rebuilt c.1980. The floor beams from an earlier truss were salvaged and supported on two new rolled beams resting on H-section posts with concrete pads. The original stone rubble abutments were repointed, and beam guide rails were added. The bridge has no significant historical or technological associations.

INFOR MATION

PHOTO: 100:10-12 (09/30/91) REVISED BY (DATE): QUAD: Rocky Hill

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18D0204 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED GEORGETOWN AND FRANKLIN TPK OVER BEDEN'S BROOK **FACILITY** GEORGETOWN AND FRANKLIN TURNPIKE (CR 518)

TOWNSHIP MONTGOMERY TOWNSHIP

TYPE T BEAM **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 2 **LENGTH** 67 ft **WIDTH** 30 ft

CONSTRUCTION DT 1936 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT OSCAR SMITH, CO. ENG. **BUILDER** J. W. ROGERS

SETTING / CONTEXT The two-lane bridge spans Beden's Brook in southern Montgomery Township. The bridge is located at a curve on a busy county highway. The surrounding area has scattered residential development interspersed with wooded parcels.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span, concrete T-beam bridge has concrete balustrades and substructure. A beam guide rail has been added, and a portion of the concrete balustrade is missing. Although found less frequently in Somerset County, T-beams are a common bridge type in New Jersey. The bridge has no significant historical or technological associations.

INFOR MATION

PHOTO: 100:13-14 (09/30/91) REVISED BY (DATE): QUAD: Rocky Hill

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18D0207 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BURNT HILL ROAD OVER BEDEN'S BROOK **FACILITY** BURNT HILL ROAD

TOWNSHIP MONTGOMERY TOWNSHIP

TYPE PONY TRUSS **DESIGN** PARKER **MATERIAL** Steel

 # SPANS 1 **LENGTH** 62 ft **WIDTH** 15.3 ft

CONSTRUCTION DT 1909 **ALTERATION DT** Moved **SOURCE** COUNTY RECORDS

DESIGNER/PATENT TOLEDO-MASSILAN BRIDGE CO **BUILDER** TOLEDO-MASSILAN BRIDGE CO

SETTING / CONTEXT The bridge is located on a bad curve and carries a quiet 2-lane road over a small stream in a unspoiled wooded setting on the south side of the mid-19th century state epileptic village now known as the New Jersey Neuropsychiatric Institute.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Bridge was Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 8/3/90, Letter 6/30/95.

SUMMARY The 5-panel Parker pony truss bridge with bolted field connections is supported ashlar abutments. It is well preserved and is one of the few, and perhaps only Parker pony truss span in the state. In addition to its unusual truss type, with a polygonal top chord that accommodates strength at the center of truss and economy of material, the bridge is technologically significant for its early use of square-headed bolts for field connections. The only alteration appears to be removal of the railing.

INFOR MATION

PHOTO: 101:17-20 (10/19/91) REVISED BY (DATE): QUAD: Rocky Hill

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18D0702 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED STUDDIFORD DRIVE OVER SOUTH BRANCH RARITAN RIVER **FACILITY** STUDDIFORD DRIVE

TOWNSHIP BRANCHBURG TOWNSHIP

TYPE THRU GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 3 **LENGTH** 198 ft **WIDTH** 20 ft

CONSTRUCTION DT 1929 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT OSCAR SMITH, CO. ENG. **BUILDER** HENRY E. TERRILL

SETTING / CONTEXT The two-lane bridge spans the South Branch of the Raritan River near its confluence with the Raritan River. The early-19th century village of South Branch is located on the east bank of the river opposite the bridge. South Branch is a National Register-listed district. The east bank of the river is one of the boundaries. Except for the eastern approach, the bridge itself does not lie within the district, and it was not built within the district's period of significance.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed, three-span, steel thru girder with encased floor beams bridge is simply supported and has a concrete substructure and a cantilevered sidewalk with beam railing on the downstream side. The replaced the last surviving wood truss covered bridge in the county, however it is a common bridge type and has no significant historical or technological associations. It is also later than village of South Branch located on the east side of the span.

INFOR MATION

PHOTO: 403:25-26 (10/31/91) REVISED BY (DATE): QUAD: Raritan

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18D0704 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED SOUTH BRANCH ROAD (CR 567) OVER HOLLAND BROOK **FACILITY** SOUTH BRANCH ROAD (CR 567)

TOWNSHIP BRANCHBURG TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 68 ft **WIDTH** 22.5 ft

CONSTRUCTION DT 1926 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT OSCAR SMITH, CO. ENG. **BUILDER** SHOCKS & SON

SETTING / CONTEXT The two-lane bridge spans Holland Brook near its confluence with the South Branch of the Raritan River. The surrounding area retains its rural character with farms and pastures, although visible to the west is a modern corporate office building (c.1985).

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed, two-span, encased steel-stringer bridge has concrete parapets and substructure. The bridge is in poor condition with deterioration and spalling to the abutments and pier. Encased steel stringers are a common bridge type in Somerset County. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 403:23-24 (10/31/91) REVISED BY (DATE): QUAD: Raritan

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18D0705 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED OLD YORK ROAD (CR 567) OVER RARITAN RIVER **FACILITY** OLD YORK ROAD (CR 567)

TOWNSHIP BRANCHBURG TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 5 **LENGTH** 250 ft **WIDTH** 26 ft

CONSTRUCTION DT 1930 **ALTERATION DT** 1978 **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The two-lane bridge carries the Old York Road, a principle overland route between New York City and Philadelphia during the 18th and 19th centuries but bypassed by US 202 in the 20th century, over the Raritan River near its confluence with the South Branch of the Raritan River. On the east river bank is a suburban residential area (c.1950-70). On the west bank is a broad flood plain with open fields and pasture.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The design integrity of the five-span steel stringer bridge has been compromised by numerous alterations. The bridge rests on the stone abutments of a previous bridge, the first pier from the east is also stone, but the other piers are concrete. In 1978 the bridge was widened with stringers, a steel grid deck and railing were added, and concrete repairs were made to the abutments and piers. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 403:21-22 (10/31/91) REVISED BY (DATE): QUAD: Raritan

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18D0904 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0
NAME & FEATURE INTERSECTED STATION ROAD OVER CHAMBERS BROOK **FACILITY** STATION ROAD
TOWNSHIP BRANCHBURG TOWNSHIP
TYPE BRICK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Brick
 # SPANS 1 **LENGTH** 27 ft **WIDTH** 30.3 ft
CONSTRUCTION DT 1850ca **ALTERATION DT** 1935 **SOURCE** COUNTY RECORDS
DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane road over a small brook on the northern edge of the village of North Branch Station. To the south of the bridge is New Jersey Transit's Raritan Valley Line, formerly the Central Railroad of New Jersey, which also crosses Chambers Brook on a brick-lined arch (c.1848). Near the intersection of Station Road and Centre Street once stood the North Branch Depot. North Branch Station village has many older homes and structures, but most have modern alterations.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No
CONSULT STATUS Individually Eligible.
CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY Constructed in ca. 1850, the single-span, brick arch with stone fascia bridge was built at the time the Somerville & Easton Railroad, predecessor of the Central Railroad of New Jersey, extended its line to White House and founded North Branch Station. The arch retains its integrity although the bridge was widened in 1935 with steel stringers on the upstream side. Due to its early date of construction and association with the early development of railroads in the county, the bridge is eligible.

INFOR MATION

Bibliography:
DeLeuw, Cather, and Co. New Jersey Transit Railroad Bridge Survey, 1991.
Somerset County Engineer. County Bridge Cards. 1935.
Snell, James. History of Hunterdon and Somerset Counties, 1881.

Physical Description: The bridge is a single-span elliptical brick arch with stone spandrel walls, abutments, and wingwalls. The stone masonry is random-course rubblestone with rusticated stone voussoirs. The bridge has been widened on the upstream side with two steel stringers inset into stone masonry at an angle to accommodate an extra lane leading into a Y-shaped intersection on the southern side of the bridge. Some concrete reinforcing has been made to the northeastern abutment to support one of the stringers. Beam guide rails have been added to the bridge. There is no evidence of previous railings or parapets. Some of the masonry has been repointed or covered with concrete, but not to a significant degree.

Historical and Technological Significance: The ca. 1850 brick arch bridge is the only known highway example of its type in Somerset County. Historically it appears to be associated with the founding of the village of North Branch Station, s small settlement that developed as a result of the 1848 development of the Somerville & Easton Railroad through the area. Although its construction is not documented, the bridge is the same type and style as a nearby span built by the railroad in 1848 to carry the line over Dumont Creek at Milepost 39.40. Although the brick arch bridge has been altered on one side, it still retains excellent integrity and is a technologically distinguished example of a brick arch span preserved in its original setting (criterion C).

Masonry arch bridges are not uncommon in Somerset County and were built from the 17th century into the 20th century. Most bridges made use of locally quarried stone, and although brick and other dressed stones were available, they were less frequently used due to the costs of shipping, a situation that began to change with the construction of canals and railroads. Although no construction records for the Station Road bridge have been located, it is possible that the bridge was constructed in 1848 when the Somerville and Easton Railroad, one of the precursors of the Central New Jersey Railroad, extended its line from Somerville to White House. A similar brick arch bridge with stone spandrel walls and a documented date of 1848 carries the railroad and a portion of the North Branch Station house over a branch of Chambers Creek just upstream from the highway bridge. The station building no longer exists, although a modern structure has been built on its foundations. The 1848 brick arch railroad bridge at milepost 39.40 is the earliest documented bridge in the 1991 NJT survey population, and it was evaluated as eligible.

County records indicate the bridge was widened with stringers at one quadrant in 1935.

Boundary Description and Justification: The bridge is evaluated as individually significant. The boundary is limited to the arch span itself and the ashlar wingwalls. The 1935 addition does not contribute to the significance of the arch bridge.

PHOTO: 310:24-27 (01/12/92) REVISED BY (DATE): QUAD: Raritan

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18D0907 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED EASTON TURNPIKE OVER NORTH BRANCH OF RARITAN RIVER **FACILITY** EASTON TURNPIKE (CR 614)

TOWNSHIP BRANCHBURG TOWNSHIP

TYPE THRU GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 20 **LENGTH** 551 ft **WIDTH** 30 ft

CONSTRUCTION DT 1924 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HIGHWAY DEPT **BUILDER**

SETTING / CONTEXT The bridge carries a 2-lane county highway over the North Branch of the Raritan River east of North Branch village, a small town with many well-preserved 18th and 19th-century buildings. The area along the river is sparsely developed with a municipal park and parking lot on the west bank, and a farm on the east bank. To the south is a 3-span concrete arch bridge (1801153) carrying US 22 over the North Branch of the Raritan River.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The viaduct has 2 encased thru girder and floorbeam main spans over the river, 7 short concrete slab with parapet approach spans to the west, and 11 similar approach spans to the east. The bridge was constructed in 1924 as part of NJ Highway Route 9, and in 1943 was designated a county road because of the construction of a new 4-lane highway to the south. It is not within the period of significance of the village of North Branch, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 110:43a, 406:6a (01/18/92) REVISED BY (DATE): QUAD: Raritan

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18D1002 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BURNT MILLS ROAD OVER MUDDY RUN **FACILITY** BURNT MILLS ROAD

TOWNSHIP BEDMINSTER TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 28 ft **WIDTH** 22 ft

CONSTRUCTION DT 1927 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT O. SMITH, JR., CO. ENG. **BUILDER** S. W. HILDERBRANT

SETTING / CONTEXT The two-lane bridge spans Muddy Run near its confluence with the Lamington River in southern Bedminster Township. The surrounding area is sparsely developed with farmland, wooded lots, and scattered 19th- and 20th-century houses.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span, encased steel-stringer bridge has paneled concrete parapets and concrete substructure. The bridge is 1 of at least 17 similar surviving encased steel stringer bridges built in the county between 1915 and 1929. It is not historically or technologically distinguished.

INFOR MATION

PHOTO: 104:23-24 (09/30/91) REVISED BY (DATE): QUAD: Gladstone

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18D1004 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BURNT MILLS ROAD OVER LAMINGTON RIVER **FACILITY** BURNT MILLS ROAD

TOWNSHIP BEDMINSTER TOWNSHIP

TYPE PONY TRUSS **DESIGN** WARREN **MATERIAL** Steel

 # SPANS 1 **LENGTH** 86 ft **WIDTH** 15.1 ft

CONSTRUCTION DT 1919 **ALTERATION DT** 1985 **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The one-lane bridge carries a quiet country road over the Lamington River near its confluence with the North Branch Raritan River. The setting is wooded with a mid-19th century farmhouse on the west side of the bridge.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed 4-panel rivet-connected Warren pony truss composed of standardized angle, channel, and plate members is supported on concrete abutments. A box beam replacing the original laced angle bottom chord was installed in 1985 as were new bolted gusset plates at the panel points and replacement floor beams. The significant alterations to the original design render the bridge technologically and historically undistinguished. A better example of the type is 18C0605.

INFOR MATION

PHOTO: 104:19-22 (10/10/91) REVISED BY (DATE): QUAD: Gladstone

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18D1006 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BURNT MILLS ROAD OVER NORTH BRANCH OF RARITAN RIVER **FACILITY** BURNT MILLS ROAD

TOWNSHIP BEDMINSTER TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 115 ft **WIDTH** 27.3 ft

CONSTRUCTION DT 1940 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT O. SMITH, JR., CO. ENG. **BUILDER** DELTA CONSTRUCTION CO.

SETTING / CONTEXT The two-lane bridge spans the scenic North Branch of the Raritan River near its confluence with the Lamington River in southern Bedminster Township. The area along the river is wooded. Nearby the area is agricultural with some suburban development.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span, encased steel stringer bridge has scored concrete substructure; Moderne-styled balustrades with diamond-shaped balusters and bull-nose end parapets; and four tapered, octagonal-shaped concrete light standards. Although more architectonic than most encased steel stringers in the county, the bridge is in poor condition with significant spalling. It is not historically or technologically distinguished.

INFOR MATION

PHOTO: 104:17-18 (09/30/91) REVISED BY (DATE): QUAD: Gladstone

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18D1102 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED RIVER ROAD OVER MIDDLE BROOK **FACILITY** RIVER ROAD

TOWNSHIP BEDMINSTER TOWNSHIP

TYPE THRU GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 55 ft **WIDTH** 20 ft

CONSTRUCTION DT 1922 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a gravel road over Middle Brook near its confluence with the North Branch of the Raritan River. The immediately surrounding area is densely wooded.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span, thru girder with encased floor beams bridge has concrete abutments, original pipe railing, and approaches with paneled concrete parapets. The bridge is 1 of 5 similar surviving shallow-depth thru girder bridges built in the northern part of the county between 1922 and 1930. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 104:29-30 (09/30/91) REVISED BY (DATE): QUAD: Gladstone

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18D1103 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BUNN ROAD OVER NORTH BRANCH RARITAN RIVER **FACILITY** BUNN ROAD

TOWNSHIP BEDMINSTER TOWNSHIP

TYPE PONY TRUSS **DESIGN** WARREN **MATERIAL** Steel

 # SPANS 1 **LENGTH** 60 ft **WIDTH** 15.2 ft

CONSTRUCTION DT 1910 **ALTERATION DT** 1988 **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The one-lane bridge carries an unimproved road over a small stream in a wooded, rural portion of the county dominated by "gentlemen farms" which preserve the historic agricultural character of the area.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 7' deep 5-panel rivet-connected Warren pony truss on ashlar abutments has been extensively altered with welded additional members. It was first rebuilt in 1938 and then again in 1988. The integrity of original design has been lost. The bridge is not historically or technologically distinguished as much of its fabric is mid- to late-20th century in origin. It is one of ten 20th-century Warren pony trusses in the county. Several others are in a more complete state of preservation.

INFOR MATION

PHOTO: 105:8-11 (09/27/91) REVISED BY (DATE): QUAD: Gladstone

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18D1110 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED LAMINGTON ROAD (CR 523) OVER MIDDLE BROOK **FACILITY** LAMINGTON ROAD (CR 523)

TOWNSHIP BEDMINSTER TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 24 ft **WIDTH** 26.1 ft

CONSTRUCTION DT 1913 **ALTERATION DT** 1973 **SOURCE** NJDOT

DESIGNER/PATENT J. DOUGHTY, CO. ENG. **BUILDER** UNKNOWN

SETTING / CONTEXT The two-lane bridge spans a small brook in an agricultural area interspersed with modern housing developments.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span steel stringer bridge has been extensively rebuilt. Constructed in 1913, the bridge was originally a steel stringer with concrete slab deck and pipe railing. In 1973 the stringers were replaced, the railing removed, the bridge widened, the deck rebuilt, and beam guide rails added. The bridge abutments are a combination of older masonry and newer concrete construction. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 104:11-12 (09/30/91) REVISED BY (DATE): QUAD: Gladstone

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18D1201 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED LARGER CROSS ROAD OVER MIDDLE BROOK **FACILITY** LARGER CROSS ROAD

TOWNSHIP BEDMINSTER TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 25 ft **WIDTH** 16.8 ft

CONSTRUCTION DT 1924 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The single-lane bridge carries a gravel road over Middle Brook in a scenic rural area with rolling fields and woods.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The short, single-span, encased steel stringer bridge has a concrete parapet on the west side and a modern beam guide rail on the east side. The abutments are masonry rubble and probably date to an earlier bridge. Encased steel stringers are a common 1920s bridge type in Somerset County. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 104:9 (09/30/91) REVISED BY (DATE): QUAD: Gladstone

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18E0104 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED RIVER ROAD OVER VAN HORN BROOK **FACILITY** RIVER ROAD

TOWNSHIP ROCKY HILL BOROUGH

TYPE STRINGER **DESIGN** JACK ARCH (BRICK) **MATERIAL** Steel

 # SPANS 1 **LENGTH** 29 ft **WIDTH** 22.4 ft

CONSTRUCTION DT 1899 **ALTERATION DT** 1937 **SOURCE** PLAQUE

DESIGNER/PATENT UNKNOWN **BUILDER** WHELY MASON(?)

SETTING / CONTEXT The bridge carries two-lanes of traffic over Van Horn Brook near its confluence with the Millstone River. Van Horn Brook forms the southeast boundary of the Rocky Hill Historic District, a turn of the century village on the Delaware and Raritan Canal. The bridge is not contiguous to the concentration of historic buildings, but lies across the historic district's boundary.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible. Listed. Rocky Hill Historic District. 07/08/1982. Contributing.

CONSULT DOCUMENTS SHPO Letter 03/12/01

SUMMARY Constructed in 1899, the well-preserved brick jack arch bridge has rolled I-beams and tie rods, and ashlar abutments with a plaque. It is individually eligible for listing in the National Register of Historic Places under Criterion C. It is within the period of significance of the Rocky Hill Historic District, and contributes to the district's historic character. In 1937 the roadway was widened slightly with narrow cantilevered extensions and the concrete parapets added, but the original jack arch portion of the bridge was undisturbed. It is a complete example of brick jack arch technology.

INFOR MATION

Bibliography:
ONJH. Somerset County: Rocky Hill Historic District National Register nomination, 1982.
Somerset County Engineer. Bridge File E0104.

Physical Description: The 29'-long bridge is composed of rolled I beam stringers with well-preserved brick jack arch fill. The stringers are tied together to counter the lateral thrust of the arches by tie rods anchored through the fascia members by square head bolts. The fascia on the downstream side is composed of stacked I members while that on the upstream side is stacked toe-in angle. The bridge rests on high, well-preserved ashlar abutments that include a date stone inscribed "Built A.D. 1899 Whely, Mason." In 1937 a new concrete deck was installed, and at that time the deck was cantilevered about one foot on each side to widen the roadway. The concrete parapet with scoring on the roadway face was added at that time. The 1937 work does not appear to have modified the original configuration. Beam guide rail marks the curved approaches to the span.

Historical and Technological Significance: The bridge ranks as one of the longest and most complete examples of brick jack arch technology in the region. In addition to its technological importance, the bridge crosses the boundary of the Rocky Hill Historic District, and it was built within the period of significance of the district and is thus a contributing resource.

The jack arch is a construction detail initially developed during the second quarter of the nineteenth century as a means of both strengthening and fireproofing beams in buildings. The shallow arches span between rolled stringers to add rigidity, some load-carrying capacity, and protection for the stringers. Brick jack arches, which are more common in some areas of the state than others, were used from about 1885 until about 1905. From about 1905 until the first world war jack arches were executed in concrete rather than brick. The 1937 alterations to the deck and parapet did not impact the original stringer-jack arch arrangement. The River Road bridge is the longest and one of the best preserved of the less than half a dozen stringer spans with brick jack arches identified in the southern two-thirds of New Jersey.

Boundary Description and Justification: Since the feature that the bridge crosses is a southeast boundary of the Rocky Hill Historic District, the bridge and its surroundings are evaluated as significant. The bridge is a contributing structure to the historic district, and it is also individually significant.

PHOTO: 100:15-20 (09/30/91 JPH (5/96)) REVISED BY (DATE): QUAD: Rocky Hill

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US
November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18E0201 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED OPOSSUM ROAD OVER BEDEN'S BROOK **FACILITY** OPOSSUM ROAD

TOWNSHIP MONTGOMERY TOWNSHIP

TYPE STONE ARCH **DESIGN** BARREL **MATERIAL** Stone

 # SPANS 2 **LENGTH** 47 ft **WIDTH** 11.5 ft

CONSTRUCTION DT 1822 **ALTERATION DT** **SOURCE** NR NOMINATION

DESIGNER/PATENT UNKNOWN **BUILDER** JWR/AHK(?)

SETTING / CONTEXT The single-lane bridge spans tree-lined Beden's Brook west of US 206 in a moderately developed residential area.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible. Listed. Early Stone Arch Bridges of Somerset County Multiple Property Listing. 02/17/1994.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The Opossum Road Bridge is a double-arched, camelbacked, random rubble bridge. It is the second oldest dated bridge in the county and has a marker that reads "BEDENS BROOK/5 M To P/1822/JWR/AHK." The bridge shows signs of continuous repair and repointing, but it retains its design integrity. A National Register nomination was prepared for the bridge in 1990 as part of a Multiple Property Documentation Form for early stone arch bridges in Somerset County. Actual NR listing is pending.

INFOR MATION

PHOTO: 101:15-16 (09/30/91) REVISED BY (DATE): QUAD: Rocky Hill

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18E0204 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED RIVER ROAD (CR 533) OVER PIKE BROOK **FACILITY** RIVER ROAD (CR 533)

TOWNSHIP MONTGOMERY TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 48 ft **WIDTH** 20 ft

CONSTRUCTION DT 1927 **ALTERATION DT** Demolished: 1997 **SOURCE** PLAQUE

DESIGNER/PATENT O. SMITH, JR., CO. ENG. **BUILDER** SNOOK BROTHERS

SETTING / CONTEXT The bridge carries a 2-lane road over tree-lined Pike Brook near its confluence with the Millstone River. The bridge lies within the River Road Historic District, an area of well-preserved 18th, 19th, and early-20th century residences and farms bordering the Millstone River. To the northeast of the bridge is an early farmhouse with associated outbuildings.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Bridge was Not Individually Eligible. Listed. River Road Historic District. 03/21/1991. Contributed.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY Built in 1927, the single-span encased concrete stringer with incised concrete parapets and concrete substructure is within the dates of significance of the River Road Historic District (1740-1939). The bridge contributes to the historic district as a representative example of a bridge type constructed widely in the county in the 1910s and 1920s. The bridge is indicative of the local effort to improve farm to market roads, and is significant to the district's transportation history.

INFOR MATION

Office of New Jersey Heritage. River Road Historic District Nomination, 1991.

PHYSICAL DESCRIPTION: The two-lane bridge is a single-span encased steel stringer with incised concrete parapets and concrete substructure. The incised parapets have a rectangular pattern, and are stepped over the abutments. A stone plaque inset in the parapet reads "O. Smith, Jr., Co. Engineer. Snook Bros. Contractors. 1927." The stringer encasing is spalling and the bottom flanges of the I-beams are exposed. The bridge has a concrete deck with an asphalt road surface.

HISTORICAL AND TECHNOLOGICAL SIGNIFICANCE: The 1927 bridge is within the River Road Historic District, a rural district of 18th, 19th, and early-20th century residences and farms paralleling the Millstone River. The bridge is not rated in the historic district nomination but falls within the district's period of significance (1740-1939). The bridge is indicative of the highway improvement campaigns of the post-World War I period, and the increasingly important role of automobile transportation in the lives of rural dwellers. Encased steel stringers were built widely in Somerset County in the period between 1915 and 1929; at least 17 similar short-span bridges are known to survive. Except for some deterioration of the concrete encasing, the Pike Brook bridge appears unaltered. The bridge is not individually distinguished, either historically or technologically. it is a common type and design. Its significance is solely based on the fact that it is located in a National Register-listed historic district and that it was built within the period of significance of that district. It is not a major element within the district, and it was not mentioned in any section of the 1991 nomination.

Boundary Description and Justification: The bridge is located within a listed National Register historic district. Thus the bridge and its setting are evaluated as significant. For a complete description of the district boundaries, please refer to the National Register file at the ONJH.

PHOTO: 310:16-17 (01/18/92) REVISED BY (DATE): QUAD: Rocky Hill

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18E0302 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MILL POND ROAD OVER PIKE RUN **FACILITY** MILL POND ROAD

TOWNSHIP MONTGOMERY TOWNSHIP

TYPE STONE ARCH **DESIGN** BARREL **MATERIAL** Stone

 # SPANS 3 **LENGTH** 57 ft **WIDTH** 16.5 ft

CONSTRUCTION DT 1800ca **ALTERATION DT** **SOURCE** NR NOMINATION

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The single-lane bridge spans a mill pond in the 18th- and 19th-century village of Bridgepoint. Downstream from the bridge is a dam creating the pond, and next to the bridge is a mill converted to a residence. The head race and tail race survive. Bridgepoint is a National Register Historic District.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible. Listed. Bridgepoint Historic District. 06/10/1975. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The three-span stone arch bridge contributes to the Bridgepoint Historic District because of its age and integrity of design. It is historically associated with the mill and pond, central features of the village. The bridge is 1 of at least 5 late-18th and early-19th century stone arch highway bridges in the county. The Bridgepoint Bridge is in good condition with some modern repointing.

INFOR MATION

PHOTO: 310:18-19 (09/30/91) REVISED BY (DATE): QUAD: Rocky Hill

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18E0405 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED TOWNSHIP LINE ROAD OVER PIKE RUN **FACILITY** TOWNSHIP LINE ROAD

TOWNSHIP HILLSBOROUGH TOWNSHIP

TYPE T BEAM **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 40 ft **WIDTH** 30 ft

CONSTRUCTION DT 1937 **ALTERATION DT** **SOURCE** PLAQUE/PLANS

DESIGNER/PATENT O. SMITH, JR., CO. ENG. **BUILDER** RICHARDS & GASTON

SETTING / CONTEXT The two-lane bridge spans a small creek in a rural area with cultivated fields, pastures, and wooded lots.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed, single-span, reinforced-concrete T-beam bridge has concrete balustrades and substructure. A utility pipe has been added to one side of the bridge. Although not found frequently in Somerset County, T-beam bridges are a common bridge type that was built widely in New Jersey from 1910 to 1940. The bridge is a representative example of the type, and it is not historically or technologically distinguished.

INFOR MATION

PHOTO: 102:24-25 (09/30/91) REVISED BY (DATE): QUAD: Rocky Hill

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18E0503 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED HOMESTEAD ROAD OVER ROYCE BROOK **FACILITY** HOMESTEAD ROAD

TOWNSHIP HILLSBOROUGH TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 47 ft **WIDTH** 20.6 ft

CONSTRUCTION DT 1917 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The two-lane bridge spans a small creek in a heavily developed residential area. To the north of the bridge is the Hillsborough High School (c.1970) and playing fields. To the south is a Greek Revival house (c.1840) on a knoll, and a suburban tract housing development.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span, skewed, encased steel-stringer bridge has concrete parapets and substructure. The builders plaque is missing from its alcove at the center of the bridge. A beam guide rail has been added to the exterior of the parapets. The bridge is 1 of at least 17 similar surviving encased steel stringer bridges built in the county between 1915 and 1929. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 102:32-33 (09/30/91) REVISED BY (DATE): QUAD: Rocky Hill

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18E0703 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED ROYCEFIELD ROAD OVER DUKES BROOK **FACILITY** ROYCEFIELD ROAD

TOWNSHIP HILLSBOROUGH TOWNSHIP

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 28 ft **WIDTH** 20 ft

CONSTRUCTION DT 1925 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The two-lane bridge carries a dirt road across a small creek at a southern entrance to the James B. Duke Estate. The bridge is at the intersection of Roycefield Road and Dukes Parkway. The area is undeveloped and wooded. Upstream from the bridge is a small dam and waterfall. The bridge matches the architecture and landscaping of the 327-acre estate, which was intended to mirror Duke's love of nature and art, and provide an escape from his work in New York City.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Duke Estate Historic District. Contributing.

CONSULT DOCUMENTS SHPO Finding 09/16/83, Letter 03/12/01. DOE 02/12/1985.

SUMMARY The reinforced concrete deck arch bridge is finished with rubble-coursed stone spandrel walls and parapets. The ring stones are set in a pattern of alternating a long and two short stones. The rustic bridge is historically associated with J.B. Duke's development of his estate in the first decades of the 20th century. It includes a number of other rusticated bridges, although each is individually different. The 2,00-acre estate is well preserved and is a potential historic district. The bridge is a contributing element to the Duke Estate Historic District, eligible for listing in the National Register of Historic Places under Criteria A and C.

INFOR MATION

Bibliography:
ONJH. Files by Subject: James B. Duke Estate, National Register Nomination, 1987.
Jenkins, John Wilbur. James B. Duke, Master Builder. New York: George H. Doran Co., 1927.

Physical Description: The 28'-long bridge is a single-span reinforced concrete elliptical arch with stone spandrel walls and parapets of rubble-coursed fieldstone of various sizes, shapes, and coloration's. The ring stones are an alternating pattern of one long stone and two short stones. At the approaches the parapets have rounded end posts. The bridge carries an unimproved road through a wooded portion of the J.B. Duke estate. The bridge is in excellent condition.

Historical and Technological Significance: The concrete arch bridge finished with stone spandrel walls and parapets is located within the boundaries of the James B. Duke Estate. The estate is considered National Register-eligible for its association with tobacco magnate Duke, and for its architectural significance as an outstanding example of a Gilded Age country estate built in a romanticized style. The landscaping, including walls and bridges which were designed as an integral part of the landscape scheme, are significant contributing elements to the estate's significance. The Roycefield Road bridge is specifically mentioned in the 1987 draft National Register nomination.

From 1893 until his death in 1925, one of James Duke's passions was the development of his 2000-acre country estate in Somerset County. In 1903 Duke hired the architectural firm of Buckenham and Miller of New York City to design the walls, pathways, bridges, fountains, well-houses, and buildings. One of the styles chosen for some walls and bridges was the "boulder style," popularized by Frederick Law Olmsted. Two teams of Italian masons from Long Island, Curcio Brothers and Barone and Darienco, constructed the rustic walls and bridges. No two bridges in the estate are exactly alike, and the Roycefield Road bridge is one of at least a half dozen bridges on the estate property. It is a contributing resource to the historic character of the well-preserved estate, which remains in the Duke family.

Boundary Description and Justification: The bridge is on the road that forms the west boundary of the Duke's Farm Historic District. It is a contributing resource to that district. The bridge and its surroundings are evaluated as significant.

PHOTO: 403:14-16 (10/31/91) REVISED BY (DATE): QUAD: Raritan

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18E0709 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED ROBERTS ROAD OVER RARITAN POWER CANAL **FACILITY** ROBERTS ROAD

TOWNSHIP BRIDGEWATER TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 49 ft **WIDTH** 12 ft

CONSTRUCTION DT 1931 **ALTERATION DT** 1982 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a single lane road over the Raritan Water Power Canal, which parallels the Raritan River for 3 miles. The canal was constructed in c.1840 to provide water power for mills in the town of Raritan to the west. The surrounding area is mixed-use commercial and residential. The bridge connects a neighborhood of small bungalows (c.1920-40) with the Old York Road to the north.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY Constructed in 1931, the steel stringer bridge has been significantly altered by modern repairs and additions. In 1982 steel-pipe columns were added at mid span to support the stringers, a transverse wood glue-lam deck and barrier replaced an old plank deck and an older masonry and concrete substructure was raised. The bridge is not historically associated with the construction of the Raritan Water Power Canal. It is not historically or technologically distinguished.

INFOR MATION

PHOTO: 406:32a-33a (01/12/92) REVISED BY (DATE): QUAD: Raritan

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18E0801 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0
NAME & FEATURE INTERSECTED NEVIUS STREET OVER RARITAN RIVER **FACILITY** NEVIUS STREET
TOWNSHIP RARITAN BOROUGH
TYPE THRU TRUSS **DESIGN** DOUBLE INTERSECTION PRATT **MATERIAL** Wrought Iron
 # SPANS 2 **LENGTH** 150 ft **WIDTH** 17 ft

CONSTRUCTION DT 1886 **ALTERATION DT** **SOURCE** COUNTY RECORDS
DESIGNER/PATENT F. A. DUNHAM, ENG. **BUILDER** WROUGHT IRON BRIDGE CO.

SETTING / CONTEXT The bridge carries a single-lane road over a picturesque section of the Raritan River. To the south is the estate of James B. Duke. The estate house is well off from the river, and next to the bridge are open fields, tree-lined lanes, and stone walls. Northeast of the bridge is Raritan's downtown area, and the former mills and factories that line the river. Next to the bridge is a Gothic-style water pumping station and a small brick hydroelectric power house (c.1900).

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No
CONSULT STATUS Individually Listed. Listed. Raritan River Bridge. 11/12/1992.
CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span, 10-panel, pin-connected, double-intersection Pratt thru truss bridge is one of the oldest and largest truss highway bridges in Somerset County. Constructed in 1886 by the Wrought Iron Bridge Co. of Canton, OH, a well-known and historically significant bridge fabricator, the bridge is a rare surviving example of the double-intersection Pratt truss type that was built widely for long-span highway and railroad bridges in the last half of the 19th century.

INFOR MATION

SOURCES:
Borough of Raritan. Raritan, New Jersey, Centennial, 1868-1968. Raritan, NJ: Borough of Raritan, 1968.
Condit, Carl W. American Building Art: The Nineteenth Century. New York, NY: Oxford University Press, 1960.
Raritan Public Library. "A Photographic History of the Borough of Raritan." Compiled by Students of Freeda Helmsletter and JoAnn Liptak. 1985.
Simmons, David. "Bridge Preservation in Ohio." Ohio Cities and Villages, Vol. 26, No. 8, August 1978, pp. 13-18.
Somerset County. 4th Book of Minutes of the Board of Chosen Freeholders of the County of Somerset. 1886.
_____. County Engineer Bridge Files #E0801. 1938.
Wrought Iron Bridge Company. Illustrated Pamphlet of Wrought Iron Bridges Built By Wrought Iron Bridge Company, Canton, Ohio. Canton, OH: Wrought Iron Bridge Co., 1885.

PHYSICAL DESCRIPTION: The Nevius Street Bridge is a single-lane, two-span bridge consisting of two nearly identical 10-panel, pin-connected, double-intersection Pratt thru trusses, each 150'-long out-to-out, and 23' in depth. The bridge has an 18'-wide roadway, and a cantilevered sidewalk with lattice railing on the upstream side. The bridge members are rolled metal sections; it has not been determined whether the sections are wrought iron, steel, or both. The lower chords are loop-welded eye bars, and the upper chords and inclined end posts are two channels with riveted cover plate. The hip verticals consist of three rods and all other verticals are channels with riveted lacing. The truss diagonals are paired eye bars and the counters with turnbuckles are paired rods. Where the counters and diagonals intersect the verticals there are metal shaped rings, commonly called "donuts." All panel point connections are made by steel pins with turned ends and tightening bolts.

The trusses have A-shaped portal bracing with decorative lattice, knee bracing and builders' plaque. The struts are I-beams, and the top-lateral and bottom lateral bracing are rods. The trusses have riveted-girder floor beams with steel stringers. The floor beams are hung from the lower panel points by U-shaped hangers. The deck is corrugated steel plate with asphalt road surface. The trusses have pipe hand railing and steel beam guard railing. The masonry abutments and cutwater center pier are coursed red sandstone, probably quarried locally. Both the south and north abutments show signs of repair with modern cement-based mortars. The bridge's south earth-filled approach is approximately 132-feet long with coursed red sandstone retaining walls and parapet topped with a pipe railing.

Alterations to the trusses have been minimal. Most of the changes appear to have taken in place in 1938. In that year, county crews installed new truss expansion bearings and concrete seats; rebuilt the floor beam hangers with welded connections; sealed the lower panel points with concrete in the space between the verticals' channels; and added the existing steel beam guide rails. Sometime between 1938 and 1970 the corrugated steel and asphalt deck replaced a wood plank deck. Angles have replaced some of the lower lateral bracing rods.

HISTORICAL AND TECHNOLOGICAL SIGNIFICANCE: The Nevius Street Bridge across the Raritan River is significant for its engineering and method of construction. Built in 1886, it is the one of the two oldest surviving metal truss highway bridge in the county, and the oldest surviving metal truss bridge still in continuous use. It represents an influential period of innovation and expansion in the development of American metal truss bridge building technology and was constructed by a nationally recognized bridge fabricator, the Wrought Iron Bridge Company of Canton, Ohio. The truss retains a high degree of integrity of design, and is one of the least altered and longest of the more than 20 surviving trusses in the county. The bridge is also the only double-intersection Pratt type truss in the county, a type increasingly rare but once employed widely by railroads in the middle decades of the 19th century. Metal trusses like the Nevius Street Bridge represent a noteworthy period of economic and industrial development in the county's history, and played a prominent part in the advance of a reliable network of overland transportation.

A bridge has spanned the Raritan River at the site of the Nevius Street Bridge, also known as the Raritan Bridge, since at least the mid-1840s. The first bridge was a six-span timber structure that connected the agricultural countryside of Hillsborough Township on the south side of the river with the village of Raritan on the north bank. Raritan's location and its abundance of water power led to its industrialization in the period between 1840 and 1880.

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US
November 12, 2002

The Nevius Street Bridge, erected in 1886, was in keeping with the town's growing industrial and urban character. In February, the Freeholders met at the old wood bridge and agreed that it had become dangerous to the traveling public. They authorized immediate makeshift repairs not to exceed $300, and moved to build a new bridge as soon as possible in the spring. In May, the Freeholders appointed a committee to advertise for proposals for both wooden and iron bridges, and for masonry substructures. The instructions were specific that if the committee excepted a proposal for an iron bridge it was to be for "2 spans of 150' each, a high truss of 80 lbs. pressure to the sq. ft. with a factor of 4, planked with Georgia pine 3" thick, the bridge to be raised 2-1/2" higher (sic)."

Two weeks later, the Freeholders awarded the superstructure contract to the Wrought Iron Bridge Company of Canton, Ohio, the lowest bidder at $7040. Substructure contracts were usually let separately from superstructure, and the masons prepared the abutments, piers, and wing walls, before the truss erection crews arrived at the site. In the case of the Nevius Street Bridge, the Freeholders awarded the contract for the substructure to two local masons, William W. Smith and Richardson Farrier. In a last minute change of plans, the Freeholders also accepted the petition of local citizens to widen the bridge roadway from 16 to 18 feet.

The Nevius Street Bridge was also the first time that the Board of Freeholder Minutes mention the employment of a professional civil engineer, F. A. Dunham, to supervise the construction of a bridge. Work on the substructure of the new bridge continued through the summer of 1886. In mid-October, the truss arrived from the Wrought Iron Bridge Company's shops in Canton. On November 17, 1886, the Freeholders accepted the Nevius Street Bridge as complete and made final payments for the masonry work, superstructure, grading, and engineering.

The Wrought Iron Bridge Company of Canton, Ohio, specialized in the construction of highway bridges. Organized in 1864 by David Hammond, the company was one of the first wrought iron truss manufacturers, and continued in existence for 36 years before being absorbed by the giant American Bridge Company in 1900. The company claimed in its promotional literature to have constructed trusses in 30 states, mostly east of the Mississippi River. In Canton, the fabricator had shops for the drafting, laying out, shearing, drilling, punching, and riveting of truss members, but did not roll its own iron or steel. The Wrought Iron Bridge Company was recognized as one of the most significant regional manufacturers of iron and steel trusses because of its workmanship and prolificacy. One other Wrought Iron Bridge Company truss is known to exist in Somerset County; the Higginsville Road Bridge over the South Branch of the Raritan River in Hillsborough Township is a well-preserved Pratt truss constructed in 1893. According to the company's 1885 trade catalogue, at least 10 other Wrought Iron Bridge Company trusses were built in New Jersey prior to 1885.

Boundary Justification and Description The bridge is individually listed in the National Register, and the boundary is limited to the span itself. The four quadrants of the bridge are also included in the Duke Farms Historic District that has been determined eligible through a SHPO finding.

PHOTO: 220:14-17 (11/30/91) REVISED BY (DATE): QUAD: Raritan

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18E0907 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED TALAMINI ROAD OVER PETERS BROOK **FACILITY** TALAMINI ROAD

TOWNSHIP BRIDGEWATER TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 26 ft **WIDTH** 30.1 ft

CONSTRUCTION DT 1918 **ALTERATION DT** 1970 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge carries a 2-lane road and sidewalks over a small stream in a mid-20th-century suburban residential neighborhood. Next to the bridge is country club with a swimming pool.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY Constructed in 1918, the single-span encased steel stringer bridge with concrete parapets and substructure has been significantly altered. In 1970 the bridge was widened with a prestressed box beam on the upstream side and a new concrete parapet and sidewalk added. Encased steel stringers are a common 1910s and 1920s short-span bridge type in Somerset County. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 110:1a,44a (01/18/92) REVISED BY (DATE): QUAD: Raritan

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18E1002 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MEADOW ROAD OVER CHAMBERS BROOK **FACILITY** MEADOW ROAD

TOWNSHIP BRIDGEWATER TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 31 ft **WIDTH** 25 ft

CONSTRUCTION DT 1931 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT O. SMITH, JR., CO. ENG. **BUILDER** RICHARDS & GASTON

SETTING / CONTEXT The two-lane bridge spans Chambers Brook in a rural area interspersed with suburban development. Next to the bridge are fields, woods, and a dairy farm.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span encased steel stringer bridge has concrete balustrades and a concrete substructure. The bridge is in good condition, but it is not distinctive as encased steel-stringer bridges with concrete balustrades are common throughout the state and is one of over 50 pre-World War II stringer spans in the county. The bridge is not historically nor technologically distinguished.

INFOR MATION

PHOTO: 104:13-14 (09/30/91) REVISED BY (DATE): QUAD: Gladstone

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18E1103 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED KLINES MILL ROAD OVER NORTH BRANCH RARITAN RIVER **FACILITY** KLINES MILL ROAD

TOWNSHIP BEDMINSTER TOWNSHIP

TYPE PONY TRUSS **DESIGN** PRATT HALF HIP **MATERIAL** Steel

 # SPANS 1 **LENGTH** 69 ft **WIDTH** 15.6 ft

CONSTRUCTION DT 1905ca **ALTERATION DT** 1981 **SOURCE** STYLE

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries an unimproved road over a small stream in a sparsely developed rural setting of both wooded areas and fields.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 4-panel half hip pin-connected Pratt pony truss that dates stylistically to ca. 1905 is supported on ashlar abutments. It has been extensively rebuilt with only the latticed angles of the verticals and the lower pin connections surviving. Many welded members have been added, and the extruded box section top chord was installed about 1981. Because of the numerous alterations, the bridge has lost most of its integrity as well as its technological and historical significance.

INFOR MATION

PHOTO: 104:38-41 (10/27/91) REVISED BY (DATE): QUAD: Gladstone

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18E1203 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED FAR HILLS ROAD OVER MINE BROOK **FACILITY** FAR HILLS ROAD

TOWNSHIP FAR HILLS BOROUGH

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 28 ft **WIDTH** 23 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The two-lane bridge spans Mine Brook south of the village of Far Hills. The surrounding area is dominated by large houses and estates. The bridge is architecturally similar to a large 1-1/2 story mansion(c.1930) just upstream from the bridge. That property, which is not included in the 1984 ONJH and Somerset County-sponsored cultural resources survey of Far Hills, is surrounded by a corresponding stone wall.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span elliptical reinforced-concrete deck arch bridge is finished in the rustic mode with fasciae of massive stones. On the downstream side of the bridge is a low masonry parapet, and on the upstream an 8'-high wall that runs the length of the property frontage. The bridge is finished in the same style as the nearby ca. 1930 stone house, which also spans the creek on a similar bridge. The span is not technologically noteworthy nor has the property been evaluated as historic.

INFOR MATION

PHOTO: 405:19-21 (11/30/91) REVISED BY (DATE): QUAD: Gladstone

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18E1205 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED OLD DUTCH ROAD OVER PEAPACK BROOK **FACILITY** OLD DUTCH ROAD

TOWNSHIP BEDMINSTER TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 58 ft **WIDTH** 15 ft

CONSTRUCTION DT 1925 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The single-lane bridge spans Peapack Brook near the confluence with the North Branch of the Raritan River. The surrounding area is residential with some well-preserved mid-19th century houses.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span, encased, steel-stringer bridge has an eastern fieldstone abutment and a concrete center pier and western abutment. A beam guide rail has been added. Encased steel stringers are a common 1920s bridge type in Somerset County. On first inspection, the bridge's setting has historic district potential, but the bridge is too new to be of significance in association with the nearby residential structures. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 103:8-9 (09/30/91) REVISED BY (DATE): QUAD: Gladstone

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18E1206 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 512 OVER NORTH BRANCH OF RARITAN RIVER **FACILITY** CR 512

TOWNSHIP FAR HILLS BOROUGH

TYPE PONY TRUSS **DESIGN** WARREN **MATERIAL** Steel

 # SPANS 1 **LENGTH** 48 ft **WIDTH** 29.9 ft

CONSTRUCTION DT 1910ca **ALTERATION DT** 1935 **SOURCE** STYLE

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane road over a small stream in a wooded area with scattered 19th- and 20th-century houses. A modern guide rail is set inside a fieldstone retaining wall approach to the bridge.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 4-panel rivet-connected Warren with verticals pony truss bridge is supported on ashlar abutments. Like several other Warren truss bridges in the county, it has been widened and strengthened with so many welded additions that the integrity of the design has been lost. The bridge was strengthened in 1935 and repaired in 1980 and 1988. It is one of 10 riveted Warren pony truss spans in the county, but the numerous alterations render it technologically and historically undistinguished.

INFOR MATION

PHOTO: 103:4-7 (10/10/91) REVISED BY (DATE): QUAD: Gladstone

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18E1303 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED HIGHLAND AVENUE OVER NORTH BRANCH OF RARITAN RIVER **FACILITY** HIGHLAND AVENUE

TOWNSHIP PEAPACK-GLADSTONE BOROUGH

TYPE STRINGER **DESIGN** **MATERIAL** Stone & Steel

 # SPANS 10 **LENGTH** 200 ft **WIDTH** 15.1 ft

CONSTRUCTION DT 1920 **ALTERATION DT** 1971 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The single-lane bridge spans the North Branch of the Raritan River south of the dam that creates Lake Ravine, a summer resort. The bridge is located in the hills east of Peapack and Gladstone. In the late-19th and early-20th century wealthy individuals built numerous mansions and estates in the area. At the bridge's western end is an impressive masonry and iron gate with lion's head water fountain. The gate leads to the former C. L. Blair estate, converted to a convent around 1950.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 10-span bridge is closed to vehicular traffic and is in poor condition. The bridge originally had 5 encased steel stringer spans with stone arch fascia and 5 stone arch spans. Two of the arch spans collapsed (c.1971) and corrugated metal pipes were added to two other spans. The bridge was constructed in 1920 to connect the estate with the pump house on the opposite side of the river. Both the bridge and the estate have been altered and have lost integrity of design.

INFOR MATION

PHOTO: 405:13-18 (10/31/91) REVISED BY (DATE): QUAD: Gladstone

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18E1313 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED HOLLAND AVENUE OVER PEAPACK BROOK **FACILITY** HOLLAND AVENUE

TOWNSHIP PEAPACK-GLADSTONE BOROUGH

TYPE MULTI GIRDER **DESIGN** JACK ARCH (CONCRETE) **MATERIAL** Steel

 # SPANS 1 **LENGTH** 43 ft **WIDTH** 30.5 ft

CONSTRUCTION DT 1915 **ALTERATION DT** 1930 **SOURCE** PLANS

DESIGNER/PATENT SOMERSET COUNTY ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The two-lane bridge spans Peapack Brook in the village of Peapack. The surrounding area is mixed use with 19th and 20th-century residences, a garage, and a railroad depot. The bridge carries a 2-lane street and one sidewalk over a minor stream. The area does not have historic district potential.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed multi-girder bridge has fieldstone fascias walls and parapets to simulate a stone arch bridge. Concrete jack arches are set between the floor beams. Channels have been added to the web of the original interior rolled girder. In 1930 the bridge was widened to the north by a stringer addition. It was finished with the same stone veneer. Although finished to blend with the picturesque village in which it is located, the bridge is not technologically or stylistically distinguished.

INFOR MATION

PHOTO: 103:10-11 (09/30/91) REVISED BY (DATE): QUAD: Gladstone

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18E1401 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED JACKSON ROAD OVER NORTH BRANCH OF RARITAN RIVER **FACILITY** JACKSON ROAD

TOWNSHIP BERNARDSVILLE BOROUGH

TYPE PONY TRUSS **DESIGN** WARREN **MATERIAL** Steel

 # SPANS 1 **LENGTH** 62 ft **WIDTH** 23.8 ft

CONSTRUCTION DT 1927 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT O. SMITH, COUNTY ENGINEER **BUILDER** A. H. COYNE, CONTRACTOR

SETTING / CONTEXT The single-lane bridge spans the river and connects Branch Road on the west bank with a private lane (Jackson Road). The surrounding area is hilly and rural with pastures, wooded lots, and scattered 19th- and 20th-century residences.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed rivet-connected 4-panel Warren pony truss bridge is a complete example of its type, but its design is typical of the period. It is composed of channels and plates for the chords, and of angles joined by battens for the diagonals. The Warren is the most common 20th-century truss type for highway bridges. The newest of the 10 Warren pony truss spans in the county, it is an extremely well preserved example of the historically significant bridge type, and it is thus notable.

INFORMATION

Bibliography:
Somerset County Engineer: Bridge File: E141.
Musti, J. Somerset County New Jersey 1688-1930. Camden, N.J., 1930.

Physical Description: The skewed 62'-long riveted Warren pony truss bridge is supported on a concrete substructure. The span is extremely well preserved. The upper chords and inclined end posts are built up box members with channels with cover plate and lacing. The diagonals are toe-down angles with battens, and the lower chords are toe-up angles with battens. Asymmetrical gusset plates are placed on both sides of the lower panel points, and they too are stiffened with a batten plate. The floor beams and stringers are rolled I sections. Lattice railings are still in place on the inside face of the trusses. As complete as the trusses is the rural setting of the bridge, which services and unimproved road.

Historical and Technological Significance: The Warren pony truss bridge on Jackson Road was built in 1927, and it is the latest of the surviving examples of metal truss bridges in the county. While exhibiting on innovative or patented details, the span is technologically and historically significant as a well preserved survivor of the last years of metal truss bridge erection in the area (criterion C). It was apparently designed by County Engineer Oscar Smith, Jr., who succeeded longtime County Engineer Joshua Doughty, and it was built at a time when most county-designed spans were encased stringers. There is no indication that this bridge was moved to Jackson Road from another location.

Prior to the widespread acceptance of rolled steel stringer and reinforced concrete arch bridges in the 1910s, the Warren pony truss was the most common early-20th century highway bridge for crossings of less than 100'. The Warren truss bridge type was patented in 1848 by two British engineers, James Warren and Willoughby Monzani. It differed from other trusses in that it did not have a vertical (compression) member and that alternate diagonals slope in opposite directions. Because some of those diagonals are compression members, the design was not well suited for pinned connections. With the perfection of the portable pneumatic equipment in the late-19th century, field riveting was possible, and the simple but rigid Warren truss came to the fore during the 1890s. During the early 20th century, steel Warren trusses appeared in rapidly growing numbers, and were used for both highway and railroad spans. However, by the end of the 1920s. few, if any, metal pony truss highway bridges were being built in New Jersey.

Boundary Description and Justification: The bridge is evaluated as individually distinguished, although its rural setting does offer fine integrity of setting. The significant boundary is limited to the span itself, both the superstructure and substructure.

PHOTO: 405:6-12 (11/10/91) REVISED BY (DATE): QUAD: Gladstone

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18F0302 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED GRIGGSTOWN CAUSEWAY OVER MILLSTONE RIVER **FACILITY** GRIGGSTOWN CAUSEWAY

TOWNSHIP FRANKLIN TOWNSHIP

TYPE PONY TRUSS **DESIGN** PRATT HALF HIP **MATERIAL** Steel

 # SPANS 2 **LENGTH** 94 ft **WIDTH** 13.5 ft

CONSTRUCTION DT 1903 **ALTERATION DT** 1938, 1978 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT DOVER BOILER WORKS **BUILDER** DOVER BOILER WORKS

SETTING / CONTEXT The one-lane bridge crosses the picturesque Millstone River in a rural area that retains its 19th century agrarian character. The span is located on the boundary of the Griggstown Historic District. The boundary is the middle of the river, thus half the bridge is outside the listed historic district.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Listed. Griggstown Historic District 08/02/1984. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 2-span Pratt half hip pin-connected pony truss bridge dates to 1903, but it has been strengthened and repaired at least twice (1938; 1978). It is supported on the west end by an ashlar abutment from an earlier span, but the pier and east abutment are concrete. Although built by Dover Boiler Works of Morris County, the bridge has been so altered by welded additional members and replacement flooring system that it has little design integrity. Alterations compromise its technological significance. Because of the alterations and the district boundary splitting the bridge, it is not contributing.

INFOR MATION

PHOTO: 100:16-23 (09/20/91) REVISED BY (DATE): QUAD: Monmouth Junction

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18F0603 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED SUNNYMEAD ROAD OVER ROYCE BROOK **FACILITY** SUNNYMEAD ROAD

TOWNSHIP HILLSBOROUGH TOWNSHIP

TYPE MULTI GIRDER **DESIGN** PARTIALLY ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 42 ft **WIDTH** 19 ft

CONSTRUCTION DT 1934 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The highway bridge spans a tree-lined brook in a sparsely-developed modern residential area (c.1950-70).

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span bridge consists of three steel deck girders with encased floor beams. The encasing has been partially removed from the floor beams and repairs have been made to the concrete deck. A beam guide rail has been added. The bridge has concrete abutments with masonry retaining walls on the approaches. The abutments are in poor condition and spalling. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 403:19-20 (10/31/91) REVISED BY (DATE): QUAD: Bound Brook

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18F0703 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED EAST DUKES PARKWAY OVER DUKES BROOK **FACILITY** EAST DUKES PARKWAY

TOWNSHIP HILLSBOROUGH TOWNSHIP

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 42 ft **WIDTH** 25 ft

CONSTRUCTION DT 1915ca **ALTERATION DT** **SOURCE** STYLE

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The two-lane bridge spans Dukes Brook near the confluence with the Raritan River south of Somerville. To the west is the intersection of Dukes Parkway and US 206. The bridge is next to a nursery.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 8/2/90

SUMMARY The single-span, reinforced concrete arch has concrete balustrades and substructure. The approach walls are made of fieldstone, and possibly predate the current bridge. The bridge is in poor condition with severe spalling and cracking. A beam guide rail has been added. The bridge is similar to at least 7 other surviving concrete arch bridges built in the county between 1911 and 1917. It is not historically or technologically distinguished.

INFOR MATION

PHOTO: 403:17-18 (10/31/91) REVISED BY (DATE): QUAD: Bound Brook

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18F0707 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED SOUTHSIDE AVENUE OVER PETERS BROOK **FACILITY** SOUTHSIDE AVENUE

TOWNSHIP SOMERVILLE BOROUGH

TYPE THRU GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 54 ft **WIDTH** 22 ft

CONSTRUCTION DT Unknown **ALTERATION DT** 1934, 1981 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The two-lane bridge spans Peters Brook in southern Somerville Borough. To the northeast of the bridge is a municipal park with swimming pool and baseball fields. To the west is a residential neighborhood (c.1920-50).

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span steel thru-girder with floor beams bridge has been rebuilt twice. In 1934 5 rivet-connected suspended floor beams were added to augment the original 3. In 1981 more floor beams were welded to the bottom flange. A sidewalk with a steel-mesh railing is cantilevered off the upstream side. The masonry abutments have been repointed. The extensively altered bridge is both historically and technologically undistinguished.

INFOR MATION

PHOTO: 404:34-35 (01/05/92) REVISED BY (DATE): QUAD: Bound Brook

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18F0803 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED HIGH STREET OVER PETERS BROOK **FACILITY** HIGH STREET

TOWNSHIP SOMERVILLE BOROUGH

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 2 **LENGTH** 80 ft **WIDTH** 40 ft

CONSTRUCTION DT 1911 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The two-lane bridge spans Peters Brook within Somerville's Peters Brook Park, a recreational area and greenstrip developed in the early 20th century. To the south of the bridge is a playground and swimming pool. The surrounding neighborhood is mixed-use commercial and residential (c.1890-1930), with many modern intrusions.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span, reinforced-concrete arch bridge with sidewalks has a concrete pier and circular decorative patterns on the closed spandrel walls. The balustrades have been removed and replaced with beam guide rails, except for 3 concrete end posts topped by decorative balls. The bridge is in poor condition with cracks and spalling. It is 1 of 6 concrete arches built in Peters Brook Park between 1905 and 1928. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 404:32-33 (01/05/92) REVISED BY (DATE): QUAD: Bound Brook

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18F0804 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CLIFF STREET OVER PETERS BROOK **FACILITY** CLIFF STREET

TOWNSHIP SOMERVILLE BOROUGH

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 75 ft **WIDTH** 39.1 ft

CONSTRUCTION DT 1915 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT JOSHUA DOUGHTY, CO. ENG. **BUILDER** WHITTAKER AND DICHL

SETTING / CONTEXT The two-lane bridge spans the Peters Brook within Peters Brook Park, a municipal recreation area and greenstrip developed in the first decades of the 20th century. The surrounding neighborhood is residential with single-family houses and apartments (c.1890-1930) with many modern intrusions and additions.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed, single-span, reinforced-concrete arch with sidewalks has concrete balustrades with vase-shaped balusters. The south fascia of the arch has been patched and resurfaced with concrete. The bridge is 1 of 6 concrete arches built in the park between 1905 and 1928. Reinforced-concrete arches were constructed widely in Somerset County. This one has a custom balustrade, but otherwise the bridge is a representative example of the type. It is not historically or technologically distinguished.

INFOR MATION

PHOTO: 404:30-31 (01/05/92) REVISED BY (DATE): QUAD: Bound Brook

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18F0805 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED GROVE STREET OVER PETERS BROOK **FACILITY** GROVE STREET

TOWNSHIP SOMERVILLE BOROUGH

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 64 ft **WIDTH** 30 ft

CONSTRUCTION DT 1916 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT JOSHUA DOUGHTY, CO. ENG. **BUILDER** SUTTON & ERNEST

SETTING / CONTEXT The two-lane bridge spans Peters Brook in Peters Brook Park, a municipal recreational area and greenstrip developed in the first decades of the 20th century. The surrounding neighborhood is residential with single-family homes (c.1850-1930) with many modern intrusions and additions.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span, reinforced concrete arch with sidewalks has a balustrade with vase-shaped balusters on the upstream side. The balustrade has been replaced with a steel railing on the downstream side. The approaches have paneled parapets. The span is 1 of 6 arches built in the park between 1905 and 1928, and is a technologically representative example of a common bridge type in the county. It is not historically or technologically distinguished.

INFOR MATION

PHOTO: 404:22-24 (12/20/92) REVISED BY (DATE): QUAD: Bound Brook

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18F0806 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BRIDGE STREET OVER PETERS BROOK **FACILITY** BRIDGE STREET

TOWNSHIP SOMERVILLE BOROUGH

TYPE CLOSED SPANDREL ARCH **DESIGN** RIBBED **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 65 ft **WIDTH** 32 ft

CONSTRUCTION DT 1925 **ALTERATION DT** 1932 **SOURCE** PLAQUE

DESIGNER/PATENT H. VAN EMBURGH, CO. ENG. **BUILDER** CROOK SUTTON

SETTING / CONTEXT The two-lane bridge spans Peters Brook in Peters Brook Park, a municipal recreation area and green strip in downtown Somerville. Next to the bridge are playing fields and a flower garden. The surrounding area is residential with single-family homes and apartment buildings (c.1850-1930) with many modern intrusions and additions.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed single-span bridge is a ribbed closed spandrel arch with architectonic details including abutment pylons with Moderne styling, masonry approach walls with concrete balustrades, and cantilevered sidewalks with wrought-iron railing. The bridge was originally built in 1925, but in 1932 the profile of the bridge was raised and the pylons rebuilt inkind. Gunite was also applied to the bridge over steel mesh work. The county-designed bridge is one of the few state examples of its type.

INFOR MATION

Bibliography:
Somerset County Engineer. Bridge File F0806.
Condit, Carl. American Building Art 20th Century, 1960.

Physical Description: The well-detailed and well-proportioned ribbed arch bridge has a 63'-long clear span and is composed of five elliptical reinforced concrete ribs on a concrete footing. The back walls are also concrete, but the wing walls are rubble stone. The arched ribs have a rise of 15'. The sidewalks are carried on encased brackets and enclosed by a metal fence-like railing set between concrete posts. The ends of the bridge are marked with massive concrete piers with brushed finish concrete panels. The piers were originally topped by decorative metal lamp posts and lamps with plain globes. The approaches are marked by concrete balustrades. The roadway over the bridge is inclined with a 4.8% rise from north to south. The profile was changed in 1932.

Historical and Technological Significance: The 1925 reinforced concrete ribbed arch bridge designed by Somerset County Engineer H. Van Emburgh and his staff is the only documented example of a county-built ribbed arch span in the region (criterion C). Although not technologically innovative, as the ribbed arch had been in use in this country since the 1910s, it is not a common bridge type in New Jersey. The use of reinforced ribs saved material, although it necessitates a deeper deck, and it produces an aesthetically pleasing span. This well-detailed bridge is located in a small urban park in Somerville. The profile of the bridge was changed in 1932, but the details of the original design were reused or reproduced. With the exception of the loss of the originally specified lights at the four corners of the bridge, the span appears to be complete.

Boundary Description and Justification: The bridge is evaluated as individually significant. The boundary is limited to the structure itself.

PHOTO: 405:35-39 (12/21/91) REVISED BY (DATE): QUAD: Bound Brook

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18F0807 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED DAVENPORT STREET OVER PETERS BROOK **FACILITY** DAVENPORT STREET

TOWNSHIP SOMERVILLE BOROUGH

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 2 **LENGTH** 71 ft **WIDTH** 30 ft

CONSTRUCTION DT 1905 **ALTERATION DT** 1926 **SOURCE** PLAQUE

DESIGNER/PATENT JOSHUA DOUGHTY, CO. ENG. **BUILDER** RICHARDS & GASTON

SETTING / CONTEXT The two-lane bridge with sidewalks spans Peters Brook in downtown Somerville at the northern end of Peters Brook Park, a municipal recreation area and greenstrip developed in the first decades of the 20th century. The neighborhood is residential with single and multi-family homes (c.1850-1930) with many modern intrusions.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span, reinforced-concrete deck arch bridge was constructed in 1905 and has paneled concrete parapets and concrete abutments and pier. In 1926 the cantilevered sidewalk with wrought-iron railing was added to the bridge on the downstream side. The bridge is 1 of 6 concrete arches built in the park between 1905 and 1928. It is not historically or technologically distinguished.

INFOR MATION

PHOTO: 405:33-34 (12/21/92) REVISED BY (DATE): QUAD: Bound Brook

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18F0810 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WILLIAM STREET OVER ROSS BROOK **FACILITY** WILLIAM STREET

TOWNSHIP SOMERVILLE BOROUGH

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 29 ft **WIDTH** 52.7 ft

CONSTRUCTION DT 1928 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT O. SMITH, JR., CO. ENG. **BUILDER** O. SUTTON

SETTING / CONTEXT The two-lane bridge with sidewalks spans a small brook on the edge of Somerville's Peters Brook Park, a municipal recreation area and greenstrip developed in the first decades of the 20th century. The neighborhood is residential with single- and multi-family homes (c.1850-1930) with many modern intrusions and additions.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span concrete arch bridge has paneled concrete parapets. It is the youngest of 6 concrete arches of various styles constructed in Peters Brook Park between 1905 and 1928. Early-20th century short-span concrete arches are a common bridge in Somerset County, and the bridge is a representative example of its type. It is not historically or technologically distinguished.

INFOR MATION

PHOTO: 404:25-26 (12/21/91) REVISED BY (DATE): QUAD: Bound Brook

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18F1007 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED SHORE DRIVE OVER CHAMBERS BROOK **FACILITY** SHORE DRIVE

TOWNSHIP BRIDGEWATER TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 34 ft **WIDTH** 11.5 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a lightly traveled, single-lane road over the inlet to Sunset Lake, a small recreational water feature with private beach. The surrounding neighborhood is suburban residential with homes dating from the 1920s to the 1970.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The short-span, steel stringer bridge has a concrete substructure. Riser beams have been added to support the asphalt pan roadway. Beam guide rails and a utility pipe have also been added. Built in 1930, the bridge is a historically and technologically undistinguished example of a common bridge type. It is one of over 50 pre-World War II stringer bridges in the county.

INFOR MATION

PHOTO: 110:9a-10a (01/18/92) REVISED BY (DATE): QUAD: Bernardsville

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18F1008 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CORIELL DRIVE OVER CHAMBERS BROOK **FACILITY** CORIELL DRIVE

TOWNSHIP BRIDGEWATER TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 2 **LENGTH** 42 ft **WIDTH** 11.5 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a single-lane road over the spillway to Sunset Lake, a private lake with beach in a mid-20th century suburban development. The masonry and concrete dam extends between the upstream wing walls of the bridge. The beach and lake are owned by the Sunset Lake Community Club.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span steel stringer bridge has a concrete substructure that has been extensively repaired and patched. Riser beams have been added to support the asphalt pan roadway. Beam guide rails have also been added. Built in 1930, the bridge is a historically and technologically undistinguished example of a common bridge type.

INFOR MATION

PHOTO: 110:11a-12a (01/18/92) REVISED BY (DATE): QUAD: Gladstone

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18F1105 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED LIBERTY CORNER ROAD OVER DEAD RIVER **FACILITY** LIBERTY CORNER ROAD

TOWNSHIP BERNARDS TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 2 **LENGTH** 41 ft **WIDTH** 36 ft

CONSTRUCTION DT 1935 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT O. SMITH, JR., CO. ENG. **BUILDER** JOSEPH W. ROGERS

SETTING / CONTEXT The bridge carries a 2-lane road over the Dead River in a sparsely developed residential area with 19th- and 20th-century houses.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span, concrete slab bridge has concrete balustrades and substructure. A utility pipe has been added on the downstream side of the bridge. Built in 1935 by Joseph W. Rogers, a contractor from Succasunna, NJ, the bridge is a representative example of a type commonly found throughout the state. It is not historically or technologically distinguished.

INFOR MATION

PHOTO: 111:41a-42a (01/18/92) REVISED BY (DATE): QUAD: Bernardsville

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18G0401 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CANAL ROAD OVER TEN MILE RUN **FACILITY** CANAL ROAD

TOWNSHIP FRANKLIN TOWNSHIP

TYPE PONY TRUSS **DESIGN** PRATT **MATERIAL** Wrought Iron

 # SPANS 1 **LENGTH** 25 ft **WIDTH** 16.3 ft

CONSTRUCTION DT 1886 **ALTERATION DT** Demolished **SOURCE** COUNTY ENG. FILE

DESIGNER/PATENT UNKNOWN **BUILDER** PENN BRIDGE COMPANY

SETTING / CONTEXT The one-lane bridge crosses a small stream in a rural, sparsely developed section of the county that is on the north end of the Griggstown Historic District.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Bridge was Not Individually Eligible. Listed. Griggstown Historic District 08/02/1984. Contributed.

CONSULT DOCUMENTS SHPO Letter 03/12/01

SUMMARY The 3-panel pin connected half hip Pratt pony truss with counters built by the Penn Bridge Co. of Beaver Falls. PA was the most complete example of the popular late-19th century truss type in the county. In 1993 the truss was dismantled and the superstructure rebuilt as a glulam slab bridge. The truss now serves as railings for a new, wider bridge. Although the original floorbeams are still present the original flooring system is gone. The ashlar abutments remain. The bridge is no longer individually eligible for listing in the National Register of Historic Places It is, however, a contributing element of the Griggstown Historic District under Criterion C.

INFOR MATION

PHOTO: 107:11a-18a (11/14/91 JPH (5/96)) REVISED BY (DATE): QUAD: Monmouth Junction

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18G0403 **CO** SOMERSET **OWNER** PRIVATE **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CANAL ROAD OVER SIX MILE RUN **FACILITY** CANAL ROAD

TOWNSHIP FRANKLIN TOWNSHIP

TYPE STONE ARCH **DESIGN** **MATERIAL** Stone

 # SPANS 3 **LENGTH** 50 ft **WIDTH** 75 ft

CONSTRUCTION DT 1834 **ALTERATION DT** 1984 **SOURCE** NR NOMINATION

DESIGNER/PATENT UNKNOWN **BUILDER** DELAWARE & RARITAN CANAL

SETTING / CONTEXT The bridge is an aqueduct serving to carry both River Road and the neighboring Delaware and Raritan Canal over Six Mile Run. The area is rural with fields and woods. To the north is the 19th-century crossroads village of Blackwells Mills with a restored canal lock tenders house maintained by the Delaware and Raritan Canal State Park. The canal right-of-way is listed in the National Register. Since the structure carries the listed resource, it is interpreted as also being eligible.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible. Listed. D&R Canal. 05/11/1973. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The three-span stone arch was constructed as part of the Delaware and Raritan Canal in 1834. The canal operated until about 1940 and primarily carried Pennsylvania coal to New York. After its closing, the state acquired the canal for a park. In 1984 the aqueduct, which carries the road and the canal/towpath at different levels, was restored. It is one of the largest of at least 16 stone arch structures along the canal. It is listed on the National Register because it carries the canal r-o-w.

INFOR MATION

PHOTO: 107:2a-7a (11/30/91) REVISED BY (DATE): QUAD: Monmouth Junction

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18G0404 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BLACKWELLS MILL ROAD OVER MILLSTONE RIVER **FACILITY** BLACKWELLS MILL ROAD

TOWNSHIP FRANKLIN TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 104 ft **WIDTH** 19.4 ft

CONSTRUCTION DT 1915 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT JOSHUA DOUGHTY, CO. ENG. **BUILDER** F. W. SCHWIERS, JR.

SETTING / CONTEXT The two-lane highway bridge spans the Millstone River near the village of Blackwells Mills. On the west side of the bridge is the intersection with River Road, which forms the eastern boundary of the Millstone Valley Agricultural District of late-18th and early-19th century farms. East of the bridge and paralleling the Millstone River is the Delaware and Raritan Canal Park, also a National Register property.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY In 1915 the 3-span, encased steel stringer bridge with concrete parapets was built on the masonry substructure of an earlier bridge. The old stone abutments and piers were widened with concrete additions to accommodate the new superstructure. The bridge borders a historic district and a state park property but is not within either boundaries or periods of significance. The bridge is a common 1910s bridge type in the county, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 107:8a-10a (11/30/91) REVISED BY (DATE): QUAD: Monmouth Junction

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18G0505 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MILLSTONE CAUSEWAY OVER MILLSTONE RIVER **FACILITY** MILLSTONE CAUSEWAY

TOWNSHIP FRANKLIN TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 28 **LENGTH** 818 ft **WIDTH** 24 ft

CONSTRUCTION DT 1930 **ALTERATION DT** Demolished **SOURCE** PLAQUE

DESIGNER/PATENT O. SMITH, JR., CO. ENG. **BUILDER** JAMES E. GANO

SETTING / CONTEXT The Millstone Causeway carries a two-lane county road and sidewalks over the Millstone River and its floodplain. The bridge spans between the villages of Millstone on the west side and East Millstone to the east. The middle of the river forms the eastern boundary of the 19th-century Millstone Historic District, thus the bridge lies partially within the district. East of the causeway is the Delaware and Raritan Canal, which forms the western boundary of the East Millstone Historic District.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Bridge was Individually Eligible. Listed. Millstone Historic District. 09/13/1976. Contributed.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 881' Millstone Causeway has 3 encased steel-stringer main spans over the Millstone River, and 25 short concrete T-beam spans over the river's floodplain. The bridge has a concrete substructure, concrete balustrades, and handsome concrete light standards with original double luminaries. The bridge is at a historically significant river crossing, and it is one of the largest bridges of its period in the county. Its state of preservation and size make it a significant local example of its type.

INFOR MATION

Bibliography:
Somerset County Engineer. Bridge File # G0505.
Mustin, M. Somerset County New Jersey. 1930.

Physical Description: The 881'-long viaduct has three encased steel stringer main spans over the Millstone River and 25 short reinforced concrete T beam spans over the flood plains. All are supported on a concrete substructure composed of concrete abutments with wingwalls and three-column concrete bents. The same concrete balustrade with circular-headed openings and scored posts is used the entire length of the span, and it is severely deteriorated in several sections. The most significant detail of the span is the five sets of concrete light standards. Each has a square base scored with Arts and Crafts-inspired decoration and a pylon post fitted with a two-arm luminaire. The posts and lamps rank among the most handsome of any bridge lighting detail in the state. The bridge is deteriorated but it does not appear to have been altered.

Historical and Technological Significance: The Millstone Causeway, designed for or by County Engineer Oscar Smith and built in 1930, is the largest and most ornamental of the over fifty concrete-encased stringer bridges in the county. While not technologically innovative or noteworthy, the bridge incorporates most of the architectonic features found on smaller and less ambitious bridges from the period between the world wars. The most notable feature of the span is the five sets of light posts. Finished in Arts-and-Crafts detailed cast concrete, the well-proportioned and well-detailed posts are fitted with two-arm luminaries that are as fine as any in the state (criterion C). Once a fairly common detail on both county and state bridges, such lighting fixtures are now rare. The bridge was fabricated by the American Bridge Company and built by James E. Gano, a local contractor. Oscar O. Smith, Jr., County Engineer, supervised the construction.

The bridge is at a historically significant river crossing that has had a bridge since the mid 18th century. The bridge crosses the Millstone River between two National Register-listed districts. Though the causeway lies partially within the Millstone Historic District, the bridge is not within the district's period of significance. The Millstone Causeway does not directly contribute to the historic character of either district and is thus noncontributing to the district. But, it is individually significant as a large, well-detailed, and well preserved example of a bridge type that played an important role in the road improvement campaigns of the 1920s and 1930s.

Boundary Description and Justification: The west side of the bridge is located in the National Register-listed Millstone Historic District, which identified the middle of the river as the boundary. Thus the west half of the bridge is located in a significant setting. A more accurate boundary for the district would be the west bank of the river which would then mean that the setting of the entire limit of the bridge is in a historic setting.

PHOTO: 107:19a-23a (10/31/91) REVISED BY (DATE): QUAD: Bound Brook

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US
November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18G0605 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WESTON CANAL ROAD OVER MILLSTONE RIVER **FACILITY** WESTON CANAL ROAD

TOWNSHIP MANVILLE BOROUGH

TYPE THRU GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 2 **LENGTH** 138 ft **WIDTH** 18.7 ft

CONSTRUCTION DT 1932 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The two-lane bridge spans the scenic Millstone River near an abandoned mill site south of the town of Manville. Downstream from the bridge is a concrete dam. The bridge is 1/3-mile west of the Delaware and Raritan Canal. The residential neighborhood west of the bridge is heavily developed.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span, thru-girder with floor beams bridge has ashlar abutments and pier that probably date from an earlier bridge. The pier has a coating of concrete. The floor beams support stringers which support the asphalt pan. A sidewalk with modern mesh railing is cantilevered from the downstream side. Some welded repairs have been made to the girder. The bridge is a representative example of a common bridge type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 403:34-36 (10/30/91) REVISED BY (DATE): QUAD: Bound Brook

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18G0609 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WILOUSKI STREET OVER TRIBUTARY OF MILLSTONE RIVER **FACILITY** WILOUSKI STREET

TOWNSHIP MANVILLE BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 26 ft **WIDTH** 19 ft

CONSTRUCTION DT 1921 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT H. VAN EMBURGH, CO. ENG. **BUILDER** W. I. HOUGHTON

SETTING / CONTEXT The narrow two-lane bridge spans a small brook just west of the Millstone River. The bridge is in a small wooded area next to the river in southern Manville Borough. The residential and commercial neighborhood to the west is heavily developed. A concrete dam extends between the bridge's upstream wing walls.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span encased steel stringer bridge with concrete substructure is significantly altered and in poor condition. The downstream parapet has been removed and beam guide rails added on both sides of the roadway. The abutments and concrete encasing are seriously spalled. Encased steel stringers are a common 1920s bridge type in Somerset County. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 403:37-38 (10/31/91) REVISED BY (DATE): QUAD: Bound Brook

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18G0701 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 533 (MAIN STREET) OVER ROYCE BROOK **FACILITY** CR 533 (MAIN STREET)

TOWNSHIP MANVILLE BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 75 ft **WIDTH** 57.4 ft

CONSTRUCTION DT 1930 **ALTERATION DT** 1970 **SOURCE** PLAQUE

DESIGNER/PATENT O. SMITH, JR., CO. ENG. **BUILDER** RICHARDS & GASTON

SETTING / CONTEXT The 4-lane bridge with sidewalks is located on the main North-South highway route in Manville. The neighborhood is mixed-use residential and commercial with many modern structures. Next to the bridge is the Manville American Legion Post and a garage.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 2-span, encased steel stringer bridge with concrete substructure and balustrade was widened in 1970 on the upstream side with a prestressed concrete beam to accommodate another lane of traffic and a new sidewalk. The abutments and pier were also widened with concrete additions, and a new steel railing was added. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 107:24a-26a (10/31/91) REVISED BY (DATE): QUAD: Bound Brook

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18G0702 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 533 (MAIN STREET) OVER RARITAN RIVER **FACILITY** CR 533 (MAIN STREET)

TOWNSHIP MANVILLE BOROUGH

TYPE STRINGER **DESIGN** CONTINUOUS **MATERIAL** Steel

 # SPANS 9 **LENGTH** 554 ft **WIDTH** 48 ft

CONSTRUCTION DT 1896 **ALTERATION DT** 1934, 1975 **SOURCE** PLAQUE

DESIGNER/PATENT O. SMITH, JR., CO. ENG. **BUILDER** JAMES E. GANO (1934)

SETTING / CONTEXT The 4-lane bridge spans the Raritan River between Manville Borough and Bridgewater Township. The bridge is in a major industrial area near the Johns-Manville asbestos factory (closed), the National Starch factory, and the main line of Conrail. Open fields next to the bridge have been used for the dumping of spoils from industrial processes.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 9-span bridge has three encased steel stringer main spans over the main channel of the river, and 6 arch approach spans to the south over the river's flood plain. The bridge has been highly altered and has at least 3 periods of construction. The approach spans are stone arches (1896) with stringer/concrete (1934) and box beam/stringer (1975) additions. The main spans (1934) were widened with box beams (1975). The bridge is not historically or technologically distinguished.

INFOR MATION

Bibliography:
Somerset County - 250 Years. Somerville, NJ: Somerset Press, 1938.
Somerset County Engineer. Bridge Plans and Cards.

Physical Description: The nine span bridge consists of three main spans over the Raritan River and six approach spans over the flood plain to the south. The bridge represents three major periods of construction. It was initially built in 1896 with six stone arch approach spans and a Pratt thru truss main span. In 1934, the truss was removed and encased steel stringers and a new concrete substructure erected in its place. At the same time, the arches were widened on the upstream side with encased stringers. The deck was rebuilt and concrete balustrades were added to the bridge. The balustrade posts had light standards and lanterns (since removed), and a commemorative monument with the county seal and builder's plaque was erected near center-span. In 1974, the bridge was widened to four lanes with a median barrier. The approach spans were widened on the downstream side with prestressed box beams, and the main spans with stringers. The downstream balustrade was removed, and a concrete barrier parapet with pipe railing was added. The stone arches were sprayed with gunite.

Historical and Technological Significance: Built in 1896 as a pin-connected thru truss main span with stone arch approach spans on the south side, the bridge, known locally as the Van Veghten Bridge, has been significantly altered and bears little resemblance to the original, historic structure. It does not have integrity of design. In 1934 the thru truss was removed, the substructure was rebuilt, and a new encased rolled stringer superstructure was placed. The stone arch approach spans were encased in concrete and widened on the upstream side with stringer additions. A standard-design concrete balustrade was installed on both sides of the widened bridge. Memorial plaques were set in a classically inspired frontispiece atop one of the balustrade posts near the center of the upstream side. The 1934 rebuilding was done by James E. Gano. In 1974 the bridge was widened again, and at that time the downstream balustrade placed in 1934 was lost. the 1974 work was designed by A. G. Lichtenstein & Associates. The bridge has lost its original integrity of design, and thus its historical and technological significance. The 1934 and 1974 additions are not historically nor technologically significant.

The bridge is at the location of one of the earliest bridges across the Raritan River in Somerset County. The bridge is known locally as the Van Veghten Bridge, after an 18th-century family that lived near the site. No 18th-century bridge fabric is known to survive.

PHOTO: 111:4a-8a (10/31/91) REVISED BY (DATE): QUAD: Bound Brook

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18G0703 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 533 OVER CUCKHOLDS BROOK **FACILITY** CR 533

TOWNSHIP BRIDGEWATER TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 42 ft **WIDTH** 48 ft

CONSTRUCTION DT 1929 **ALTERATION DT** 1970ca **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The 4-lane bridge spans a small brook in a mixed use commercial and residential neighborhood between the towns of Bound Brook and Somerville. Near the bridge are an electric substation and a warehouse of modern construction.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span bridge has been significantly altered. The original structure was a 2-lane wide encased steel stringer bridge with concrete substructure. The bridge was widened ca.1970 to 4-lanes and 2 sidewalks with the addition of unencased steel stringers and supporting concrete abutments on both sides of the original bridge. The bridge has no significant historical or technological associations.

INFOR MATION

PHOTO: 404:38-39 (01/05/92) REVISED BY (DATE): QUAD: Bound Brook

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18G0802 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED KLINE PLACE OVER CUCKOLDS BROOK **FACILITY** KLINE PLACE

TOWNSHIP BRIDGEWATER TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 31 ft **WIDTH** 30 ft

CONSTRUCTION DT 1933 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The two-lane bridge spans a small brook that meanders through a residential neighborhood of bungalows (c.1920-50).

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span encased steel-stringer bridge has a concrete substructure and pipe railing. It is a representative example of a common short-span bridge type. It is not historically or technologically distinguished.

INFOR MATION

PHOTO: 404:42-43 (01/05/92) REVISED BY (DATE): QUAD: Bound Brook

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18G0810 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MARTINSVILLE ROAD (CR 525) OVER MIDDLE BROOK **FACILITY** MARTINSVILLE ROAD (CR 525)

TOWNSHIP BRIDGEWATER TOWNSHIP

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 75 ft **WIDTH** 23.7 ft

CONSTRUCTION DT 1917 **ALTERATION DT** Demolished **SOURCE** PLAQUE

DESIGNER/PATENT O. SMITH, JR., CO. ENG. **BUILDER** UNKNOWN

SETTING / CONTEXT The two-lane bridge spans a creek flowing through a hilly wooded area of the Watchung Mountain Range north of Bound Brook. A large open pit quarry is west of the bridge. Upstream from the bridge are the masonry abutments of a previous bridge, abandoned when the road was regraded in 1917.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Bridge was Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span reinforced concrete arch bridge has paneled parapets. It is in poor condition with severe spalling. The bridge is 1 of at least 7 similar surviving concrete arch bridges built in the county between 1911 and 1917. It is not historically or technologically distinguished.

INFOR MATION

PHOTO: 109:43-44 (11/30/91) REVISED BY (DATE): QUAD: Bound Brook

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18G0812 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MARTINSVILLE ROAD (CR 525) OVER MIDDLE BROOK **FACILITY** MARTINSVILLE ROAD (CR 525)

TOWNSHIP BRIDGEWATER TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 44 ft **WIDTH** 30 ft

CONSTRUCTION DT 1935 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The two-lane bridge is located on a winding road leading over the First Watchung Mountain. It is just downstream from the Bound Brook Water Co. reservoir. Visible from the bridge is the large concrete dam and riprap spillway creating the reservoir.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed, single-span, encased steel stringer bridge has paneled fascia, concrete balustrades, and concrete substructure. A beam guide rail has been added. The bridge is a representative example of a common bridge type found widely across the state, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 405:1-2 (11/30/91) REVISED BY (DATE): QUAD: Bound Brook

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18G0903 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED NEWMAN'S LANE OVER WEST BRANCH OF MIDDLE BROOK **FACILITY** NEWMAN'S LANE

TOWNSHIP BRIDGEWATER TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 32 ft **WIDTH** 20 ft

CONSTRUCTION DT 1929 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT O. SMITH, JR., CO. ENG. **BUILDER** J. GANO

SETTING / CONTEXT The two-lane bridge spans a small creek west of the Washington Valley Reservoir. The neighborhood is sparsely developed with large wooded lots and scattered 19th- and 20th-century housing. The bridge is south of the village of Martinsville.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span, encased, steel-stringer bridge has concrete parapets and substructure. The parapets are stepped, being slightly lower over the approaches than the superstructure. The bridge has a metal tie rod running laterally through the stringers at center span. The bridge is a representative example of a common short-span bridge type built in the county in the 1920s. It is not historically or technologically distinguished.

INFOR MATION

PHOTO: 405:4-5 (11/30/91) REVISED BY (DATE): QUAD: Bound Brook

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18G1102 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MARTINSVILLE ROAD (CR 525) OVER DEAD RIVER **FACILITY** MARTINSVILLE ROAD (CR 525)

TOWNSHIP WARREN TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 53 ft **WIDTH** 30 ft

CONSTRUCTION DT 1942 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT O. SMITH, JR., CO. ENG. **BUILDER** HOFFMAN CONSTRUCTION CO.

SETTING / CONTEXT The bridge carries a 2-lane road over the river near an interchange of I-78. The neighborhood is heavily developed with corporate offices. Next to the bridge is a new multi-story hotel.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed, single-span encased steel stringer bridge has concrete balustrades and substructure. Beam guide rails have been added, and there is a utility pipe attached to the upstream side of the bridge. The bridge is a representative example of a common bridge type found widely across the state. It is not historically or technologically distinguished.

INFOR MATION

PHOTO: 111:36a-38a (01/18/92) REVISED BY (DATE): QUAD: Bernardsville

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18G1107 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED SOMERVILLE ROAD OVER DEAD RIVER **FACILITY** SOMERVILLE ROAD

TOWNSHIP BERNARDS TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 35 ft **WIDTH** 16.4 ft

CONSTRUCTION DT 1935 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The two-lane bridge spans the Dead River next to a horse farm and equestrian school. The river's flood plain is undeveloped and wooded.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span encased steel stringer bridge has rubble-coursed masonry parapets and abutments with wingwalls. The abutments may date to an earlier bridge. A representative example of a common type, the stringer span is not historically or technologically distinguished.

INFOR MATION

PHOTO: 111:39a-40a (01/18/92) REVISED BY (DATE): QUAD: Bernardsville

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18G1109 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MINE BROOK ROAD OVER DEAD RIVER **FACILITY** MINE BROOK ROAD

TOWNSHIP BERNARDS TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 24 ft **WIDTH** 23.8 ft

CONSTRUCTION DT 1915 **ALTERATION DT** **SOURCE** STYLE

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a two-lane road over a small brook in a 19th- and 20th-century residential area of large wooded lots.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span encased steel stringer bridge has scored parapets and concrete substructure. The bridge is in poor condition with severe cracking and spalling. Some concrete has been repaired and patched numerous times. The bridge is one of at least 17 similar encased steel stringer bridges with parapets built in the county between 1915 and 1929. It is not historically or technologically distinguished.

INFOR MATION

PHOTO: 111:43a-44a (01/18/92) REVISED BY (DATE): QUAD: Bernardsville

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18H0812 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED THOMPSON AVENUE (CR 525) OVER MIDDLE BROOK **FACILITY** THOMPSON AVENUE (CR 525)

TOWNSHIP BRIDGEWATER TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 67 ft **WIDTH** 35.8 ft

CONSTRUCTION DT 1936 **ALTERATION DT** 1989 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The two-lane bridge spans tree-lined Middle Brook north of the busy intersection of US 22 and CR 525. The surroundings are commercial with a restaurant to the south and an active gravel quarry to the north.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed, single-span, encased steel stringer with paneled fascia bridge has been significantly altered. In 1989 the bridge was rehabilitated with repairs to the stringers, the addition of a concrete slab deck, the addition of a sidewalk on the upstream side, and the replacement of the original balustrade with modern railing. The bridge is a common type, and has no significant historical or technological associations.

INFOR MATION

PHOTO: 109:41-42 (11/30/91) REVISED BY (DATE): QUAD: Bound Brook

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18H0909 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED DOCK WATCH HOLLOW ROAD OVER DOCK WATCH HOLLOW RUN **FACILITY** DOCK WATCH HOLLOW ROAD

TOWNSHIP WARREN TOWNSHIP

TYPE THRU GIRDER **DESIGN** PARTIALLY ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 55 ft **WIDTH** 14.9 ft

CONSTRUCTION DT 1930 **ALTERATION DT** 1990 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The single-lane bridge spans a small brook in a wooded, hilly, sparsely developed area of Warren Township in the Watchung Mountains. To the west of the bridge is an active quarry.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span, skewed bridge is a thru girder with encased floor beams. Ca.1991 the bridge was strengthened with supporting piers under the girders at the northeast and southwest corners. The concrete substructure has been repaired and patched. The original pipe railing has been removed and a beam guide rail added. The altered bridge is similar to at least 5 other thru girders built in the county between 1922 and 1930. It is not historically or technologically distinguished.

INFOR MATION

PHOTO: 113:6a-8a (01/25/92) REVISED BY (DATE): QUAD: Bound Brook

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18H0911 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED FERGUSON ROAD OVER BRANCH OF DOCK WATCH HOLLOW RUN **FACILITY** FERGUSON ROAD

TOWNSHIP WARREN TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 34 ft **WIDTH** 20 ft

CONSTRUCTION DT 1932 **ALTERATION DT** 1981 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** JAMES E. GANO

SETTING / CONTEXT The bridge carries two-lanes of traffic over a small brook in the Watchung mountain range. It is located on a sharp curve. The surrounding area is 19th- and 20th-century residential on wooded lots.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span steel stringer bridge was significantly altered in 1981 by the removal of the concrete parapets and the concrete encasing of the exterior stringers. Beam guide rails were added. Steel stringers are a common short-span bridge type, and the bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 113:4a-5a (01/25/92) REVISED BY (DATE): QUAD: Bound Brook

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18H0913 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED DOCK WATCH HOLLOW ROAD OVER DOCK WATCH HOLLOW RUN **FACILITY** DOCK WATCH HOLLOW ROAD

TOWNSHIP WARREN TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 40 ft **WIDTH** 20 ft

CONSTRUCTION DT 1928 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT O. SMITH, COUNTY ENGINEER **BUILDER** C. SUTTON

SETTING / CONTEXT The bridge carries a two-lane county road over a small brook in the Watchung Mountain Range. The surrounding area is 19th- and 20th-century residential on large wooded lots.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed single-span encased steel stringer bridge has incised concrete parapets. The northern abutment is masonry with concrete reinforcing, while the southern abutment is concrete with no exterior signs of masonry. The bridge is in poor condition with spalling and cracking. It is 1 of at least 17 similar short-span encased steel stringer bridges built in the county from 1915 to 1929. It is not historically or technologically distinguished.

INFOR MATION

PHOTO: 113:1a-2a (01/25/92) REVISED BY (DATE): QUAD: Bound Brook

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18H1006 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MOUNTAIN VIEW ROAD OVER TRIBURARY OF DEAD RIVER **FACILITY** MOUNTAIN VIEW ROAD

TOWNSHIP WARREN TOWNSHIP

TYPE THRU GIRDER **DESIGN** PARTIALLY ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 39 ft **WIDTH** 19.8 ft

CONSTRUCTION DT 1925ca **ALTERATION DT** **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries two-lanes of traffic over a small brook in a sparsely developed residential area of 19th- and 20th-century houses.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed, single-span, thru girder with encased floor beams bridge is similar in design to at least 5 other shallow thru girder bridges built in this part of the county between 1922 and 1930. The bridge has a concrete substructure and concrete parapets on the approaches. A beam guide rail has been added, and concrete repairs have been made to the substructure. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 220:8-9 (01/25/92) REVISED BY (DATE): QUAD: Bernardsville

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18H1105 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED ACKEN ROAD OVER DEAD RIVER **FACILITY** ACKEN ROAD

TOWNSHIP BERNARDS TOWNSHIP

TYPE THRU GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 2 **LENGTH** 52 ft **WIDTH** 14.9 ft

CONSTRUCTION DT 1927 **ALTERATION DT** 1981 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The single-lane bridge is located in an undeveloped wooded area of the flood plain of the Dead River. Nearby is a high-tension electric power line.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge is a make-shift of old and new structural components, and is a thru girder with floor beams. County records indicate that the superstructure was rebuilt in 1927, stringers replaced in 1981, and deck replaced in 1985. Concrete piers support the bridge at center span, and floor beams are spaced at uneven intervals and are attached to the rolled I-section girders by U-shaped hangers. The abutments are masonry extended with concrete. The span is not technologically noteworthy.

INFOR MATION

PHOTO: 110:26a-27a (01/18/92) REVISED BY (DATE): QUAD: Bernardsville

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18H1110 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED VALLEY ROAD (CR 512) OVER PASSAIC RIVER **FACILITY** VALLEY ROAD (CR 512)

TOWNSHIP BERNARDS TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 103 ft **WIDTH** 33 ft

CONSTRUCTION DT 1931 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT O. SMITH, JR., CO. ENG. **BUILDER** GRAY CONSTRUCTION CO.

SETTING / CONTEXT The two-lane bridge with sidewalks spans the Passaic River, which forms the border between Morris County and Somerset County. The bridge is located in a mid-20th century suburban residential neighborhood. Most of the homes have modern additions and alterations.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The three-span, concrete-encased steel stringer bridge with concrete balustrades and substructure was constructed in 1931 as a joint-county project of Morris County and Somerset County. The bridge is in poor condition with concrete spalling exposing the lower flanges of the stringers. The bridge is a common 20th-century bridge type, similar to bridges found throughout the state. It is not historically or technologically distinguished.

INFOR MATION

PHOTO: 110:24a-25a (01/18/92) REVISED BY (DATE): QUAD: Bernardsville

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18K0902 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED KING GEORGE ROAD OVER EAST BRANCH OF MIDDLE BROOK **FACILITY** KING GEORGE ROAD

TOWNSHIP WARREN TOWNSHIP

TYPE THRU GIRDER **DESIGN** PARTIALLY ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 50 ft **WIDTH** 19.8 ft

CONSTRUCTION DT 1925 **ALTERATION DT** 1982 **SOURCE** PLANS

DESIGNER/PATENT UNKNOWN **BUILDER** LEVERING & GARRIGUES CO.

SETTING / CONTEXT The two-lane bridge spans a tree-lined creek in a suburban residential development (c.1920-1990).

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span 1925 steel thru girder bridge with partially encased floor beams has been significantly altered by widening with steel stringers on the downstream side (1982). In order to widen the bridge the downstream girder was cut down and converted into a stringer the same depth as the ones used for the widened extension. The bridge has a concrete substructure and beam guide rail railings. It is heavily altered and is also not historically or technologically distinguished.

INFOR MATION

PHOTO: 404:8-10 (01/05/92) REVISED BY (DATE): QUAD: Bound Brook

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18K0903 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MORNING GLORY ROAD OVER EAST BRANCH OF MIDDLE BROOK **FACILITY** MORNING GLORY ROAD (CR 527)

TOWNSHIP WARREN TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 2 **LENGTH** 40 ft **WIDTH** 28 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT O. SMITH, JR., CO. ENG. **BUILDER** SNOOK BROTHERS

SETTING / CONTEXT The two-lane bridge is located on the outskirts of the 19th-century village of Springdale in Washington Valley. The surroundings are gently rolling hills with moderate residential development. Next to the bridge is a pasture.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed two-span concrete-slab bridge has a concrete substructure and concrete parapets with reticular pattern panels. The reticular parapet feature is not the most common parapet decorative pattern, but it is not unusual or technologically noteworthy. At least one other 1930 concrete slab bridge in the county has the same detailing (18C0705). Concrete slab bridges are a common short-span bridge type throughout the state, and the bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 404:6-7 (01/05/92) REVISED BY (DATE): QUAD: Bound Brook

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18K0908 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WARRENVILLE ROAD OVER EAST BRANCH OF MIDDLE BROOK **FACILITY** WARRENVILLE ROAD

TOWNSHIP WARREN TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 23 ft **WIDTH** 31.7 ft

CONSTRUCTION DT 1914 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The two-lane bridge is located near a modern commercial area with office buildings and a shopping center. To the east is the Warren Branch Golf Course. Next to the bridge is a modern steel foot bridge with metal railing.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed, single-span concrete slab bridge rests on older masonry abutments that have been widened with concrete additions. Pipe railings have been removed, and a beam guide rail added. The bridge is a historically and technologically undistinguished example of a common short-span bridge type.

INFOR MATION

PHOTO: 113:9a-10a (01/25/92) REVISED BY (DATE): QUAD: Plainfield

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18K1102 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MOUNTAIN AVENUE OVER CORY'S BROOK **FACILITY** MOUNTAIN AVENUE

TOWNSHIP WARREN TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 2 **LENGTH** 33 ft **WIDTH** 26.6 ft

CONSTRUCTION DT 1927 **ALTERATION DT** 1980 **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a two-lane road over a small brook in a 19th- and 20th-century residential area with large wooded lots.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The short-span steel stringer bridge has been extensively altered. The 1927 bridge was originally an encased steel stringer with concrete parapets. In c.1980 the fascia encasing and parapets were removed, beam guide rails added, and supporting concrete piers added at mid-span. The bridge rests on older masonry abutments that have extensive concrete repairs and reinforcing. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 220:10-11 (01/25/92) REVISED BY (DATE): QUAD: Bernardsville

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18L0901 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MADISON AVENUE OVER GREEN BROOK **FACILITY** MADISON AVENUE

TOWNSHIP GREEN BROOK TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 2 **LENGTH** 56 ft **WIDTH** 30 ft

CONSTRUCTION DT 1915 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The two-lane bridge spans Green Brook on the county line with Middlesex County. The neighborhood is mixed 19th and 20th-century residential. West of the bridge is a leaf composting area.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span concrete slab bridge has been altered by the addition of modern steel railings and concrete buttressing to the concrete abutments and pier. The fascia have molded banding. The deck shows signs of deterioration and spalling. Concrete slabs are a common bridge type, and the bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 109:37-38 (11/30/91) REVISED BY (DATE): QUAD: Plainfield

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18L0902 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MADISON AVENUE OVER TRIBUTARY OF GREEN BROOK **FACILITY** MADISON AVENUE

TOWNSHIP GREEN BROOK TOWNSHIP

TYPE DECK GIRDER **DESIGN** PARTIALLY ENCASED **MATERIAL** 109:39-40

 # SPANS 1 **LENGTH** 35 ft **WIDTH** 19 ft

CONSTRUCTION DT 1925 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT H. VAN EMBURGH, CO. ENG. **BUILDER** ARTHUR E. SMITH

SETTING / CONTEXT The two-lane bridge spans a small creek in a mixed 19th- and 20th-century residential neighborhood.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span built-up deck girder with encased floor beams bridge has a cantilevered sidewalk on the downstream side. Modern beam guide rails have been welded to the bridge. The abutments are concrete. The bridge is 1 of at least 5 similar surviving girder bridges built in the northeastern part of the county between 1922 and 1930. It is not historically or technologically distinguished.

INFOR MATION

PHOTO: 109:39-40 (11/30/91) REVISED BY (DATE): QUAD: Plainfield

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18L0904 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED JEFFERSON AVENUE OVER GREEN BROOK **FACILITY** JEFFERSON AVENUE

TOWNSHIP GREEN BROOK TOWNSHIP

TYPE PONY TRUSS **DESIGN** PRATT **MATERIAL** Metal

 # SPANS 1 **LENGTH** 51 ft **WIDTH** 19.2 ft

CONSTRUCTION DT 1900 **ALTERATION DT** 1938 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane street over a small stream that serves as the boundary between Somerset and Middlesex counties. The surrounding area is dotted with late-19th and early-20th century houses. A cantilevered sidewalk is on the upstream side of the bridge.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY Built in 1900 as a pin-connected Pratt pony truss on ashlar abutments, the 4-panel bridge has been so altered with welded elements that it no longer functions as a pin-connected truss. The upper pins are not connected to the top chord. The first rebuilding of the bridge occurred in 1938. The span has little integrity of original design, and as a result is not technologically or historically distinguished. A modern steel grid deck has been added as has a cantilevered sidewalk.

INFOR MATION

PHOTO: 109:34-36 (10/27/91) REVISED BY (DATE): QUAD: Plainfield

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18L1013 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED STIRLING ROAD OVER STONY BROOK **FACILITY** STIRLING ROAD

TOWNSHIP WARREN TOWNSHIP

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 71 ft **WIDTH** 32 ft

CONSTRUCTION DT 1910 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The two-lane bridge spans a brook in the Second Watchung Mountain Range in the northeastern part of the county. The bridge is located at a sharp curve in the road. The surrounding area is residential with mid-20th century homes on large wooded lots.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed, single-span, reinforced concrete arch bridge is in poor condition with severe spalling and deterioration to the spandrel walls and arch barrel. Original railings have been removed and replaced with beam guide rails. The bridge has field stone wing walls that probably date to an earlier bridge. The arch is 1 of at least 7 similar arch bridges built in the county between 1910 and 1917. It is not historically or technologically distinguished.

INFOR MATION

PHOTO: 112:33-36 (01/25/92) REVISED BY (DATE): QUAD: Chatham

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18L1108 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED STIRLING ROAD OVER PASSAIC RIVER **FACILITY** STIRLING ROAD

TOWNSHIP WARREN TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 2 **LENGTH** 89 ft **WIDTH** 18.6 ft

CONSTRUCTION DT 1925 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The narrow, two-lane bridge carries traffic across the Passaic River, which forms the border between Somerset County and Morris County. To the north in Morris County is the small village of Stirling. The buildings near the bridge are a mix of 19th- and 20th-century residential and commercial structures.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span steel stringer bridge is built on older masonry abutments wingwalls and a cutwater concrete pier. Steel railings and utility pipes have been added to the bridge. Sections of the original pipe railing with 2-leg posts remain on the approaches. The span is a historically and technologically undistinguished example of a common bridge type.

INFOR MATION

PHOTO: 112:37-38 (01/25/92) REVISED BY (DATE): QUAD: Chatham

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18L1109 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED HILLCREST ROAD (CR 531) OVER PASSAIC RIVER **FACILITY** HILLCREST ROAD (CR 531)

TOWNSHIP WARREN TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 2 **LENGTH** 92 ft **WIDTH** 18.3 ft

CONSTRUCTION DT 1925 **ALTERATION DT** 1989 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The narrow two-lane bridge carries traffic and one sidewalk across the Passaic River, which forms the border between Somerset County and Morris County. The neighborhood is residential with a mixture of 19th- and early 20th-century residential structures with many modern alterations and additions.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span steel stringer bridge is built on masonry abutments that probably date from an older bridge. The center pier composed of rivet-connected steel cylinders filled with concrete and a rolled I-beam cap beam is a modern addition. The bridge has steel beam guide rail railings and a sidewalk with wire-mesh railing on the downstream side. In 1989 the county added the steel grid deck. The bridge is a technologically and historically undistinguished example of a common bridge type.

INFOR MATION

PHOTO: 112:39-40 (01/25/92) REVISED BY (DATE): QUAD: Chatham

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18M0901 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CLINTON AVENUE OVER GREEN BROOK **FACILITY** CLINTON AVENUE

TOWNSHIP NORTH PLAINFIELD BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 87 ft **WIDTH** 30 ft

CONSTRUCTION DT 1922 **ALTERATION DT** 1974 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT H. C. VAN EMBURGH, CO ENG **BUILDER** JOSEPH BARONE

SETTING / CONTEXT The bridge carries two-lanes of traffic and sidewalks across Green Brook on the border of Somerset County and Union County. The bridge is at the western end of Green Brook Park, a green strip running along Green Brook between North Plainfield Borough and Plainfield Borough. Surrounding the park is an early-20th century residential neighborhood. Most of the housing has modern alterations and additions.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed three-span bridge is an encased steel stringer with arched reinforced-concrete fascia. The bridge has two sidewalks, balustrades and curved parapets on the approaches. The bridge retains some of its decorative varied-texture concrete finishes. Original light standards and luminaries have been removed. In 1974 repairs were made to the piers. The custom-detailed bridge is located in a park setting, but it is not technologically or historically noteworthy.

INFOR MATION

PHOTO: 111:10a-14a (01/25/92) REVISED BY (DATE): QUAD: Plainfield

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18M0902 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WEST END AVENUE OVER GREEN BROOK **FACILITY** WEST END AVENUE

TOWNSHIP NORTH PLAINFIELD BOROUGH

TYPE DECK ARCH **DESIGN** BARREL **MATERIAL** Reinforced Concrete

 # SPANS 3 **LENGTH** 72 ft **WIDTH** 48 ft

CONSTRUCTION DT 1915 **ALTERATION DT** **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The two-lane bridge spans Green Brook, which forms the border between Somerset County and Union County. The bridge is located in Green Brook Park, a green strip along Green Brook between Plainfield Borough and North Plainfield Borough. The surrounding neighborhood is residential with early-20th century housing to the south and mid-20th century housing to the north. Most of the houses have modern additions. West End Avenue becomes a parkway with a tree-lined median strip to the north.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The three-span barrel arch bridge has concrete parapets finished with shallow panels. The original light standards and luminaries have been removed. The spandrel walls, abutments, piers, and barrels are in poor condition with patching. The bridge is a representative example of a common type and style often found in urban parks in the state dating from the early 20th-century. It is not historically or technologically distinguished from other bridges of the same type.

INFOR MATION

PHOTO: 111:15a-16a (01/25/92) REVISED BY (DATE): QUAD: Plainfield

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18M0903 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED GERARD AVENUE OVER GREEN BROOK **FACILITY** GERARD AVENUE

TOWNSHIP NORTH PLAINFIELD BOROUGH

TYPE MULTI GIRDER **DESIGN** JACK ARCH (BRICK) **MATERIAL** Metal

 # SPANS 1 **LENGTH** 49 ft **WIDTH** 30.1 ft

CONSTRUCTION DT 1903 **ALTERATION DT** **SOURCE** COUNTY RECORDS

DESIGNER/PATENT J. DOUGHTY, CO. ENG. **BUILDER** DOVER BOILER WORKS

SETTING / CONTEXT The two-lane bridge spans Green Brook, which forms the border between Somerset County and Union County. The surrounding neighborhood is late-19th and early-20th century vernacular residential housing with modern additions and intrusions. To the south is a commercial area along NJ 28, Plainfield's Front Street. Plainfield and North Plainfield grew rapidly in the late 19th and early 20th centuries as a response to suburbanization promoted by railroads and industrial expansion.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span multi-girder bridge was constructed in 1903 by a regionally significant bridge manufacturer, the Dover Boiler Works. The bridge retains its integrity of design with riveted girders and brick jack arches that are deeper for the roadway than the sidewalks. The bridge rests on ashlar abutments. In 1924 the railings with fluted cast iron posts were added. The bridge is associated with a historical period of suburban expansion in Plainfield and North Plainfield.

INFOR MATION

Bibliography:
Somerset County Engineer. Bridge File M0903.
Darnell, Victor. Directory of American Bridge Building Companies 1840-1900. 1984.

Physical Description: The 49'-long bridge is a well-preserved example of a built-up multi deck girder span with brick jack arches. The span, which carries the roadway and two flanking sidewalks, is supported on ashlar abutments. The girders have X-pattern lateral bracing. The jack arches between the girders are of two depths; the shallower of the two is used under the sidewalks while those under the roadway are deeper. The large number of rivets on girders is explained by the rivet-connected angles that serve as jack arch skewbacks. The handsome iron picket railing with cast iron posts was placed in 1924.

Historical and Technological Significance: The 1903 multi-girder bridge is a complete example of its type and is also a good example of brick jack arch technology. The built-up multi-girder bridge was used in New Jersey for a brief period between the 1890s and about 1910. It fell out of use after the improvement of rolled steel stringers. Brick jack arches, which add some load-carrying capacity to the span, also ceased to be used about the same time. The well-preserved bridge is thus technologically distinguished as an example of bridge building technologies that were eclipsed by others early this century. It is also the work of a regionally noteworthy fabricator -- Dover Boiler Works of Dover (Morris County), New Jersey. They company began fabricating bridges from stock shapes in 1901, and they continued to do so until at least the 1920s. Not more than a dozen examples of their work have been identified to date.

Boundary Description and Justification: The span is located in a late-19th century residential area, but numerous alterations to the dwellings diminish the architectural significance of the setting, which consequently does not appear to possess historic district potential. the span is evaluated as individually distinguished, and the boundary is limited to the structures, superstructure and ashlar portion of the substructure itself.

PHOTO: 111:17a-20a (01/25/92) REVISED BY (DATE): QUAD: Plainfield

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18M0904 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED SYCAMORE AVENUE OVER GREEN BROOK **FACILITY** SYCAMORE AVENUE

TOWNSHIP NORTH PLAINFIELD BOROUGH

TYPE MULTI GIRDER **DESIGN** **MATERIAL** Metal

 # SPANS 1 **LENGTH** 49 ft **WIDTH** 34.5 ft

CONSTRUCTION DT 1905ca **ALTERATION DT** **SOURCE** STYLE

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The two-lane bridge spans Green Brook, which forms the border between Somerset County and Union County. The bridge is located in a residential working class neighborhood dating from the late-19th and ealry-20th centuries. Most of the buildings have been modernized. A concrete spillway is located downstream from the bridge.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge consists of 4 built-up deck girders, 2 on each side of the bridge, with interior stringers, which are probably modern replacements of original girders. It has ashlar abutments and picket railing with cast-iron posts. No plans or repair records were located at the county engineer's office, but it is similar to the 1903 Gerard Ave. over Green Brook bridge. This undocumented span is a representative example of its type and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 111:21a-25a (01/25/92) REVISED BY (DATE): QUAD: Plainfield

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18M0905 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WASHINGTON AVENUE OVER GREEN BROOK **FACILITY** WASHINGTON AVENUE

TOWNSHIP NORTH PLAINFIELD BOROUGH

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 74 ft **WIDTH** 30.1 ft

CONSTRUCTION DT 1911 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The two-lane bridge spans Green Brook, which forms the border between Somerset County and Union County. The neighborhood to the north is late-19th and early-20th century residential. The Washington Park Historic District begins a few blocks north of the bridge, but the bridge's neighboring residential structures were too altered or modern to include in the district. South of the bridge is a former factory building, also altered, and Plainfield's Front Street commercial area.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span reinforced concrete arch has modern beam guide rails that replaced concrete balustrades. It is in poor condition with spalling and patching. The bridge has ashlar footings that have been reinforced with concrete. One of at least 7 concrete deck arch bridges built in the county between 1910 and 1917, the span is not historically or technologically distinguished.

INFOR MATION

PHOTO: 112:8-9 (01/25/92) REVISED BY (DATE): QUAD: Plainfield

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18M0906 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED GROVE STREET OVER GREEN BROOK **FACILITY** GROVE STREET

TOWNSHIP NORTH PLAINFIELD BOROUGH

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 70 ft **WIDTH** 36.5 ft

CONSTRUCTION DT 1916 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT JOSHUA DOUGHTY, CO. ENG. **BUILDER** ARTHUR E. SMITH

SETTING / CONTEXT The two-lane bridge with sidewalks spans Green Brook on the border between Somerset County and Union County. South of the bridge is Plainfield's downtown, and north of the bridge is a residential neighborhood with single-family homes and apartment buildings. The buildings date from the late-19th and early-20th centuries but few retain their historic integrity.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span reinforced-concrete arch bridge has concrete balustrades with vase-shaped balusters. The bridge is 1 of at least 7 similar arches built in the county between 1910 and 1917. The bridge is in poor condition with spalling and numerous concrete repairs to the balustrades. Although the bridge retains some architectonic features, it is not a historically or technologically distinguished example of the bridge type. It is one of 20 examples of its type in the county.

INFOR MATION

PHOTO: 112:10-13 (01/25/92) REVISED BY (DATE): QUAD: Plainfield

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NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18M1001 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED DUER STREET OVER GREEN BROOK **FACILITY** DUER STREET

TOWNSHIP NORTH PLAINFIELD BOROUGH

TYPE MULTI GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 50 ft **WIDTH** 30 ft

CONSTRUCTION DT 1900 **ALTERATION DT** 1990 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT NJ STEEL & IRON CO. **BUILDER** NJ STEEL & IRON CO.

SETTING / CONTEXT The two-lane bridge with sidewalks spans Green Brook on the border between Somerset County and Union County. South of the bridge is downtown Plainfield, and north a residential neighborhood of North Plainfield. Next to the bridge is a large parking lot. Most of the neighboring buildings date from the late-19th or early-20th century, but have been significantly altered and modernized.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span multi-deck girder bridge was constructed in 1900 by the NJ Steel & Iron Co. of Trenton. The original plans show a lattice railing that has since been replaced by a picket rail on one side of the bridge and beam guide rails on the other. In 1990 the county repaired the deck and made welded repairs to the girders. The bridge is not historically or technologically distinguished. Gerard Avenue over Green Brook (18M0903) is a more extant example of the bridge type.

INFOR MATION

PHOTO: 112:14-18 (01/25/92) REVISED BY (DATE): QUAD: Plainfield

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18M1003 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED ROCKVIEW TERRACE OVER STONY BROOK **FACILITY** ROCKVIEW TERRACE

TOWNSHIP NORTH PLAINFIELD BOROUGH

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 54 ft **WIDTH** 30 ft

CONSTRUCTION DT 1913 **ALTERATION DT** 1980 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The two-lane bridge with sidewalks spans Stony Brook on north boundary of the Washington Park Historic District, an architecturally significant "late Victorian architecture" residential area with a period of significance from 1868 until 1917. The boundary of the district is the middle of the stream that the bridge crosses. West of the bridge is the Green Acres municipal playground.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Listed. Washington Park Historic District. 04/09/1987. Not Rated.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The steel stringer bridge has been significantly altered by widening and the replacement of steel stringer superstructure ca. 1980. Modern aluminum railings have been added. The masonry abutments dating to at least 1913 have been widened and repaired with concrete additions. The highly altered and basically modern bridge does not contribute to the Washington Park Historic District. It is not historically or technologically distinguished.

INFOR MATION

PHOTO: 112:22-23 (01/25/92) REVISED BY (DATE): QUAD: Plainfield

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 18M1006 **CO** SOMERSET **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED GROVE STREET OVER STONY BROOK **FACILITY** GROVE STREET

TOWNSHIP NORTH PLAINFIELD BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 43 ft **WIDTH** 31.7 ft

CONSTRUCTION DT 1917 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The two lane bridge with sidewalk spans Stony Brook near the intersection of Grove Street and US 22. Grove Street is bordered by late-19th and early-20th century homes. Nearby is a public school. US 22 is a busy commercial strip.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span encased steel stringer bridge has a concrete substructure. A sidewalk supported by an unencased steel stringer has been added to the downstream side of the bridge. The sidewalk has wire mesh railing. Beam guide rails have been added to the bridge. Concrete repairs and reinforcing have been made to the substructure. The bridge is technologically and historically undistinguished.

INFOR MATION

PHOTO: 112:24-25 (01/25/92) REVISED BY (DATE): QUAD: Plainfield

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1900A10 **CO** SUSSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 616 OVER CONRAIL (ABANDONED) **FACILITY** CR 616

TOWNSHIP ANDOVER TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 47 ft **WIDTH** 30.6 ft

CONSTRUCTION DT 1937 **ALTERATION DT** 1988ca **SOURCE** INSCRIPTION

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane county road over abandoned Conrail r-o-w in a wooded undeveloped area adjacent to a golf course. The railroad r-o-w was originally part of the New York Susquehanna & Western line, then part of the Lehigh and Hudson River Railroad before transferred to Conrail.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased stringer bridges supported on scored concrete abutments was constructed on a slight skew. The encasement of the fascia stringers is panelled. The span is flanked by ca. 1988 guide rails affixed to the concrete curbs. One of over 25 pre-WW II stringer bridges in the county, the span is an altered example of a common type in the state, and it is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 1907:40,41 (07/92) REVISED BY (DATE): QUAD: Newton East

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1900A92 **CO** SUSSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 669 OVER PEQUEST RIVER **FACILITY** CR 669

TOWNSHIP ANDOVER BOROUGH

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 23 ft **WIDTH** 24 ft

CONSTRUCTION DT 1933 **ALTERATION DT** 1980ca **SOURCE** PLANS

DESIGNER/PATENT HARVEY SNOOK, CO. ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane road over a small watercourse in a wooded residential area of single-family homes developed in the 1960s.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single span concrete slab bridge supported on concrete abutments has a standard county-type 2-rail concrete railing on one side. 2-rail guide railing replaced the original railing at the other side, and single-rail guide rails were placed in front of the railings in circa 1980. One of over 10 pre-WW II slab bridges in the county, the span is a short example of a common type, and it is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 1901:1-2 (08/92) REVISED BY (DATE): QUAD: Stanhope

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1900B02 **CO** SUSSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PRICE AVENUE OVER CULVERS CREEK **FACILITY** PRICE AVENUE

TOWNSHIP BRANCHVILLE BOROUGH

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 28 ft **WIDTH** 16 ft

CONSTRUCTION DT 1915 **ALTERATION DT** 1980ca **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 1-lane 2-way street over a small stream. The span borders a residential neighborhood of single-family homes dating from the 1920s through the 1950s to the south, and the town center to the north that dates from the mid-19th century to the early 1900s.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span steel stringer bridge with a reinforced concrete deck is supported on concrete abutments. A gabion retaining wall supports the north embankments. The original railing was removed and replaced with guide rail in circa 1980. One of over 25 stringer bridges in the county, the span is an example of a common type, and it is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 1906:34,35 (08/92) REVISED BY (DATE): QUAD: Culvers Gap

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1900C09 **CO** SUSSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED STRAWBERRY POINT DRIVE OVER CRANBERRY LAKE INLET **FACILITY** STRAWBERRY POINT DRIVE

TOWNSHIP BYRAM TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 25 ft **WIDTH** 22 ft

CONSTRUCTION DT 1938 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane road over an inlet to a lake in a residential lake community developed from the 1930s through the present.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span reinforced concrete slab bridge is supported on concrete abutments. The lake inlet is bordered by masonry retaining walls. The span is flanked by 2-rail concrete railing. One of over 10 pre-WW II slab bridges in the county, the span is a representative example of a common type, and it is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 1905:28,29 (08/92) REVISED BY (DATE): QUAD: Tranquility

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1900C13 **CO** SUSSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED LAKE DRIVE OVER LUBBERS RUN **FACILITY** LAKE DRIVE

TOWNSHIP BYRAM TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 24 ft **WIDTH** 15.3 ft

CONSTRUCTION DT 1941 **ALTERATION DT** 1980ca **SOURCE** PLANS

DESIGNER/PATENT HARVEY SNOOK, CO. ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 1-lane, 2-way road over a small stream in a wooded residential area of single-family homes dating from the 1940s through the 1960s. A concrete arch span carrying the abandoned tracks of the Delaware Lackawanna and Western NJ cutoff on the Bradbury Fill is located about 80' upstream of the bridge.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span stringer bridge supported on concrete abutments has asphalt-filled deck pans. The narrow span is flanked by guide rails that replaced the original railings in circa 1980. One of over 25 pre-WW II stringer bridges in the county, the span is a representative example of a common type in the state, and it is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 1901:38-39 (08/92) REVISED BY (DATE): QUAD: Stanhope

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1900C17 **CO** SUSSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED ROSEVILLE ROAD OVER NEW JERSEY CUTOFF **FACILITY** ROSEVILLE ROAD

TOWNSHIP BYRAM TOWNSHIP

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 66 ft **WIDTH** 18 ft

CONSTRUCTION DT 1911 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT DL&W OFFICE OF ENGINEERING **BUILDER** DAVID W. FLICKWIR

SETTING / CONTEXT The bridge carries a 1-lane, 2-way road in a wooded undeveloped area over abandoned Conrail r-o-w, formerly r-o-w of the New Jersey Cutoff of the Delaware Lackawanna & Western Railroad. The NJ Cutoff was constructed to improve transportation of anthracite coal from Pennsylvania to markets east. A significant engineering achievement, the line was constructed with major cuts and fills, and avoided creating any highway railroad grade crossings along its 28.45 mile length.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Delaware, Lackawanna & Western Railroad New Jersey Cutoff Historic District, Eligible. Contributing.

CONSULT DOCUMENTS SHPO Opinion 3/22/94, Letter 03/12/01.

SUMMARY The elliptical concrete deck arch bridge supported on a concrete substructure has reticulated concrete balustrades. The handsome and unaltered span is one of 7 arch bridges built in the county as part of the 1908-1911 development of the NJ Cutoff by the DL&W RR. Others are in Warren Co. The cutoff is a technologically significant engineering achievement noted for its use of reinforced concrete for bridges and structures and for completely grade separating the railroad and highway crossings. The bridge is not individually eligible for listing in the National Register of Historic Places, but is eligible under Criterion C as a contributing element of the Delaware, Lackawanna & Western Railroad New Jersey Cutoff Historic District.

INFORMATION

BIBLIOGRAPHY:

"The New Cut-off Line of the Lackawanna Railroad", Wheaton, F.L., Engineering News, Vol.60, No.7, August 13, 1908.
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"Some Concrete Culverts and Small Bridges on the Slateford-Hopatcong Cut-off of the Delaware, Lackawanna & Western R.R.", Engineering News, Vol.62, No.14, September 30, 1909.
Condit, Carl W., American Building Art The Twentieth Century, 1961.
Taber, Thomas Townsend, The Delaware, Lackawanna & Western Railroad in the Nineteenth Century. 1977.
Taber, T.T. and Taber, T.T. III, The Delaware, Lackawanna & Western Railroad in the Twentieth Century, Vols. I and II. 1980.
Lefferts, H. Leedom Jr., and Piefer, David R., Northwest New Jersey: An Inventory and History of Historic Engineering and Industry. 1979.

Physical Description: The reinforced concrete elliptical arch bridge with a high rise is flanked by reticulated concrete balustrades. The arch spans 66', and carries an 18' wide road. The date of construction, 1911, is inscribed on the fascia. The span appears unaltered.

Historical and Technological Significance: The New Jersey Cut-Off, built in 1908-1911, is historically and technologically distinguished in the areas of engineering and transportation (Criteria A, C). The cut-off is an important engineering accomplishment of the early 20th century. The Delaware, Lackawanna & Western RR (DL&W) designed and built the line to improve the efficiency of train travel across the mountainous terrain of northwestern New Jersey in Warren, Sussex, and Morris counties from Slateford, Pennsylvania to the DL&W mainline near Lake Hopatcong. The design and construction of a railroad that rises and falls just eleven feet over its length of 28.45 miles while crossing the mountains and valleys of northwestern New Jersey is remarkable even today. The decision to use reinforced concrete exclusively for all structures along the route was a pioneering action that attracted the attention of the engineering profession. The railroad's use of reinforced concrete did much to prove the material to be as strong and durable as the engineers of the early-20th century had anticipated. The DL&W also made full use of the moldable qualities of the material, designing not just functional structures, but also aesthetically pleasing ones that enhance the beauty of the railroad.

Sixteen structures are included in the NJDOT Historic Bridge Survey, but other structures, including viaducts, tunnels, and stations, were observed within Warren and Sussex counties. The structures not included in this survey appear to have integrity consistent with those bridges and tunnels that are included.

The New Jersey Cutoff is the culmination of over 55 years of efforts by the company to improve its route across New Jersey to New York City. The Delaware, Lackawanna and Western Railroad (DL&W), composed of a network of smaller railroads in Pennsylvania, New York and New Jersey, was formed in 1853 for the purpose of moving anthracite coal from the mining regions of northeastern Pennsylvania to market locations. It started from the merger of the Liggett's Gap RR and the Delaware & Cobbs Gap RR, which had been chartered and developed around 1850 by parties interested in carrying the coal to the Erie RR to the west and to the Delaware River to the east.

As the anthracite coal mining industry grew, so did the desire to increase the access to markets. In reaching to the east the DL&W needed a connection in New Jersey. They incorporated the Warren Railroad in the 1851 to carry trains from the Delaware River at Columbia (Warren County, NJ) to Central Railroad of New Jersey tracks in Hampton (Hunterdon County, NJ). From there the coal could be moved eastward to Elizabethport (near Newark, NJ). Commuters also traveled this route to get to New York City. In the late 1860s the DL&W became dissatisfied with the CNJ connections and sought their own access to the New York markets. In 1868 they leased the Morris & Essex RR, which was developed in the 1830s and 1840s in Morris, Essex and Hudson counties and the 1850s in Warren County. The M&E crossed New Jersey from Hoboken to Phillipsburg on the Delaware River.

Though the DL&W controlled several railroads (like the M&E, Warren, Valley, etc.), each was operated separately until 1899, when new DL&W president William Truesdale centralized control of the company. This move allowed for increased efficiency for the railroad as a whole. In addition to the reorganization, Truesdale undertook an ambitious plan to modernize the routes (All background information

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

gathered from Taber, 1977).

In seeking a more efficient, less circuitous route to replace the old 1851 Warren Railroad right-of-way, the DL&W considered three plans to build a completely new route (Taber and Taber, 1980:34-36). The plan chosen was a completely new line that would include massive cuts and fills to virtually eliminate grade changes. The existing line was nearly 40 miles long, had 57 curves comprising almost 13 miles of track, and a maximum grade of 60.2 feet per mile with a total rise and fall of 248 feet. The new layout, known as the New Jersey Cut-Off, limited the number and degree of curves and saved over 11 miles of track from the circuitous old line. This was the most expensive choice, costing $11,065,511.43 when completed (Taber and Taber, 1980:39), but the anticipated benefits for the railroad outweighed the cost.

Beginning in 1908 and under the direction of DL&W Chief Engineer George Ray, layout and design of the cut-off began. The line was to be 28.45 miles long, with a total rise and fall of just 11 feet and less than 5 miles of curved track. The new route would require 73 structures, including two massive viaducts, twelve overhead highway bridges and numerous crossings of roads and minor watercourses. Over 14 million cubic yards of both cut and fill were needed to create the relatively flat crossing of the hills and valleys of northwestern New Jersey (Taber and Taber, 1980:36).

Mr. Ray decided that reinforced concrete would be used for all structures along the route. This was the first time such a decision was made, causing the nickname of the "reinforced concrete railroad" to be used by the engineering profession when discussing the cut-off (Taber and Taber, 1980:36). Reinforced concrete was a state-of-the-art building material with yet unknown ultimate capabilities. It was thought to be as strong and durable as stone, and seemingly more permanent than wood or even steel.

Uncommon methods were used for the construction of the fills along the route. While the traditional method of building a wooden trestle to run dumping trains on was used for most fills, tracking was hung from suspended cables for the fills of greater magnitude. Dumping trains would carry fill onto the suspended tracks and dump the fill material from there. Most of the fill used on the cutoff was taken from the many cuts that were made, but even that was not enough. The DL&W bought 760 acres of farm land from which the contractors could dig additional fill. Five million pounds of dynamite was used to make the cuts. The Pequest Fill (Milepoint 55.85, Green Township, Sussex County) was the largest along the cut-off and in 1908 was claimed to be the "largest railway embankment ever made" (Engineering News, 1908:72). It was over 3 miles long and was up to 140 feet high. Over 6.5 million cubic yards of fill were necessary to reach the proper grade on this fill (Taber and Taber, 1980:36).

The DL&W chose to use similar structures for similar uses along the line. Where highway bridges were needed to cross their tracks, they designed reinforced concrete deck arch bridges, a bridge type that was capable of relatively long spans while providing dynamic and graceful forms. At least eleven deck arches were built in New Jersey, (1900G12, 1900G13, 1900K07, 1900C17, 2153166, 2153165, 2153164, 2153163, 2153162, 2153161, 2153160), all of them single span structures with one of two types of balustrades. Though design adjustments had to be made for roadway alignment and foundation conditions, the deck arch bridges are very similar structures.

Reinforced concrete arch tunnels were constructed where the cut-off crossed over roads or small waterways. These structures often supported high fill embankments as the cut-off crossed a valley. Over 35 of these structures were built along the line, and several of them are included in the Historic Bridge Survey (Wasigan and Simpson roads in Warren County, 2117152, and 1911155 in Sussex County). Slab-roofed tunnels and box culverts were also built to carry the right-of-way over roads and streams (1900C18).

The largest structures along the line were the two multi-span viaducts; the Delaware River Viaduct (2114159) in Knowlton Township and the Paulins Kill Viaduct (Milepoint 70.63, near Hainesburg in Knowlton Township). Both are open spandrel arch bridges that span valleys and larger water courses. The 9-span Delaware River Viaduct crosses the river as well as the highways that parallel it on both sides. It is 1,450 feet long and carries trains 65 feet above the river. The nine span structure has seven open spandrel arches and two deck arch approach spans on the Pennsylvania end. The 7-span Paulins Kill Viaduct in Hainesburg (Warren County) is 1100 feet long, but it is more graceful and magnificent as it rises 115 feet above the valley floor. It passes over the Paulins Kill River, the New York, Susquehanna and Western Railroad and the valley they run through (viaduct not included in the bridge survey because no roadway is associated with it). It was the most impressive structure on the DL&W main line prior to the building of the Tunkhannock Viaduct in Nicholson, Pennsylvania, completed in 1915.

Around the turn of the century, reinforced concrete arches were generally limited to relatively short and often single span bridges. The dead load carried by the arches was reduced with the introduction of open spandrel arches. The lighter structures were capable of longer spans and more aesthetically pleasing large bridges. The Walnut Lane bridge (1906-8) over Wissahickon Creek in Philadelphia was a forerunner of the type, though it used virtually no steel reinforcement in the two ribs (Condit, 1961:198). The use of reinforcement made the possibilities even greater. Under Ray's direction, the length and number of spans increased to create massive structures that dominated the landscape.

The New Jersey Cut-Off was divided into sections for bidding. Seven contractors were each awarded one section of the line, including contractors from as far away as Billings, Montana and Roanoke, Virginia. Each contract included all clearing, grading and masonry construction (Wheaton, 1908).

In addition to its engineering significance, the railroad right-of-way ranks historically as one of the most significant in the state, owing to the impact moving coal across the state had on the development of transportation systems within New Jersey. The Lehigh Valley Railroad played a significant role in the development of transportation and transportation-driven development in the northern half of the state, and the cut-off stands as one of the most ambitious remnants of the coal era in the state.

In summation, the viaducts, tunnels, overpasses, cuts, and fills on the New Jersey Cut-Off (1908-1911) form part of a unified design that was, and still is, one of the most remarkable engineering achievements of the early 20th century in the region. Furthermore, the New Jersey Cut-Off is one of the most visible remnants of the DL&W, and is illustrative of the history of one of the largest movers of coal that contributed to the transportation-driven economic growth of the northern half of the state. The New Jersey Cut-Off is a significant part of the western New Jersey historic landscape and transportation systems.

Boundary Description and Justification: The significance of the structure is based, in part, on its historic association and physical

connection with a right-of-way that is both historically and technologically important. In New Jersey, the potential historic corridor appears to be limited to the railroad right-of-way. The potential historic corridor is approximately 28 miles long stretching from the Delaware River to the eastern junction at Hopatcong, Morris County. The New Jersey Cut-Off's western junction is in Slateford, Pennsylvania on the west bank of the Delaware River. The entire route and all its related structures were not surveyed as part of this project, but those portions of the route that were surveyed or observed as part of the 1991-1993 Historic Bridge Survey have integrity of setting and original design and appear to representative of the overall state of preservation and completeness of the route in Sussex and Warren counties.

PHOTO: 1901:40-42 (08/92) REVISED BY (DATE): QUAD: Stanhope

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1900C18 **CO** SUSSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED ROSEVILLE ROAD OVER WOLF LAKE INLET **FACILITY** ROSEVILLE ROAD

TOWNSHIP BYRAM TOWNSHIP

TYPE CULVERT **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 2 **LENGTH** 40 ft **WIDTH** 30 ft

CONSTRUCTION DT 1910 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT DL&W OFFICE OF ENGINEERING **BUILDER** DAVID W. FLICKWIR

SETTING / CONTEXT The bridge carries a 2-lane road over a lake inlet in a wooded area. The bridge is beneath a concrete arch span and high fill carrying the New Jersey Cut-Off of the DL&W Railroad across a valley and lake. That arch span was not inventoried, but is pictured. The Cutoff improved the movement of Pennsylvania anthracite coal to markets east. A significant engineering achievement, the lines was constructed with major cuts and fills, and avoided creating any highway railroad grade crossings along its 28.45 mile length.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Delaware, Lackawanna & Western Railroad New Jersey Cutoff Historic District, Eligible. Contributing.

CONSULT DOCUMENTS SHPO Opinion 3/22/94, Letter 03/12/01.

SUMMARY The 2-span skewed reinforced concrete culvert span with concrete substructure has no railings. An example of a common bridge type, the span is not individually significant, but is an original feature of the 1908-11 NJ Cutoff of the DL&W RR, a significant engineering achievement noted for its use of reinforced concrete for bridges and structures and for completely grade separating the railroad and highway crossings. The culvert accommodates flow on each side of the cutoff, which crosses the lake. The structure is not individually eligible for listing in the National Register of Historic Places, but is eligible as a contributing element of the Delaware, Lackawanna & Western Railroad New Jersey Cutoff Historic District under Criteria A and C.

INFOR MATION

BIBLIOGRAPHY:

"The New Cut-off Line of the Lackawanna Railroad", Wheaton, F.L., Engineering News, Vol.60, No.7, August 13, 1908.
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"Some Concrete Culverts and Small Bridges on the Slateford-Hopatcong Cut-off of the Delaware, Lackawanna & Western R.R.", Engineering News, Vol.62, No.14, September 30, 1909.
Condit, Carl W., American Building Art The Twentieth Century, 1961.
Taber, Thomas Townsend, The Delaware, Lackawanna & Western Railroad in the Nineteenth Century. 1977.
Taber, T.T. and Taber, T.T. III, The Delaware, Lackawanna & Western Railroad in the Twentieth Century, Vols. I and II. 1980.
Lefferts, H. Leedom Jr., and Piefer, David R., Northwest New Jersey: An Inventory and History of Historic Engineering and Industry. 1979.

Physical Description: The skewed 2-span reinforced concrete culvert spans carries a road over a lake divided by the fill that carries the now-abandoned right-of-way of a railroad. The wide culvert spans beneath roadway and the railroad embankment. The embankment is carried over the roadway by a concrete arch tunnel. The culvert spans 40' and measures 300' wide along the skew (tunnel not included in the survey; the structure number refers to the 2-cell culvert). No alterations to the span were noted.

Historical and Technological Significance: The 2-cell concrete culvert, constructed in 1910, is not individually distinguished. It is significant because it was built, along with the concrete arch spanning above it to carry the railroad over the roadway, as part of the construction of the New Jersey Cut-Off of the Delaware, Lackawanna & Western RR. The New Jersey Cut-Off, built in 1908-1911, is historically and technologically distinguished in the areas of engineering and transportation (Criteria A, C). The cut-off is an important engineering accomplishment of the early 20th century. The Delaware, Lackawanna & Western RR (DL&W) designed and built the line to improve the efficiency of train travel across the mountainous terrain of northwestern New Jersey in Warren, Sussex, and Morris counties from Slateford, Pennsylvania to the DL&W mainline near Lake Hopatcong. The design and construction of a railroad that rises and falls just eleven feet over its length of 28.45 miles while crossing the mountains and valleys of northwestern New Jersey is remarkable even today. The decision to use reinforced concrete exclusively for all structures along the route was a pioneering action that attracted the attention of the engineering profession. The railroad's use of reinforced concrete did much to prove the material to be as strong and durable as the engineers of the early-20th century had anticipated. The DL&W also made full use of the moldable qualities of the material, designing not just functional structures, but also aesthetically pleasing ones that enhance the beauty of the railroad.

Sixteen structures are included in the NJDOT Historic Bridge Survey, but other structures, including viaducts, tunnels, and stations, were observed within Warren and Sussex counties. The structures not included in this survey appear to have integrity consistent with those bridges and tunnels that are included.

The New Jersey Cutoff is the culmination of over 55 years of efforts by the company to improve its route across New Jersey to New York City. The Delaware, Lackawanna and Western Railroad (DL&W), composed of a network of smaller railroads in Pennsylvania, New York and New Jersey, was formed in 1853 for the purpose of moving anthracite coal from the mining regions of northeastern Pennsylvania to market locations. It started from the merger of the Liggett's Gap RR and the Delaware & Cobbs Gap RR, which had been chartered and developed around 1850 by parties interested in carrying the coal to the Erie RR to the west and to the Delaware River to the east.

As the anthracite coal mining industry grew, so did the desire to increase the access to markets. In reaching to the east the DL&W needed a connection in New Jersey. They incorporated the Warren Railroad in the 1851 to carry trains from the Delaware River at Columbia (Warren County, NJ) to Central Railroad of New Jersey tracks in Hampton (Hunterdon County, NJ). From there the coal could be moved eastward to Elizabethport (near Newark, NJ). Commuters also traveled this route to get to New York City. In the late 1860s the DL&W became dissatisfied with the CNJ connections and sought their own access to the New York markets. In 1868 they leased the Morris & Essex RR, which was developed in the 1830s and 1840s in Morris, Essex and Hudson counties and the 1850s in Warren County. The M&E crossed New Jersey from Hoboken to Phillipsburg on the Delaware River.

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

Though the DL&W controlled several railroads (like the M&E, Warren, Valley, etc.), each was operated separately until 1899, when new DL&W president William Truesdale centralized control of the company. This move allowed for increased efficiency for the railroad as a whole. In addition to the reorganization, Truesdale undertook an ambitious plan to modernize the routes (All background information gathered from Taber, 1977).

In seeking a more efficient, less circuitous route to replace the old 1851 Warren Railroad right-of-way, the DL&W considered three plans to build a completely new route (Taber and Taber, 1980:34-36). The plan chosen was a completely new line that would include massive cuts and fills to virtually eliminate grade changes. The existing line was nearly 40 miles long, had 57 curves comprising almost 13 miles of track, and a maximum grade of 60.2 feet per mile with a total rise and fall of 248 feet. The new layout, known as the New Jersey Cut-Off, limited the number and degree of curves and saved over 11 miles of track from the circuitous old line. This was the most expensive choice, costing $11,065,511.43 when completed (Taber and Taber, 1980:39), but the anticipated benefits for the railroad outweighed the cost.

Beginning in 1908 and under the direction of DL&W Chief Engineer George Ray, layout and design of the cut-off began. The line was to be 28.45 miles long, with a total rise and fall of just 11 feet and less than 5 miles of curved track. The new route would require 73 structures, including two massive viaducts, twelve overhead highway bridges and numerous crossings of roads and minor watercourses. Over 14 million cubic yards of both cut and fill were needed to create the relatively flat crossing of the hills and valleys of northwestern New Jersey (Taber and Taber, 1980:36).

Mr. Ray decided that reinforced concrete would be used for all structures along the route. This was the first time such a decision was made, causing the nickname of the "reinforced concrete railroad" to be used by the engineering profession when discussing the cut-off (Taber and Taber, 1980:36). Reinforced concrete was a state-of-the-art building material with yet unknown ultimate capabilities. It was thought to be as strong and durable as stone, and seemingly more permanent than wood or even steel.

Uncommon methods were used for the construction of the fills along the route. While the traditional method of building a wooden trestle to run dumping trains on was used for most fills, tracking was hung from suspended cables for the fills of greater magnitude. Dumping trains would carry fill onto the suspended tracks and dump the fill material from there. Most of the fill used on the cutoff was taken from the many cuts that were made, but even that was not enough. The DL&W bought 760 acres of farm land from which the contractors could dig additional fill. Five million pounds of dynamite was used to make the cuts. The Pequest Fill (Milepoint 55.85, Green Township, Sussex County) was the largest along the cut-off and in 1908 was claimed to be the "largest railway embankment ever made" (Engineering News, 1908:72). It was over 3 miles long and was up to 140 feet high. Over 6.5 million cubic yards of fill were necessary to reach the proper grade on this fill (Taber and Taber, 1980:36).

The DL&W chose to use similar structures for similar uses along the line. Where highway bridges were needed to cross their tracks, they designed reinforced concrete deck arch bridges, a bridge type that was capable of relatively long spans while providing dynamic and graceful forms. At least eleven deck arches were built in New Jersey, (1900G12, 1900G13, 1900K07, 1900C17, 2153166, 2153165, 2153164, 2153163, 2153162, 2153161, 2153160), all of them single span structures with one of two types of balustrades. Though design adjustments had to be made for roadway alignment and foundation conditions, the deck arch bridges are very similar structures.

Reinforced concrete arch tunnels were constructed where the cut-off crossed over roads or small waterways. These structures often supported high fill embankments as the cut-off crossed a valley. Over 35 of these structures were built along the line, and several of them are included in the Historic Bridge Survey (Wasigan and Simpson roads in Warren County, 2117152, and 1911155 in Sussex County). Slab-roofed tunnels and box culverts were also built to carry the right-of-way over roads and streams (1900C18).

The largest structures along the line were the two multi-span viaducts; the Delaware River Viaduct (2114159) in Knowlton Township and the Paulins Kill Viaduct (Milepoint 70.63, near Hainesburg in Knowlton Township). Both are open spandrel arch bridges that span valleys and larger water courses. The 9-span Delaware River Viaduct crosses the river as well as the highways that parallel it on both sides. It is 1,450 feet long and carries trains 65 feet above the river. The nine span structure has seven open spandrel arches and two deck arch approach spans on the Pennsylvania end. The 7-span Paulins Kill Viaduct in Hainesburg (Warren County) is 1100 feet long, but it is more graceful and magnificent as it rises 115 feet above the valley floor. It passes over the Paulins Kill River, the New York, Susquehanna and Western Railroad and the valley they run through (viaduct not included in the bridge survey because no roadway is associated with it). It was the most impressive structure on the DL&W main line prior to the building of the Tunkhannock Viaduct in Nicholson, Pennsylvania, completed in 1915.

Around the turn of the century, reinforced concrete arches were generally limited to relatively short and often single span bridges. The dead load carried by the arches was reduced with the introduction of open spandrel arches. The lighter structures were capable of longer spans and more aesthetically pleasing large bridges. The Walnut Lane bridge (1906-8) over Wissahickon Creek in Philadelphia was a forerunner of the type, though it used virtually no steel reinforcement in the two ribs (Condit, 1961:198). The use of reinforcement made the possibilities even greater. Under Ray's direction, the length and number of spans increased to create massive structures that dominated the landscape.

The New Jersey Cut-Off was divided into sections for bidding. Seven contractors were each awarded one section of the line, including contractors from as far away as Billings, Montana and Roanoke, Virginia. Each contract included all clearing, grading and masonry construction (Wheaton, 1908).

In addition to its engineering significance, the railroad right-of-way ranks historically as one of the most significant in the state, owing to the impact moving coal across the state had on the development of transportation systems within New Jersey. The Lehigh Valley Railroad played a significant role in the development of transportation and transportation-driven development in the northern half of the state, and the cut-off stands as one of the most ambitious remnants of the coal era in the state.

In summation, the viaducts, tunnels, overpasses, cuts, and fills on the New Jersey Cut-Off (1908-1911) form part of a unified design that was, and still is, one of the most remarkable engineering achievements of the early 20th century in the region. Furthermore, the New Jersey Cut-Off is one of the most visible remnants of the DL&W, and is illustrative of the history of one of the largest movers of coal that

contributed to the transportation-driven economic growth of the northern half of the state. The New Jersey Cut-Off is a significant part of the western New Jersey historic landscape and transportation systems.

Boundary Description and Justification: The significance of the structure is based, in part, on its historic association and physical connection with a right-of-way that is both historically and technologically important. In New Jersey, the potential historic corridor appears to be limited to the railroad right-of-way. The potential historic corridor is approximately 28 miles long stretching from the Delaware River to the eastern junction at Hopatcong, Morris County. The New Jersey Cut-Off's western junction is in Slateford, Pennsylvania on the west bank of the Delaware River. The entire route and all its related structures were not surveyed as part of this project, but those portions of the route that were surveyed or observed as part of the 1991-1993 Historic Bridge Survey have integrity of setting and original design and appear to representative of the overall state of preservation and completeness of the route in Sussex and Warren counties.

The viaduct is also individually eligible, in and of itself, including superstructure, substructure, and right-of-way over the water feature and highways.

PHOTO: 1908:1-4; 432:2-5 (08/92) REVISED BY (DATE): QUAD: Stanhope

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1900D07 **CO** SUSSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED SMITH HILL ROAD OVER BRANCH OF PAULINS KILL LAKE **FACILITY** SMITH HILL ROAD

TOWNSHIP FRANKFORD TOWNSHIP

TYPE PONY TRUSS **DESIGN** PRATT **MATERIAL** Metal

 # SPANS 1 **LENGTH** 48 ft **WIDTH** 11 ft

CONSTRUCTION DT 1890ca **ALTERATION DT** Moved: 1994 **SOURCE** PLAQUE (REMOVED)

DESIGNER/PATENT UNKNOWN **BUILDER** I. P. BARTLEY & CO.

SETTING / CONTEXT The bridge carries a 1-lane 2-way collector road over a small stream surrounded by wooded undeveloped land. The bridge is about 50' from the intersection with US 206. The structures in the area along US 206 are both residential and commercial, and they date from the late 1800s through the 1970s.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Bridge was Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 7/9/90, Letter 6/30/95.

SUMMARY The single-span Pratt pony truss bridge is supported by concrete abutments. The deck is laminated timber, and the curbs are timber. The original metal pipe railings remain along the face of the trusses. The lower chord is dented at one location, and welded spacers were added at the bottom chord. The bridge is significant because it is a well-preserved example of a pony truss constructed by a local contractor. It is scheduled to be removed and placed at the county fairgrounds.

INFOR MATION

PHOTO: 1906:36-39 (08/92) REVISED BY (DATE): QUAD: Branchville

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1900E06 **CO** SUSSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 631 OVER WALLKILL RIVER **FACILITY** CR 631

TOWNSHIP FRANKLIN BOROUGH

TYPE STONE ARCH **DESIGN** ELLIPTICAL **MATERIAL** Stone

 # SPANS 1 **LENGTH** 40 ft **WIDTH** 38.7 ft

CONSTRUCTION DT 1875 **ALTERATION DT** 1932, 1984 **SOURCE** STYLE

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge carries a 2-lane road with shoulders and a sidewalk over a small stream in a commercial area dating from the 1900s through the 1950s.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The stone arch bridge was widened to both sides with steel stringers on stone and concrete abutments with wingwalls. The north side was widened in 1932 and the south side in 1984. The masonry has been repointed. A 2-rail concrete railing at the north side dates to the 1932 widening. A guide rail flanks the sidewalk at the south side. The span is not distinguished because alterations have compromised the original design integrity of the bridge.

INFOR MATION

PHOTO: 1903:17-19 (08/92) REVISED BY (DATE): QUAD: Franklin

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1900E07 **CO** SUSSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 631 OVER WALLKILL RIVER, NY S & W RR **FACILITY** CR 631

TOWNSHIP FRANKLIN BOROUGH

TYPE THRU GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 14 **LENGTH** 498 ft **WIDTH** 24 ft

CONSTRUCTION DT 1927 **ALTERATION DT** **SOURCE** COUNTY RECORDS

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge carries a 2-lane road and a sidewalk over a small river and Conrail. This line was part of the Lehigh and Hudson River and New York, Susquehanna and Western Railroads before being transferred to Conrail. Just south of the span, the line links with a branch that served the New Jersey Zinc Mine in Ogdensburg, which was an important source of revenue for the L&H. The span is located in a wooded area of homes dating from the 1930s to the 1960s.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 14-span riveted thru girder with floorbeams viaduct is supported on concrete abutments and riveted steel pier bents. A few pier bents were replaced in kind but have welded connections. The girder web in span 2 has welded repair plates. Metal picket railing flanks the cantilevered sidewalk at the north, and modern 3-rail railing flanks the south side. The viaduct span is an example of a common type, and it is neither technologically innovative nor historically distinguished.

INFOR MATION

Bibliography:
H. Leedom Lefforts, Jr., and David Peifer. Northwest New Jersey: An Inventory and History of Historic Engineering and Industry. Washington, DC: Heritage Conservation and Recreation Service, 1979.
Sussex County Engineer. Bridge Files.

Physical Description: The 14-span bridge built on a skew carries a two-lane highway over a single railroad track and the Wallkill River. The bridge consists of from east to west one steel stringer span, one thru girder with floor beams span, three deck girder with floor beams spans, two thru girder with floor beams spans (the first over the railroad track), two stringer spans, and five deck girder with floor beams spans (the first over the river). The bridge is supported by steel pier bents with cross bracing and by concrete spill-thru abutments. The viaduct has a cantilevered sidewalk with metal railing to the north. The structure exhibits no unusual or distinctive construction details.

Historical and Technological Significance: The 14-span viaduct, constructed in 1927, is composed of a combination of thru girder, deck girder, and steel stringer spans, all standard early 20th century bridge types. Although the bridge is a multi-span railroad overpass composed of several very common and well represented bridge types, it is not a technologically distinguished example, and it demonstrates no innovative construction techniques.

The bridge, sometimes referred to as the Franklin Viaduct, is located at the Franklin junction of the former New York, Susquehanna and Western (NYS&W) Railroad's Sussex Branch, the Lehigh and Hudson (L&H) Railroad's main line, and the Delaware, Lackawanna and Western Railroad's Sussex Branch. The railroad right-of-ways were developed from 1860 to 1885 and served to transport through traffic and products of local farms, mines and factories. The bridge was constructed in 1927 to carry an existing county road over the busy rail junction and the river. The setting is undistinguished and does not maintain its historic integrity. Most of the railroad-related structures have been removed, and the rail lines are no longer operable north of Franklin. A short portion of the former L&H and NYS&W tracks are maintained by Conrail as a lightly used branch line.

PHOTO: 1903:20-24 (08/92) REVISED BY (DATE): QUAD: Franklin

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1900E10 **CO** SUSSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED SCOTT ROAD OVER WALLKILL RIVER **FACILITY** SCOTT ROAD

TOWNSHIP FRANKLIN BOROUGH

TYPE PONY TRUSS **DESIGN** PRATT **MATERIAL** Steel

 # SPANS 1 **LENGTH** 37 ft **WIDTH** 14.2 ft

CONSTRUCTION DT 1890ca **ALTERATION DT** **SOURCE** STYLE

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 1-lane, 2-way road over a small stream in a sparsely-developed wooded residential area of single-family homes built in the 1950s. A New York Susquehanna and Western Railroad track crosses the road at grade-level about 50' from the bridge.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 8/2/90, Letter 6/30/95.

SUMMARY The pin-connected Pratt with counters pony truss bridge with riveted floorbeams is supported on stone abutments. The deck is asphalt filled metal deck pans. Alterations are limited to repair plates welded at the base of the end inclined members and guide rail added. The alterations to the truss are minor, and the span is distinguished because it is a well-preserved example of an increasing rare but once important bridge type.

INFOR MATION

PHOTO: 1903:25-28 (08/92) REVISED BY (DATE): QUAD: Hamburg

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1900G02 **CO** SUSSEX **OWNER** COUNTY **MILEPOINT** 0.98

NAME & FEATURE INTERSECTED CR 611 OVER PEQUEST RIVER **FACILITY** CR 611 (SPRINGDALE-TRANQUILITY ROAD)

TOWNSHIP GREEN TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 57 ft **WIDTH** 24 ft

CONSTRUCTION DT 1939 **ALTERATION DT** **SOURCE** PLANS/INSCRIPTION

DESIGNER/PATENT HARVEY SNOOK, CO. ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane county road over a small watercourse in a wooded sparsely-developed residential neighborhood of single-family homes dating from the late 1800s through the early 1900s.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased stringer bridge supported on concrete abutments is enclosed by Sussex County standard-design 2-rail concrete railings. The encasement of the fascia stringers is panelled. One of over 25 stringer bridges in the county from the pre-World War II era, this span is a representative example of a common type in the state, and it is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 1907:26,27 (07/92) REVISED BY (DATE): QUAD: Tranquility

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1900G06 **CO** SUSSEX **OWNER** COUNTY **MILEPOINT** 2.86

NAME & FEATURE INTERSECTED CR 603 OVER EAST BRANCH OF PEQUEST RIVER **FACILITY** CR 603

TOWNSHIP GREEN TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 2 **LENGTH** 34 ft **WIDTH** 23.6 ft

CONSTRUCTION DT 1939 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT HARVEY SNOOK, CO. ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane highway over a small stream in a wooded rural area proximate to farm land.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 2-span continuous concrete slab bridge supported on concrete abutments and pier has 2-rail concrete railings common to county bridges of this era. Guide rail was added in front of the railings. One of over 10 pre-WW II slab bridges in the county, the span is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 1901:43-44 (08/92) REVISED BY (DATE): QUAD: Tranquility

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1900G12 **CO** SUSSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED HENRY ROAD OVER NJ CUTOFF DL&W RR **FACILITY** HENRY ROAD

TOWNSHIP GREEN TOWNSHIP

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 116 ft **WIDTH** 18 ft

CONSTRUCTION DT 1911 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT DL&W OFFICE OF ENGINEERING **BUILDER** WALTER H. GAHAGAN

SETTING / CONTEXT The bridge carries a narrow 2-lane road in a wooded undeveloped area over the abandoned r-o-w for the New Jersey Cutoff of the Delaware Lackawanna & Western Railroad. The Cutoff was constructed to improve transporting anthracite coal from Pennsylvania to markets east. A significant engineering achievement, the line was constructed with major cuts and fills

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Delaware, Lackawanna & Western Railroad New Jersey Cutoff Historic District, Eligible. Contributing.

CONSULT DOCUMENTS SHPO Opinion 3/22/94, Letter 03/12/01.

SUMMARY The reinforced concrete deck arch bridge supported on a concrete substructure is constructed on a skew. High custom concrete balustrades flank both sides of the span. One of over 17 concrete arch bridges constructed for the NJ portion of the rail line, this span is not individually eligible for listing in the National Register of Historic Places. It is historically and technologically significant as a contributing resource of the DL&W Railroad New Jersey Cutoff Historic District in Sussex and Warren Counties under Criteria A and C. The cutoff is a technologically significant engineering achievement noted for its use of reinforced concrete for bridges and structures and for completely grade separating the railroad and highway crossings

INFOR MATION

BIBLIOGRAPHY:

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Lefferts, H. Leedom Jr., and Piefer, David R., Northwest New Jersey: An Inventory and History of Historic Engineering and Industry. 1979.

Physical Description: The skewed reinforced concrete elliptical deck arch bridge with a high rise is flanked by high concrete balustrades with an oval piercing pattern. The date of construction, 1911, is inscribed in the fascia. The well-proportioned span appears unaltered.

Historical and Technological Significance: The deck arch bridge constructed in 1911, is not individually distinguished, but it is significant because it was built as part of the construction of the New Jersey Cut-Off of the Delaware, Lackawanna & Western RR. The New Jersey Cut-Off, built in 1908-1911, is historically and technologically distinguished in the areas of engineering and transportation (Criteria A, C). The cut-off is an important engineering accomplishment of the early 20th century. The Delaware, Lackawanna & Western RR (DL&W) designed and built the line to improve the efficiency of train travel across the mountainous terrain of northwestern New Jersey. The decision to exclusively use reinforced concrete for all structures along the route was a pioneering action that attracted the attention of the engineering profession. The design and construction of a railroad that rises and falls just eleven feet over its length of 28.45 miles while crossing the mountains and valleys of northwestern New Jersey is remarkable even today. The railroad's use of reinforced concrete for all of the structures built along the road did much to prove the material to be as strong and durable as the engineers of the early-20th century had anticipated. The DL&W also made full use of the moldable qualities of the material, designing not just functional structures, but also aesthetically pleasing ones that enhance the beauty of the railroad. The right-of-way of the New Jersey Cut-Off and the reinforced concrete structures along it are an important part of the history of transportation in northwestern New Jersey.

The Delaware, Lackawanna and Western Railroad (DL&W), composed of a network of smaller railroads in Pennsylvania, New York and New Jersey, was formed in 1853 for the purpose of moving anthracite coal from the mining regions of northeastern Pennsylvania to market locations. It started from the merger of the Liggett's Gap RR and the Delaware & Cobbs Gap RR, which had been chartered and developed around 1850 by parties interested in carrying the coal to the Erie RR to the west and to the Delaware River to the east.

As the anthracite coal mining industry grew, so did the desire to increase the access to markets. The DL&W began to acquire other rail lines like the Syracuse, Binghamton & New York RR and the Utica, Chenango & Susquehanna RR, and thus extending their operations to the north and east. Often these acquisitions required the development of new right-of-ways like the Valley and Greene Railroads to connect newly acquired lines with existing DL&W trackage.

In reaching to the east the DL&W needed a connection in New Jersey. They incorporated the Warren Railroad in the 1851 to carry trains from the Delaware River at Columbia (Warren County, NJ) to Central Railroad of New Jersey tracks in Hampton (Hunterdon County, NJ). From there the coal could be moved eastward to Elizabethport (near Newark, NJ). Commuters also traveled this route to get to New York City. In the late 1860s the DL&W became dissatisfied with the CNJ connections and sought their own access to the New York markets. In 1868 they leased the Morris & Essex RR, which was developed in the 1830s and 1840s in Morris, Essex and Hudson Counties and the 1850s in Warren County. The M&E crossed New Jersey from Hoboken on the Hudson River to Phillipsburg on the Delaware River. Though the DL&W controlled several railroads (like the M&E, Warren, Valley, etc.), each was operated separately until 1899, when new DL&W president William Truesdale centralized control of the company. This move allowed for increased efficiency for the railroad as a whole, though some of the divisions would lose business (All background information gathered from Taber, 1977).

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
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In seeking a more efficient, less circuitous route across western New Jersey to replace the former Warren Railroad right-of-way, the DL&W considered three plans (Taber and Taber, 1980:34-36). The plan chosen was that of what we know as the New Jersey Cut-off, a completely new line that would include massive cuts and fills to virtually eliminate grade changes. The existing line was nearly 40 miles long, had 57 curves comprising almost 13 miles of track, and a maximum grade of 60.2 feet per mile with a total rise and fall of 248 feet. The new layout limited the number and degree of curves and saved over 11 miles of track from the circuitous old line. This was the most expensive choice, costing $11,065,511.43 when completed (Taber and Taber, 1980:39), but the anticipated benefits for the railroad outweighed the cost.

Under the direction of DL&W Chief Engineer George Ray, layout and design of the cut-off began. The line was to be 28.45 miles long, with a total rise and fall of just 11 feet and less than 5 miles of curved track. The new route would require 73 structures, including two massive viaducts, twelve overhead highway bridges and numerous crossings of roads and minor watercourses. Over 14 million cubic yards of both cut and fill were needed to create the relatively flat crossing of the hills and valleys of northwestern New Jersey (Taber and Taber, 1980:36).

Mr. Ray decided that reinforced concrete would be used for all structures along the route. This was the first time such a decision was made, causing the nickname of the "reinforced concrete railroad" to be used by the engineering profession when discussing the cut-off (Taber and Taber, 1980:36). Reinforced concrete was a state-of-the-art building material with yet unknown ultimate capabilities. It was thought to be as strong and durable as stone, and seemingly more permanent than wood or even steel.

The DL&W chose to use similar structures for similar uses along the line. Where highway bridges were needed to cross their tracks, they designed reinforced concrete deck arch bridges, a bridge type that was capable of relatively long spans while providing dynamic and graceful forms. Eleven deck arches were built in New Jersey, all of them single span structures with one of two types of balustrades. Though design adjustments had to be made for roadway alignment and foundation conditions, the bridges are very similar structures. A three-span deck arch bridge was built in Pennsylvania at Slateford, near the junction of the cut-off with the old line.

Reinforced concrete arch tunnels were constructed where the cut-off crossed over roads or small waterways. These structures often supported high fill embankments as the cut-off crossed a valley. Over 35 of these structures were built along the line. Slab-roofed tunnels and box culverts were also built to carry the right-of-way over roads and streams.

The largest structures along the line were the multi-span viaducts, open spandrel arch bridges that spanned valleys and crossed larger water courses. Around the turn of the century, reinforced concrete arches were generally limited to relatively short and often single span bridges. The dead load carried by the arches was reduced with the introduction of open spandrel arches. The lighter structures were capable of longer spans and more aesthetically pleasing large bridges. The Walnut Lane bridge (1906-8) over Wissahickon Creek in Philadelphia was a forerunner of the type, though it used virtually no steel reinforcement in the two ribs (Condit, 1961:198). The use of reinforcement made the possibilities even greater. The length and number of spans increased to create massive structures that dominated the landscape.

The Delaware River Viaduct at Slateford, Pennsylvania, spans the river as well as the highways following the river on each side. It is 1,450 feet long and carries trains 65 feet above the water. The nine span structure has seven open spandrel arches and two deck arch approach spans on the Pennsylvania end. The longest spans are those which span the river, five of which are 150 feet at the springing line.

The Paulins Kill Viaduct in Hainesburg, New Jersey is slightly shorter than the Delaware River Bridge, being only 1100 feet long, but it is more graceful and magnificent as it rises 115 feet above the valley floor. It passes over the Paulins Kill River, the New York, Susquehanna and Western Railroad and the valley they run through. This seven span structure had five spans of 120 feet and two of 100 feet. It was the most impressive structure on the DL&W main line prior to the building of the Tunkhannock Viaduct in Nicholson, Pennsylvania, built less than five years later on a similar project, the Nicholson Cut-Off.

The New Jersey Cut-Off was divided into sections for bidding. Seven contractors were each awarded one section of the line, including contractors from as far away as Billings, Montana and Roanoke, Virginia. Each contract included all clearing, grading and masonry construction (Wheaton, 1908).

Uncommon methods were used for the construction of the fills along the route. While the traditional method of building a wooden trestle to run dumping trains on was used for most fills, tracking was hung from suspended cables for the fills of greater magnitude. Dumping trains would carry fill onto the suspended tracks and dump the fill material from there. Most of the fill used on the cutoff was taken from the many cuts that were made, but even that was not enough. The DL&W bought 760 acres of farm land from which the contractors could dig additional fill. Five million pounds of dynamite was used to make the cuts. The Pequest Fill was the largest along the cut-off and in 1908 was claimed to be the "largest railway embankment ever made" (Engineering News, 7/16/1908:72). It was over 3 miles long and was up to 140 feet high. Over 6.5 million cubic yards of fill were necessary to reach the proper grade on this fill (Taber and Taber, 1980:36).

In addition to its engineering significance, the right-of-way ranks historically as one of the most significant in the state, owing to the impact moving coal across the state had on the development of transportation systems within New Jersey. The Lehigh Valley Railroad played a significant role in the development of transportation and transportation-driven development in the northern half of the state, and the cut-off stands as one of the most ambitious remnants of the coal era in the state.

Boundary Description and Justification: The significance of this structure is based on its historic association and physical connection with a right-of-way that is both historically and technologically important. The boundary is limited to the 28.5 mile long right-of-way of the DL&W's New Jersey Cut-Off.

PHOTO: 1907:28-29 (07/92) REVISED BY (DATE): QUAD: Tranquility

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1900G13 **CO** SUSSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 611 OVER NJ CUTOFF OF DL&W RR **FACILITY** CR 611

TOWNSHIP GREEN TOWNSHIP

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 103 ft **WIDTH** 18 ft

CONSTRUCTION DT 1911 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT DL&W OFFICE OF ENGINEERING **BUILDER** WALTER H. GAHAGAN

SETTING / CONTEXT The bridge carries a narrow 2-lane county road over the abandoned NJ Cutoff r-o-w in a wooded undeveloped area with a residential neighborhood of single-family homes dating from the early 1900s to the 1950s on one side of the span. The abandoned Greendell concrete railroad station is about 150' east of the bridge. The NJ Cutoff was a significant engineering achievement which was constructed with major cuts and fills, and avoided creating any highway railroad grade crossings along its 28.45 mile length.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Delaware, Lackawanna & Western Railroad New Jersey Cutoff Historic District, Eligible. Contributing.

CONSULT DOCUMENTS SHPO Opinion 3/22/94, Letter 03/12/01.

SUMMARY The skewed single-span concrete arch bridge supported on a concrete substructure is flanked by high concrete balustrades. One of over 17 arch spans on the NJ portion of the route, the bridge is a good example of its type, and is historically significant because it is associated with the construction of the 1908-11 NJ Cutoff of the DL&W RR. The cutoff is a technologically significant engineering achievement noted for its use of reinforced concrete for bridges and structures and for completely grade separating the railroad and highway crossings. The bridge is not individually eligible for listing in the National Register of Historic Places but is eligible as a contributing element of the Delaware, Lackawanna & Western Railroad New Jersey Cutoff Historic District under Criteria A and C.

INFOR MATION

BIBLIOGRAPHY:
"The New Cut-off Line of the Lackawanna Railroad", Wheaton, F.L., Engineering News, Vol.60, No.7, August 13, 1908.
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Lefferts, H. Leedom Jr., and Piefer, David R., Northwest New Jersey: An Inventory and History of Historic Engineering and Industry. 1979.

Physical Description: The reinforced concrete deck arch bridge spans 103' and carries an 18' road. The abandoned Greendell concrete railroad station (not included in the survey but observed as a potentially historic resource) is located about 150' east of the bridge. No plans for the span were located but it appears unaltered. The fascia is inscribed with the date of construction, 1911.

Historical and Technological Significance: The 1911 deck arch bridge is not individually distinguished, but it is significant because it was built as part of the original construction of the New Jersey Cut-Off of the Delaware, Lackawanna & Western RR. The New Jersey Cut-Off, built in 1908-1911, is historically and technologically distinguished in the areas of engineering and transportation (Criteria A, C). The cut-off is an important engineering accomplishment of the early 20th century. The Delaware, Lackawanna & Western RR (DL&W) designed and built the line to improve the efficiency of train travel across the mountainous terrain of northwestern New Jersey in Warren, Sussex, and Morris counties from Slateford, Pennsylvania to the DL&W mainline near Lake Hopatcong. The design and construction of a railroad that rises and falls just eleven feet over its length of 28.45 miles while crossing the mountains and valleys of northwestern New Jersey is remarkable even today. The decision to use reinforced concrete exclusively for all structures along the route was a pioneering action that attracted the attention of the engineering profession. The railroad's use of reinforced concrete did much to prove the material to be as strong and durable as the engineers of the early-20th century had anticipated. The DL&W also made full use of the moldable qualities of the material, designing not just functional structures, but also aesthetically pleasing ones that enhance the beauty of the railroad.

Sixteen structures are included in the NJDOT Historic Bridge Survey, but other structures, including viaducts, tunnels, and stations, were observed within Warren and Sussex counties. The structures not included in this survey appear to have integrity consistent with those bridges and tunnels that are included.

The New Jersey Cutoff is the culmination of over 55 years of efforts by the company to improve its route across New Jersey to New York City. The Delaware, Lackawanna and Western Railroad (DL&W), composed of a network of smaller railroads in Pennsylvania, New York and New Jersey, was formed in 1853 for the purpose of moving anthracite coal from the mining regions of northeastern Pennsylvania to market locations. It started from the merger of the Liggett's Gap RR and the Delaware & Cobbs Gap RR, which had been chartered and developed around 1850 by parties interested in carrying the coal to the Erie RR to the west and to the Delaware River to the east.

As the anthracite coal mining industry grew, so did the desire to increase the access to markets. In reaching to the east the DL&W needed a connection in New Jersey. They incorporated the Warren Railroad in the 1851 to carry trains from the Delaware River at Columbia (Warren County, NJ) to Central Railroad of New Jersey tracks in Hampton (Hunterdon County, NJ). From there the coal could be moved eastward to Elizabethport (near Newark, NJ). Commuters also traveled this route to get to New York City. In the late 1860s the DL&W became dissatisfied with the CNJ connections and sought their own access to the New York markets. In 1868 they leased the Morris & Essex RR, which was developed in the 1830s and 1840s in Morris, Essex and Hudson counties and the 1850s in Warren County. The M&E crossed New Jersey from Hoboken to Phillipsburg on the Delaware River.

Though the DL&W controlled several railroads (like the M&E, Warren, Valley, etc.), each was operated separately until 1899, when new

DL&W president William Truesdale centralized control of the company. This move allowed for increased efficiency for the railroad as a whole. In addition to the reorganization, Truesdale undertook an ambitious plan to modernize the routes (All background information gathered from Taber, 1977).

In seeking a more efficient, less circuitous route to replace the old 1851 Warren Railroad right-of-way, the DL&W considered three plans to build a completely new route (Taber and Taber, 1980:34-36). The plan chosen was a completely new line that would include massive cuts and fills to virtually eliminate grade changes. The existing line was nearly 40 miles long, had 57 curves comprising almost 13 miles of track, and a maximum grade of 60.2 feet per mile with a total rise and fall of 248 feet. The new layout, known as the New Jersey Cut-Off, limited the number and degree of curves and saved over 11 miles of track from the circuitous old line. This was the most expensive choice, costing $11,065,511.43 when completed (Taber and Taber, 1980:39), but the anticipated benefits for the railroad outweighed the cost.

Beginning in 1908 and under the direction of DL&W Chief Engineer George Ray, layout and design of the cut-off began. The line was to be 28.45 miles long, with a total rise and fall of just 11 feet and less than 5 miles of curved track. The new route would require 73 structures, including two massive viaducts, twelve overhead highway bridges and numerous crossings of roads and minor watercourses. Over 14 million cubic yards of both cut and fill were needed to create the relatively flat crossing of the hills and valleys of northwestern New Jersey (Taber and Taber, 1980:36).

Mr. Ray decided that reinforced concrete would be used for all structures along the route. This was the first time such a decision was made, causing the nickname of the "reinforced concrete railroad" to be used by the engineering profession when discussing the cut-off (Taber and Taber, 1980:36). Reinforced concrete was a state-of-the-art building material with yet unknown ultimate capabilities. It was thought to be as strong and durable as stone, and seemingly more permanent than wood or even steel.

Uncommon methods were used for the construction of the fills along the route. While the traditional method of building a wooden trestle to run dumping trains on was used for most fills, tracking was hung from suspended cables for the fills of greater magnitude. Dumping trains would carry fill onto the suspended tracks and dump the fill material from there. Most of the fill used on the cutoff was taken from the many cuts that were made, but even that was not enough. The DL&W bought 760 acres of farm land from which the contractors could dig additional fill. Five million pounds of dynamite was used to make the cuts. The Pequest Fill (Milepoint 55.85, Green Township, Sussex County) was the largest along the cut-off and in 1908 was claimed to be the "largest railway embankment ever made" (Engineering News, 1908:72). It was over 3 miles long and was up to 140 feet high. Over 6.5 million cubic yards of fill were necessary to reach the proper grade on this fill (Taber and Taber, 1980:36).

The DL&W chose to use similar structures for similar uses along the line. Where highway bridges were needed to cross their tracks, they designed reinforced concrete deck arch bridges, a bridge type that was capable of relatively long spans while providing dynamic and graceful forms. At least eleven deck arches were built in New Jersey, (1900G12, 1900G13, 1900K07, 1900C17, 2153166, 2153165, 2153164, 2153163, 2153162, 2153161, 2153160), all of them single span structures with one of two types of balustrades. Though design adjustments had to be made for roadway alignment and foundation conditions, the deck arch bridges are very similar structures.

Reinforced concrete arch tunnels were constructed where the cut-off crossed over roads or small waterways. These structures often supported high fill embankments as the cut-off crossed a valley. Over 35 of these structures were built along the line, and several of them are included in the Historic Bridge Survey (Wasigan and Simpson roads in Warren County, 2117152, and 1911155 in Sussex County). Slab-roofed tunnels and box culverts were also built to carry the right-of-way over roads and streams (1900C18).

The largest structures along the line were the two multi-span viaducts; the Delaware River Viaduct (2114159) in Knowlton Township and the Paulins Kill Viaduct (Milepoint 70.63, near Hainesburg in Knowlton Township). Both are open spandrel arch bridges that span valleys and larger water courses. The 9-span Delaware River Viaduct crosses the river as well as the highways that parallel it on both sides. It is 1,450 feet long and carries trains 65 feet above the river. The nine span structure has seven open spandrel arches and two deck arch approach spans on the Pennsylvania end. The 7-span Paulins Kill Viaduct in Hainesburg (Warren County) is 1100 feet long, but it is more graceful and magnificent as it rises 115 feet above the valley floor. It passes over the Paulins Kill River, the New York, Susquehanna and Western Railroad and the valley they run through (viaduct not included in the bridge survey because no roadway is associated with it). It was the most impressive structure on the DL&W main line prior to the building of the Tunkhannock Viaduct in Nicholson, Pennsylvania, completed in 1915.

Around the turn of the century, reinforced concrete arches were generally limited to relatively short and often single span bridges. The dead load carried by the arches was reduced with the introduction of open spandrel arches. The lighter structures were capable of longer spans and more aesthetically pleasing large bridges. The Walnut Lane bridge (1906-8) over Wissahickon Creek in Philadelphia was a forerunner of the type, though it used virtually no steel reinforcement in the two ribs (Condit, 1961:198). The use of reinforcement made the possibilities even greater. Under Ray's direction, the length and number of spans increased to create massive structures that dominated the landscape.

The New Jersey Cut-Off was divided into sections for bidding. Seven contractors were each awarded one section of the line, including contractors from as far away as Billings, Montana and Roanoke, Virginia. Each contract included all clearing, grading and masonry construction (Wheaton, 1908).

In addition to its engineering significance, the railroad right-of-way ranks historically as one of the most significant in the state, owing to the impact moving coal across the state had on the development of transportation systems within New Jersey. The Lehigh Valley Railroad played a significant role in the development of transportation and transportation-driven development in the northern half of the state, and the cut-off stands as one of the most ambitious remnants of the coal era in the state.

In summation, the viaducts, tunnels, overpasses, cuts, and fills on the New Jersey Cut-Off (1908-1911) form part of a unified design that was, and still is, one of the most remarkable engineering achievements of the early 20th century in the region. Furthermore, the New Jersey Cut-Off is one of the most visible remnants of the DL&W, and is illustrative of the history of one of the largest movers of coal that contributed to the transportation-driven economic growth of the northern half of the state. The New Jersey Cut-Off is a significant part of the western New Jersey historic landscape and transportation systems.

Boundary Description and Justification: The significance of the structure is based, in part, on its historic association and physical connection with a right-of-way that is both historically and technologically important. In New Jersey, the potential historic corridor appears to be limited to the railroad right-of-way. The potential historic corridor is approximately 28 miles long stretching from the Delaware River to the eastern junction at Hopatcong, Morris County. The New Jersey Cut-Off's western junction is in Slateford, Pennsylvania on the west bank of the Delaware River. The entire route and all its related structures were not surveyed as part of this project, but those portions of the route that were surveyed or observed as part of the 1991-1993 Historic Bridge Survey have integrity of setting and original design and appear to representative of the overall state of preservation and completeness of the route in Sussex and Warren counties.

PHOTO: 1907:30-32 (07/92) REVISED BY (DATE): QUAD: Tranquility

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1900H03 **CO** SUSSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 622 OVER PAULINS KILL LAKE **FACILITY** CR 622

TOWNSHIP HAMPTON TOWNSHIP

TYPE THRU GIRDER **DESIGN** PARTIALLY ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 77 ft **WIDTH** 20.7 ft

CONSTRUCTION DT 1926 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT HARVEY SNOOK, CO. ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane road over a lake in a wooded area. The lake is bordered by boat ramps and it is a fishing area.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span thru girder with floorbeams bridge is supported on concrete abutments. The floorbeams are encased. No alterations are visible. The span is a representative example of a common type, but it is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 1901:13-14 (08/92) REVISED BY (DATE): QUAD: Newton West

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1900H05 **CO** SUSSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PARSONS ROAD OVER PAULINS KILL **FACILITY** PARSONS ROAD

TOWNSHIP HAMPTON TOWNSHIP

TYPE PONY TRUSS **DESIGN** PRATT **MATERIAL** Steel

 # SPANS 1 **LENGTH** 50 ft **WIDTH** 11.8 ft

CONSTRUCTION DT 1900ca **ALTERATION DT** Demolished **SOURCE** STYLE

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a single-lane, 2-way street over a small stream in a wooded sparsely developed area. An abandoned farm and farmhouse is located at one side of the bridge. The bridge was removed after the 8/92 field inspection.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Bridge was Removed.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The Pratt pin-connected pony truss bridge is supported on repointed stone abutments. Guide rail has been added in front of the trusses. Alterations are limited to welded repairs at the intersection of the counters and welds at the railing. One of 6 Pratt pony truss bridges in the county, the span is a well-preserved example of an uncommon bridge type, and it is distinguished. The span has been removed by the county.

INFOR MATION

PHOTO: 1901:15-18 (08/92) REVISED BY (DATE): QUAD: Newton West

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1900H92 **CO** SUSSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED GINGERBREAD CASTLE ROAD OVER WALLKILL RIVER **FACILITY** GINGERBREAD CASTLE ROAD

TOWNSHIP HAMBURG BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 33 ft **WIDTH** 16.3 ft

CONSTRUCTION DT 1920ca **ALTERATION DT** **SOURCE** STYLE/COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 1-lane of a 2-way road over a mill race. The bridge was built as part of the 1921-1931 expansion of the Wheatsworth Co. biscuit factory. Owner F. H. Bennett constructed fanciful medieval concrete factory buildings and the Gingerbread Castle amusement park to attract tourists. The factory ceased operations in the 1970s but portions are still operated as an amusement park. The site, which is well-preserved, appears to be a potential NR historic district.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Potential Wheatsworth Historic District. Contributing.

CONSULT DOCUMENTS SHPO Letter 03/12/01

SUMMARY The 2-span encased stringer bridge set on a concrete substructure is flanked on one side with a metal railing with medieval-style posts and on the other side by a concrete balustrade. Original plans for the bridge were not located, but it appears to be stylistically and structurally associated with the 1920s expansion of the Wheatsworth factory. The bridge is not individually eligible, but would be a contributing element to the Wheatsworth Historic District, if it were determined NR eligible under Criteria A and C.

INFOR MATION

Bibliography:
Sussex County Engineer. Bridge Files.
Sussex County Library. "Gingerbread Castle." Vertical Files.

Physical Description: The skewed two-span 33'-long encased stringer bridge rests on concrete abutments and pier. The abutments form part of the retaining walls of the mill tail race. The bridge has two-high pipe railings set between concrete posts with bold paling caps on the downstream side opposite the mill and a simply detailed concrete balustrade with a rectangular pattern on the side adjacent the mill. The structure appears unaltered.

Historical and Technological Significance: The encased stringer bridge is historically associated with a former factory site and amusement park of the Wheatsworth Company. The entire site appears to be a potentially eligible historic site (Criterion A and C). The factory that produced whole-grain flour for biscuits is notable for its masonry and reinforced-concrete construction that includes fanciful medieval-style architectonic features such as asymmetrical windows and doors, balconies, and rounded arches. Adjacent the multi-story factory buildings is a reinforced-concrete construction fairy-tale Gingerbread Castle built by the owners of the mill as an amusement park for children and tourists. The amusement park features several other fanciful masonry and reinforced-concrete buildings and a small lake on the opposite side of Gingerbread Castle Road. The factory and amusement park are technologically significant illustrations of with the moldable qualities of reinforced-concrete in construction of a variety of building types. Gate posts have ceramic tile mosaics illustrating activities that once occurred at the mill. The factory and park appear to constitute a potential National Register historic site, and the bridge because it matches in style and dates to a significant period of the factory's and park's development would be a contributing element. The bridge spans the mill tail race adjacent to the factory building. The span is not individually significant.

In 1921 Wheatsworth Co. owner F. H. Bennett purchased the factory and expanded operations. Industrial activity at the site dated back to the mid-18th century when the Sharp family established an iron forge around which grew the village of Hamburg. In the mid-19th-century the site was used as a distillery and later as a lime kiln. Bennett incorporated a surviving stone mill building in his factory design, but little other physical evidence of earlier industrial activities is visible at the site. The Wheatsworth Company operated the factory from 1921 to 1931 and in the late 1920s began construction of the Gingerbread Castle as a tourist attraction and whimsical tribute to popular children's fairy tales. The amusement's construction coincided with improvements to the State Highway system that were attracting increasing numbers of automobile vacationers to the region. The factory property borders NJ Route 23. In 1931 the factory was sold to the National Biscuit Company, and in 1943 the Plastoid Corporation purchased the facility. Factory operations ceased in 1978, but the amusement park continues to be open to the public. The site retains a high degree of integrity.

Boundary Description and Justification: The bridge is not individually significant, but it is significant for its association with the Wheatsworth Co. factory and Gingerbread Castle amusement park. If the historic site were determined a National Register eligible property, the bridge would be within the boundaries of the eligible property and it would be a contributing resource.

PHOTO: 1903:31-33; 432:9-17 (08/92 JPH (5/96 REVISED BY (DATE): QUAD: Hamburg

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1900J05 **CO** SUSSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 625 OVER NEW YORK SUSQUEHANNA AND WESTERN RR **FACILITY** CR 625 (SILVER LAKE ROAD)

TOWNSHIP HARDYSTON TOWNSHIP

TYPE THRU GIRDER **DESIGN** JACK ARCH (CONCRETE) **MATERIAL** Steel

 # SPANS 1 **LENGTH** 42 ft **WIDTH** 17.5 ft

CONSTRUCTION DT 1905 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT NYS & W RR OFFICE OF ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 1-lane of a 2-way county road over a lightly-used track, part of the New York Susquehanna and Western Railroad. NJ 23 is about 1000' from the bridge to the west and a post-WW II residential neighborhood is to the east.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 02/24/93

SUMMARY The plate thru girder with floorbeams bridge supported on concrete abutments cut into a ledge has a concrete jack arches between the floorbeams. Guide rails were added atop each girder. The bridge is a representative example of a common type and design. Bridges with concrete jack arches are frequent in the northern half of the state. This span is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 1907:42-44 (07/92) REVISED BY (DATE): QUAD: Franklin

NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1900J06 **CO** SUSSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 515 OVER PEQUANNOCK RIVER **FACILITY** CR 515

TOWNSHIP HARDYSTON TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 23 ft **WIDTH** 35.2 ft

CONSTRUCTION DT 1943 **ALTERATION DT** 1966 **SOURCE** PLANS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane road with shoulders over a small stream in a wooded undeveloped area.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The reinforced concrete slab bridge is supported on stone abutments from a previous span. They were widened on the west with concrete extensions for prestressed concrete beams in 1966. The original railings were replaced with guide railings. One of over 10 pre-WW II slab bridges in the county, the altered span is an example of a common type, and it is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 1904:6-7 (08/92) REVISED BY (DATE): QUAD: Franklin

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1900K07 **CO** SUSSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 605 OVER NJ CUTOFF OF DL&W RR **FACILITY** CR 605

TOWNSHIP HOPATCONG BOROUGH

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 85 ft **WIDTH** 17.7 ft

CONSTRUCTION DT 1911 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT DL&W OFFICE OF ENGINEERING **BUILDER** TIMONTHY BURKE

SETTING / CONTEXT The bridge carries a one-lane of a two-directional road in a wooded area over the abandoned New Jersey Cutoff of the Delaware Lackawanna & Western Railroad. The NJ Cutoff was constructed to improve transporting anthracite coal from eastern Pennsylvania to markets east. A significant engineering achievement, the line was constructed with major cuts and fills, and avoided creating any highway railroad grade crossings along its 28.45 mile length.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible. Delaware, Lackawanna & Western Railroad New Jersey Cutoff Historic District, Eligible. Contributing.

CONSULT DOCUMENTS SHPO Opinion 3/22/94 05/05/94, Letter 03/12/01.

SUMMARY The deck arch bridge supported on scored concrete abutments is flanked by standard design concrete balustrades. Both approaches to the bridge are on a horizontal curve. The bridge is significant because it is one of the original reinforced concrete bridges built as part of the 1908-11 New Jersey Cutoff of the DL&W RR, a technologically significant engineering achievement noted for its use of reinforced concrete for bridges and structures and for completely grade separating the railroad and highway crossings. The bridge is individually eligible for listing in the National Register of Historic Places under Criterion C, and is a contributing element of the Delaware, Lackawanna & Western Railroad New Jersey Cutoff Historic District under Criteria A and C.

INFOR MATION

BIBLIOGRAPHY:

"The New Cut-off Line of the Lackawanna Railroad", Wheaton, F.L., Engineering News, Vol.60, No.7, August 13, 1908.
Short summary of DL&W Cut-off, Engineering News, Vol.60, No.3, July 16, 1908. pg.72.
"Some Concrete Culverts and Small Bridges on the Slateford-Hopatcong Cut-off of the Delaware, Lackawanna & Western R.R.", Engineering News, Vol.62, No.14, September 30, 1909.
Condit, Carl W., American Building Art The Twentieth Century, 1961.
Taber, Thomas Townsend, The Delaware, Lackawanna & Western Railroad in the Nineteenth Century. 1977.
Taber, T.T. and Taber, T.T. III, The Delaware, Lackawanna & Western Railroad in the Twentieth Century, Vols. I and II. 1980.
Lefferts, H. Leedom Jr., and Piefer, David R., Northwest New Jersey: An Inventory and History of Historic Engineering and Industry. 1979.

Physical Description: The reinforced concrete elliptical arch bridge spans 85' and carries a 17.7' wide county road. The arch with a high rise extends from a scored concrete substructure, and the road is flanked by standard-design concrete balustrades. The span appears unaltered. The date of construction, 1911, is inscribed in the fascia.

Historical and Technological Significance: The elliptical arch bridge, constructed in 1911, is not individually eligible, but it is significant because it was built as part of the construction of the New Jersey Cut-Off of the Delaware, Lackawanna & Western RR.

The New Jersey Cut-Off, built in 1908-1911, is historically and technologically distinguished in the areas of engineering and transportation (Criteria A, C). The cut-off is an important engineering accomplishment of the early 20th century. The Delaware, Lackawanna & Western RR (DL&W) designed and built the line to improve the efficiency of train travel across the mountainous terrain of northwestern New Jersey in Warren, Sussex, and Morris counties from Slateford, Pennsylvania to the DL&W mainline near Lake Hopatcong. The design and construction of a railroad that rises and falls just eleven feet over its length of 28.45 miles while crossing the mountains and valleys of northwestern New Jersey is remarkable even today. The decision to use reinforced concrete exclusively for all structures along the route was a pioneering action that attracted the attention of the engineering profession. The railroad's use of reinforced concrete did much to prove the material to be as strong and durable as the engineers of the early-20th century had anticipated. The DL&W also made full use of the moldable qualities of the material, designing not just functional structures, but also aesthetically pleasing ones that enhance the beauty of the railroad.

Sixteen structures are included in the NJDOT Historic Bridge Survey, but other structures, including viaducts, tunnels, and stations, were observed within Warren and Sussex counties. The structures not included in this survey appear to have integrity consistent with those bridges and tunnels that are included.

The New Jersey Cutoff is the culmination of over 55 years of efforts by the company to improve its route across New Jersey to New York City. The Delaware, Lackawanna and Western Railroad (DL&W), composed of a network of smaller railroads in Pennsylvania, New York and New Jersey, was formed in 1853 for the purpose of moving anthracite coal from the mining regions of northeastern Pennsylvania to market locations. It started from the merger of the Liggett's Gap RR and the Delaware & Cobbs Gap RR, which had been chartered and developed around 1850 by parties interested in carrying the coal to the Erie RR to the west and to the Delaware River to the east.

As the anthracite coal mining industry grew, so did the desire to increase the access to markets. In reaching to the east the DL&W needed a connection in New Jersey. They incorporated the Warren Railroad in the 1851 to carry trains from the Delaware River at Columbia (Warren County, NJ) to Central Railroad of New Jersey tracks in Hampton (Hunterdon County, NJ). From there the coal could be moved eastward to Elizabethport (near Newark, NJ). Commuters also traveled this route to get to New York City. In the late 1860s the DL&W became dissatisfied with the CNJ connections and sought their own access to the New York markets. In 1868 they leased the Morris & Essex RR, which was developed in the 1830s and 1840s in Morris, Essex and Hudson counties and the 1850s in Warren County. The M&E crossed New Jersey from Hoboken to Phillipsburg on the Delaware River.

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

Though the DL&W controlled several railroads (like the M&E, Warren, Valley, etc.), each was operated separately until 1899, when new DL&W president William Truesdale centralized control of the company. This move allowed for increased efficiency for the railroad as a whole. In addition to the reorganization, Truesdale undertook an ambitious plan to modernize the routes (All background information gathered from Taber, 1977).

In seeking a more efficient, less circuitous route to replace the old 1851 Warren Railroad right-of-way, the DL&W considered three plans to build a completely new route (Taber and Taber, 1980:34-36). The plan chosen was a completely new line that would include massive cuts and fills to virtually eliminate grade changes. The existing line was nearly 40 miles long, had 57 curves comprising almost 13 miles of track, and a maximum grade of 60.2 feet per mile with a total rise and fall of 248 feet. The new layout, known as the New Jersey Cut-Off, limited the number and degree of curves and saved over 11 miles of track from the circuitous old line. This was the most expensive choice, costing $11,065,511.43 when completed (Taber and Taber, 1980:39), but the anticipated benefits for the railroad outweighed the cost.

Beginning in 1908 and under the direction of DL&W Chief Engineer George Ray, layout and design of the cut-off began. The line was to be 28.45 miles long, with a total rise and fall of just 11 feet and less than 5 miles of curved track. The new route would require 73 structures, including two massive viaducts, twelve overhead highway bridges and numerous crossings of roads and minor watercourses. Over 14 million cubic yards of both cut and fill were needed to create the relatively flat crossing of the hills and valleys of northwestern New Jersey (Taber and Taber, 1980:36).

Mr. Ray decided that reinforced concrete would be used for all structures along the route. This was the first time such a decision was made, causing the nickname of the "reinforced concrete railroad" to be used by the engineering profession when discussing the cut-off (Taber and Taber, 1980:36). Reinforced concrete was a state-of-the-art building material with yet unknown ultimate capabilities. It was thought to be as strong and durable as stone, and seemingly more permanent than wood or even steel.

Uncommon methods were used for the construction of the fills along the route. While the traditional method of building a wooden trestle to run dumping trains on was used for most fills, tracking was hung from suspended cables for the fills of greater magnitude. Dumping trains would carry fill onto the suspended tracks and dump the fill material from there. Most of the fill used on the cutoff was taken from the many cuts that were made, but even that was not enough. The DL&W bought 760 acres of farm land from which the contractors could dig additional fill. Five million pounds of dynamite was used to make the cuts. The Pequest Fill (Milepoint 55.85, Green Township, Sussex County) was the largest along the cut-off and in 1908 was claimed to be the "largest railway embankment ever made" (Engineering News, 1908:72). It was over 3 miles long and was up to 140 feet high. Over 6.5 million cubic yards of fill were necessary to reach the proper grade on this fill (Taber and Taber, 1980:36).

The DL&W chose to use similar structures for similar uses along the line. Where highway bridges were needed to cross their tracks, they designed reinforced concrete deck arch bridges, a bridge type that was capable of relatively long spans while providing dynamic and graceful forms. At least eleven deck arches were built in New Jersey, (1900G12, 1900G13, 1900K07, 1900C17, 2153166, 2153165, 2153164, 2153163, 2153162, 2153161, 2153160), all of them single span structures with one of two types of balustrades. Though design adjustments had to be made for roadway alignment and foundation conditions, the deck arch bridges are very similar structures.

Reinforced concrete arch tunnels were constructed where the cut-off crossed over roads or small waterways. These structures often supported high fill embankments as the cut-off crossed a valley. Over 35 of these structures were built along the line, and several of them are included in the Historic Bridge Survey (Wasigan and Simpson roads in Warren County, 2117152, and 1911155 in Sussex County). Slab-roofed tunnels and box culverts were also built to carry the right-of-way over roads and streams (1900C18).

The largest structures along the line were the two multi-span viaducts; the Delaware River Viaduct (2114159) in Knowlton Township and the Paulins Kill Viaduct (Milepoint 70.63, near Hainesburg in Knowlton Township). Both are open spandrel arch bridges that span valleys and larger water courses. The 9-span Delaware River Viaduct crosses the river as well as the highways that parallel it on both sides. It is 1,450 feet long and carries trains 65 feet above the river. The nine span structure has seven open spandrel arches and two deck arch approach spans on the Pennsylvania end. The 7-span Paulins Kill Viaduct in Hainesburg (Warren County) is 1100 feet long, but it is more graceful and magnificent as it rises 115 feet above the valley floor. It passes over the Paulins Kill River, the New York, Susquehanna and Western Railroad and the valley they run through (viaduct not included in the bridge survey because no roadway is associated with it). It was the most impressive structure on the DL&W main line prior to the building of the Tunkhannock Viaduct in Nicholson, Pennsylvania, completed in 1915.

Around the turn of the century, reinforced concrete arches were generally limited to relatively short and often single span bridges. The dead load carried by the arches was reduced with the introduction of open spandrel arches. The lighter structures were capable of longer spans and more aesthetically pleasing large bridges. The Walnut Lane bridge (1906-8) over Wissahickon Creek in Philadelphia was a forerunner of the type, though it used virtually no steel reinforcement in the two ribs (Condit, 1961:198). The use of reinforcement made the possibilities even greater. Under Ray's direction, the length and number of spans increased to create massive structures that dominated the landscape.

The New Jersey Cut-Off was divided into sections for bidding. Seven contractors were each awarded one section of the line, including contractors from as far away as Billings, Montana and Roanoke, Virginia. Each contract included all clearing, grading and masonry construction (Wheaton, 1908).

In addition to its engineering significance, the railroad right-of-way ranks historically as one of the most significant in the state, owing to the impact moving coal across the state had on the development of transportation systems within New Jersey. The Lehigh Valley Railroad played a significant role in the development of transportation and transportation-driven development in the northern half of the state, and the cut-off stands as one of the most ambitious remnants of the coal era in the state.

In summation, the viaducts, tunnels, overpasses, cuts, and fills on the New Jersey Cut-Off (1908-1911) form part of a unified design that was, and still is, one of the most remarkable engineering achievements of the early 20th century in the region. Furthermore, the New Jersey Cut-Off is one of the most visible remnants of the DL&W, and is illustrative of the history of one of the largest movers of coal that contributed to the transportation-driven economic growth of the northern half of the state. The New Jersey Cut-Off is a significant part of

the western New Jersey historic landscape and transportation systems.

Boundary Description and Justification: The significance of the structure is based, in part, on its historic association and physical connection with a right-of-way that is both historically and technologically important. In New Jersey, the potential historic corridor appears to be limited to the railroad right-of-way. The potential historic corridor is approximately 28 miles long stretching from the Delaware River to the eastern junction at Hopatcong, Morris County. The New Jersey Cut-Off's western junction is in Slateford, Pennsylvania on the west bank of the Delaware River. The entire route and all its related structures were not surveyed as part of this project, but those portions of the route that were surveyed or observed as part of the 1991-1993 Historic Bridge Survey have integrity of setting and original design and appear to representative of the overall state of preservation and completeness of the route in Sussex and Warren counties.

PHOTO: 1903:9-10 (08/92 JPH (5/96)) REVISED BY (DATE): QUAD: Stanhope

NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1900L07 **CO** SUSSEX **OWNER** COUNTY **MILEPOINT** 0.22

NAME & FEATURE INTERSECTED LAFAYETTE BEAVER RUN ROAD OVER PAULINS KILL **FACILITY** LAFAYETTE BEAVER RUN ROAD

TOWNSHIP LAFAYETTE TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 57 ft **WIDTH** 24 ft

CONSTRUCTION DT 1938 **ALTERATION DT** **SOURCE** PLANS/INSCRIPTION

DESIGNER/PATENT HARVEY SNOOK, CO. ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane collector road over a shallow stream in an area of residential homes and farm land with structures dating from the 1940s through the 1970s.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased stringer bridge is supported on scored concrete abutments and constructed on a skew. The fascia stringers have paneled concrete encasement. The span is flanked by standard Sussex County design 2-rail concrete railings with guide rails attached. One of over 25 pre-WW II stringer bridges in the county, the span is an example of a common type, and it is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 1906:40-41 (08/92) REVISED BY (DATE): QUAD: Newton East

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1900M09 **CO** SUSSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MILLVILLE ROAD OVER SHIMERS BROOK **FACILITY** MILLVILLE ROAD

TOWNSHIP MONTAGUE TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 22 ft **WIDTH** 16.1 ft

CONSTRUCTION DT 1930 **ALTERATION DT** 1980ca **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 1-lane of a 2-lane street over a small stream in a wooded undeveloped area. The span is located within the boundaries of the Millville Historic and Archaeological District which is listed in the National Register. The district is significant for its water-powered industry with mills operated during the 18th and 19th century.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Listed. Millville Historic and Archaeological District. 01/30/1984. Noncontributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The short-span stringer bridge is supported on stone abutments from a previous span with concrete caps. The span has asphalt-filled deck pans, and it is flanked by guide rails which date to circa 1980. The altered span is not historically nor technologically noteworthy. It was built outside the 18th and 19th century period of significance of the historic district. It does not contribute to the district and is rated noncontributing.

INFOR MATION

PHOTO: 1905:2,3 (08/92) REVISED BY (DATE): QUAD: Milford

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NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1900M10 **CO** SUSSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 653 OVER SHIMERS BROOK **FACILITY** CR 653

TOWNSHIP MONTAGUE TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 26 ft **WIDTH** 28 ft

CONSTRUCTION DT 1936 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT HARVEY SNOOK, CO. ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane county road with narrow shoulders over a small stream, and it is set in farm land. The houses in the area date from the 1930s through the 1950s.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span concrete slab bridge supported on concrete abutments is flanked by beam guide rails. Concrete repairs were made to the substructure and the slab. No alterations were noted. One of over 10 pre-WW II slab bridges in the county, the span is a representative example of a common type, and it is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 1905:44,1 (08/92) REVISED BY (DATE): QUAD: Milford

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1900M16 **CO** SUSSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 653 OVER BRANCH OF MILL BROOK **FACILITY** CR 653

TOWNSHIP MONTAGUE TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 2 **LENGTH** 31 ft **WIDTH** 29 ft

CONSTRUCTION DT 1940 **ALTERATION DT** 1980ca **SOURCE** PLANS

DESIGNER/PATENT HARVEY SNOOK, CO. ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane county road with narrow shoulders over a small stream bordering wooded undeveloped land to one side and a residential area dating from the early 1900s to the 1920s to the other side.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 2-span continuous concrete slab bridge is supported on a concrete substructure. An invert slab was placed under both spans. The bridge is flanked by modern guide rails. One of over 10 pre-1945 slab bridges in the county, the span is an example of a common type, and it is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 1905:42,43 (08/92) REVISED BY (DATE): QUAD: Port Jervis South

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1900M24 **CO** SUSSEX **OWNER** COUNTY **MILEPOINT** 6.12

NAME & FEATURE INTERSECTED CR 653 OVER TRIBUTARY OF MILL BROOK **FACILITY** CR 653 (CLOVE ROAD)

TOWNSHIP MONTAGUE TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 2 **LENGTH** 28 ft **WIDTH** 22.2 ft

CONSTRUCTION DT 1936 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT HARVEY SNOOK, CO. ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane county road with narrow shoulders over a small stream, and it borders wooded undeveloped land to one side, and a residential area dating from the 1910s to the 1920s to the other.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 8/29/91

SUMMARY The 2-span continuous concrete slab bridge is supported on a concrete pier and stone abutments from a previous span. The bridge is bordered by standard Sussex County design 2-rail concrete railings. One of over 10 pre-1945 slab bridges in the county the span is an example of a common type, and it is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 1905:40,41 (08/92) REVISED BY (DATE): QUAD: Port Jervis South

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1900M25 **CO** SUSSEX **OWNER** COUNTY **MILEPOINT** 7.16

NAME & FEATURE INTERSECTED CR 653 OVER TRIBUTARY OF MILL BROOK **FACILITY** CR 653 (CLOVE ROAD)

TOWNSHIP MONTAGUE TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 27 ft **WIDTH** 22 ft

CONSTRUCTION DT 1933 **ALTERATION DT** 1980ca **SOURCE** PLANS

DESIGNER/PATENT HARVEY SNOOK, CO. ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane county road over a small stream in a wooded area. A commercial building constructed in the 1930s is contiguous to the span.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 12/05/90

SUMMARY The single-span reinforced concrete slab bridge supported on concrete abutments was constructed on a slight skew. The southwest wingwall was rebuilt, and the substructure and slab have concrete repairs. The bridge is bordered by modern guide rails. One of over 10 pre-1945 slab bridges in the county, the span is an example of a common type, and it is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 1905:38,39 (08/92) REVISED BY (DATE): QUAD: Port Jervis South

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1900O07 **CO** SUSSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PASSAIC AVENUE OVER WALLKILL RIVER **FACILITY** PASSAIC AVENUE

TOWNSHIP OGDENSBURG BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 47 ft **WIDTH** 20 ft

CONSTRUCTION DT 1928 **ALTERATION DT** 1980ca **SOURCE** PLANS

DESIGNER/PATENT HARVEY SNOOK, CO. ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane road over a stream in a wooded area about 200' east of the entrance to the Sterling Mining Co., now a museum. Sterling Hill was mined from 1877 until 1986. Ogdensburg developed to support the mine which is noted for its ore with brightly fluorescent minerals. The mine is a potential historic district, but this bridge is located outside the boundaries of the mining complex.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed encased stringer bridge is supported on concrete abutments. The original railing was removed and replaced with guide rail in circa 1980. One of over 25 pre-WW II stringer bridges in the county, the altered span is an example of a common type, and it is not technologically innovative. The span was constructed during operation of the Sterling Hill mine, but it is not historically associated with the operations of the mine itself. It is outside the potential historic district.

INFOR MATION

PHOTO: 1903:11-12 (08/92) REVISED BY (DATE): QUAD: Franklin

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1900O08 **CO** SUSSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED KENNEDY AVE OVER WALLKILL RIVER **FACILITY** KENNEDY AVENUE

TOWNSHIP OGDENSBURG BOROUGH

TYPE STRINGER **DESIGN** PARTIALLY ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 22 ft **WIDTH** 15.7 ft

CONSTRUCTION DT 1920 **ALTERATION DT** 1980ca **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 1-lane, 2-way road over a small stream in a wooded, sparsely developed area. A late 19th century house is located contiguous to the bridge.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The stringer bridge supported on a concrete substructure is flanked by guide railing placed in circa 1980. The underside of the deck is flush with the stringer bottom flanges so that the stringers are almost entirely encased. Tie rods are anchored through the fascia stringers, which are not encased. The span is neither technologically nor historically distinguished.

INFOR MATION

PHOTO: 1903:13-14 (08/92) REVISED BY (DATE): QUAD: Franklin

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NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1900P01 **CO** SUSSEX **OWNER** STATE AGENCY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BROOK ROAD OVER BIG FLAT BROOK **FACILITY** BROOK ROAD

TOWNSHIP SANDYSTON TOWNSHIP

TYPE PONY TRUSS **DESIGN** PRATT **MATERIAL** Metal

 # SPANS 1 **LENGTH** 46 ft **WIDTH** 11.6 ft

CONSTRUCTION DT 1890ca **ALTERATION DT** **SOURCE** STYLE

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 1-lane, 2-way street over a shallow stream in a wooded undeveloped area located within the Flat Brook-Roy Wildlife Management Area.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The pin-connected Pratt pony truss bridge supported on concrete abutments has a laminated timber deck. Alterations are limited to the addition of welded outriggers and steel railings were welded to the truss. The span is distinguished because it is a very well-preserved example of an important early metal truss bridge type. Located within undeveloped parkland, the integrity of the original setting has not been compromised. Date of construction and builder are undocumented.

INFOR MATION

Bibliography:
Sussex County Engineer's Office. Bridge Files.

Physical Description: The single-span pin-connected half-hip Pratt pony truss bridge supported on concrete abutments, spans 46' and carries an 11'6" wide road. The four-panel truss is composed of standard-design members. Upper chords are back-to-back channels with cover plate on the top and lattice on the bottom of the built-up box member. Bottom chords are pairs of rectangular section eye bar at center bays and circular section bars at end bays. Verticals are back-to-back angles joined by lattice. Diagonal members are pairs of square section bars, and counters are single circular section rods. Outriggers were welded to the truss at each panel point at unknown dates, and a steel channel guide rail has been was welded to each inside truss face. The span has a laminated timber deck.

Historical and Technological Significance: The ca. 1890 Pratt pony truss bridge is a very well-preserved example of an increasingly uncommon bridge type (Criterion C). The span, although undocumented to date of construction and builder, is a virtually unaltered example of the most common late-19th century bridge type. It is one of four eligible pony truss spans in Sussex County (1900D07, Smith Mill Road, Frankford Twp.; 1900E10, Scott Road, Franklin Borough; 1900W06, Main Street, Walpack Township). The bridge is located within the undeveloped Flat Brook-Roy Wildlife Management Area, and the integrity of setting has not been compromised.

Through the third quarter of the 19th century, a variety of truss designs were developed and patented, but the one that proved to be the most economical, efficient, and easy to fabricate and erect in the field was the Pratt truss, which has the verticals in compression and the diagonals in tension. The truss was patented by Thomas and Caleb Pratt in 1844, and the earliest examples were a combination of wood (for the compression members) and iron (for tensile members). The Pratt truss went on through the century to become the most common design, and it was not until technological advances made it possible to execute reliable field riveted connections after about 1890 that the Warren truss superseded the pin-connected Pratts on the nations highways and byways.

Boundary Description and Justification: The bridge is rated individually eligible. The boundary is limited to the superstructure and substructure of the bridge itself.

PHOTO: 1902:32-35 (08/92) REVISED BY (DATE): QUAD: Culvers Gap

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NJDOT updated data 03-01-2001.
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1900P15 **CO** SUSSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED ROY ROAD OVER LITTLE FLAT BROOK **FACILITY** ROY ROAD

TOWNSHIP SANDYSTON TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 23 ft **WIDTH** 12.8 ft

CONSTRUCTION DT 1935 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 1-lane road that accesses a private driveway. The bridge spans a small stream in a wooded rural area adjacent to a horse farm.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The stringer bridge supported on stone masonry abutments from a previous span has a laminated timber deck and 2-rail timber railings. The bridge is closed to public traffic. One of over 25 pre-WW II stringer bridges in the county, the span is an example of common type, and it is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 1902:30-31 (08/92) REVISED BY (DATE): QUAD: Culvers Gap

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1900P21 **CO** SUSSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 645 (LAYTON ROAD) OVER LITTLE FLAT BROOK **FACILITY** CR 645

TOWNSHIP SANDYSTON TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 33 ft **WIDTH** 22.2 ft

CONSTRUCTION DT 1936 **ALTERATION DT** 1960ca **SOURCE** PLANS

DESIGNER/PATENT HARVEY SNOOK, CO. ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane road over a small stream in a sparsely developed wooded commercial and residential area. A house built in the late 1800s is located near the span, and the remaining structures in the area date from the 1920s to the 1950s.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The stringer bridge is supported on a concrete substructure. The original railings were removed and replaced with guide rails. The superstructure appears to have been replaced. Plans indicate the bridge was originally an encased stringer bridge. The span is an altered example of a common pre-WW II bridge type in the county, and it is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 1902:28-29 (08/92) REVISED BY (DATE): QUAD: Culvers Gap

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1900P28 **CO** SUSSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED DEGROAT ROAD OVER LITTLE FLAT BROOK **FACILITY** DEGROAT ROAD

TOWNSHIP SANDYSTON TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 39 ft **WIDTH** 25.7 ft

CONSTRUCTION DT 1942 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT HARVEY SNOOK, CO. ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane road over a small stream in a wooded sparsely developed rural area adjacent to horse farms.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The slightly skewed encased stringer bridge supported on scored concrete abutments is flanked by standard design 2-rail concrete railings. The fascia stringers are finished with flat panels. Guide rail was added in front of the railings. Although an attractive and unaltered span, it is a representative example of a common county type and design and is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 1902:40-41 (08/92) REVISED BY (DATE): QUAD: Milford

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1900Q25 **CO** SUSSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WEST MOUNTAIN ROAD OVER NY SUSQUEHANNA & WESTERN RR **FACILITY** WEST MOUNTAIN ROAD

TOWNSHIP SPARTA TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Wood

 # SPANS 3 **LENGTH** 55 ft **WIDTH** 14.4 ft

CONSTRUCTION DT 1911 **ALTERATION DT** 1959, 1991 **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 1-lane 2-way street over a track of the New York Susquehanna & Western Railroad. The road provides access to Lake Grinnell, an early-20th century summer resort community of lakeshore cottages located east of the bridge. West of the bridge are a horse farm and post-1950 residences.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 7/9/90, Letter 6/30/95.

SUMMARY The 3-span timber stringer bridge is supported on timber pier bents, one high coursed stone gravity abutment, and one concrete abutment. Many timber stringers and substructure members have been replaced (1959,1991) since the span was originally built in 1911. The span carries a plank deck and has 2-rail wood railings. The bridge is an undistinguished example of a common bridge type, but it is one of the few timber bridges in this region. It is technologically undistinguished.

INFOR MATION

PHOTO: 432:7-8 (08/92) REVISED BY (DATE): QUAD: Newton East

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1900S01 **CO** SUSSEX **OWNER** COUNTY **MILEPOINT** 0.3

NAME & FEATURE INTERSECTED CR 610 OVER PAULINS KILL **FACILITY** CR 610 (FREDON-STILLWATER ROAD)

TOWNSHIP STILLWATER TOWNSHIP

TYPE THRU GIRDER **DESIGN** PARTIALLY ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 78 ft **WIDTH** 20.2 ft

CONSTRUCTION DT 1926 **ALTERATION DT** **SOURCE** PLANS/INSCRIPTION

DESIGNER/PATENT HARVEY SNOOK, CO. ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane road over a small watercourse at the edge of the town center of Stillwater adjacent to an ca. 1800 mill and an 1820s inn. The area is a potential historic district. The span replaced a truss bridge constructed in 1888 by the Berlin Iron Bridge Co. The plaque from the non-extant 1888 bridge is set in the concrete abutment wall.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Agreed Potential Historic District. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The thru girder with encased floorbeams bridge is supported on concrete abutments. The bridge is an example of a common type, and it is not technologically distinguished. The span is not historically significant, and it post-dates the period of significance of its 19th-century setting. It does not contribute to the character nor is it within the period of significance of the potential Stillwater historic district. It is thus a noncontributing resource.

INFOR MATION

PHOTO: 1907:33-35 (07/92) REVISED BY (DATE): QUAD: Newton West

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1900S15 **CO** SUSSEX **OWNER** COUNTY **MILEPOINT** 13.88

NAME & FEATURE INTERSECTED CR 521 OVER TROUT BROOK **FACILITY** CR 521

TOWNSHIP STILLWATER TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 29 ft **WIDTH** 20.1 ft

CONSTRUCTION DT 1930 **ALTERATION DT** 1980ca **SOURCE** PLANS/INSCRIPTION

DESIGNER/PATENT HARVEY SNOOK, CO. ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane county road over a small watercourse. It is located in the small 19th-century rural crossroads village of Middleville. Most of the homes have modern alterations, and the village does not appear to possess historic district potential.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased stringer bridge supported on concrete abutments is flanked by guide rails placed in circa 1980. One of over 25 pre-WW II stringer bridges in the county, the span is an example of a common type in the state, and it is not technologically or historically distinguished.

INFOR MATION

PHOTO: 1907:38,39 (07/92) REVISED BY (DATE): QUAD: Newton West

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1900S18 **CO** SUSSEX **OWNER** COUNTY **MILEPOINT** 0.6

NAME & FEATURE INTERSECTED CR 619 OVER PAULINS KILL **FACILITY** CR 619

TOWNSHIP STILLWATER TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 58 ft **WIDTH** 23.9 ft

CONSTRUCTION DT 1933 **ALTERATION DT** 1980ca **SOURCE** PLANS/INSCRIPTION

DESIGNER/PATENT HARVEY SNOOK, CO. ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane county road over a small watercourse near the intersection of CR 619 and CR 612. West of the bridge is a small 19th-century rural crossroads village and a dairy farm, located approximately one mile east of Middleville. The village has numerous modern alterations and intrusions and does not appear to possess historic district potential.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased stringer bridge supported on scored concrete abutments is flanked by guide rails placed in circa 1980. The encased fascia beams are panelled. One of over 25 pre-WW II stringer bridges in the county, the span is an example of a common type, and it is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 1907:36,37 (07/92) REVISED BY (DATE): QUAD: Newton West

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1900S25 **CO** SUSSEX **OWNER** COUNTY **MILEPOINT** 0.13

NAME & FEATURE INTERSECTED CR 622 OVER INLET TO SWARTSWOOD LAKE **FACILITY** CR 622 (NEWTON SWARTSWOOD ROAD)

TOWNSHIP STILLWATER TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 80 ft **WIDTH** 26.8 ft

CONSTRUCTION DT 1940 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT HARVEY SNOOK, CO. ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane road with shoulders over a shallow watercourse in a wooded area with residential and commercial buildings dating from the 1940s to the 1950s. A house dating to the late 1800s is located to one side of the span.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 2-span continuous encased steel stringer bridge supported on a concrete substructure is flanked by standard county design 2-rail concrete railings. Guide rail was added in front of the railings. One of over 25 pre-WW II stringer bridges in the county the span is an example of a common bridge type, and it is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 1901:19-20 (08/92) REVISED BY (DATE): QUAD: Newton West

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1900S26 **CO** SUSSEX **OWNER** COUNTY **MILEPOINT** 17.11

NAME & FEATURE INTERSECTED CR 521 OVER INLET TO SWARTSWOOD LAKE **FACILITY** CR 521

TOWNSHIP STILLWATER TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 48 ft **WIDTH** 23.9 ft

CONSTRUCTION DT 1940 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT HARVEY SNOOK, CO. ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane road with shoulders and a sidewalk over a shallow watercourse in a residential area dating to the 1910s. A building dating to the 1910s at the south west corner of the bridge appears to have been an old hotel.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased stringer bridge supported on concrete abutments is flanked by standard county design 2-rail concrete railings. Guide rail was added in front of the railings. One of over 25 pre-1945 stringer bridges in the county, the span is an example of a common type, and it is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 1902:20-21 (08/92) REVISED BY (DATE): QUAD: Newton West

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1900V26 **CO** SUSSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MAPLE GRANGE ROAD OVER POCHUCK CREEK **FACILITY** MAPLE GRANGE ROAD

TOWNSHIP VERNON TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 40 ft **WIDTH** 24 ft

CONSTRUCTION DT 1934 **ALTERATION DT** **SOURCE** PLANS/INSCRIPTION

DESIGNER/PATENT HARVEY SNOOK, CO. ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane road over a small stream in a wooded undeveloped area adjacent to farmland.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased stringer bridge supported on scored concrete abutments is flanked by standard county design 2-rail concrete railings. The concrete encasement on the fascia stringers is finished with flat panels. One of over 25 pre-1945 stringer bridges in the county, the span is a representative example of a common type and is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 1904:8-9 (08/92) REVISED BY (DATE): QUAD: Wawayanda

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1900V27 **CO** SUSSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MAPLE GRANGE ROAD OVER POCHUCK CREEK **FACILITY** MAPLE GRANGE ROAD

TOWNSHIP VERNON TOWNSHIP

TYPE PONY TRUSS **DESIGN** PRATT **MATERIAL** Metal

 # SPANS 1 **LENGTH** 52 ft **WIDTH** 13.6 ft

CONSTRUCTION DT 1890ca **ALTERATION DT** 1938 **SOURCE** STYLE (INSCRIPTION)

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries one lane of a 2-way road over a small stream in a wooded setting. The surrounding area is sparsely developed and mixed with farms and single-family homes built in the 1950s.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 4/20/93

SUMMARY The pin-connected Pratt pony truss bridge is supported on stone abutments. In 1938 the superstructure was raised by adding concrete caps to the abutments. The deck is asphalt filled metal deck pans. New members were added at the bottom chords, diagonals and counters. Repairs were welded and many new gusset plates were added. One of over 6 pony truss bridges in the county, alterations have compromised the design integrity. More complete examples of the type are represented in the county.

INFOR MATION

Bibliography:
Sussex County Engineers Office files.

Physical Description: The pin-connected 4-panel Pratt pony truss bridge supported on stone abutments spans 52' and carries a 13'-6" wide road. The superstructure was raised in 1938 by adding concrete capping to the stone abutments. The upper chord members are back-to-back channels with a top cover plate and batten plates at the bottom. Vertical members are built-up I-sections composed of 2 pairs of angles separated by lacing. The lower chords and diagonal members are pair of rectangular section bars. The trusses have been significantly altered. Gusset plates were welded at each upper and lower panel point. New diagonal and lower chord members were welded to gusset plates to supplement the original members. Outriggers were added at each panel point. The floor system was replaced with asphalt-filled metal deck pans.

Historical and Technological Significance: The ca. 1890 pony truss bridge is an altered example of a type that is represented by less altered and more distinguished spans in the county. The alterations have compromised the visual integrity of the span. More complete examples of pin-connected pony trusses in the county are Main Street over Big Flat Brook, 1900W06, in Walpack Center historic district; Smithhill Road over Branch of Paulins Kill Lake, 1900D07, in Frankford Township; and Scott Road over Wallkill River, 1900E10, in Franklin Borough.

PHOTO: 1904:10-13 (08/92) REVISED BY (DATE): QUAD: Wawayanda

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1900W06 **CO** SUSSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MAIN STREET OVER BIG FLAT BROOK **FACILITY** MAIN STREET

TOWNSHIP WALPACK TOWNSHIP

TYPE PONY TRUSS **DESIGN** PRATT **MATERIAL** Metal

 # SPANS 1 **LENGTH** 70 ft **WIDTH** 11.6 ft

CONSTRUCTION DT 1889 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT UNKNOWN **BUILDER** GROTON BRIDGE & MANUF CO

SETTING / CONTEXT The bridge carries a 1-lane road over a small stream in a wooded area located within the Delaware Water Gap National Recreation Area. The span is within the borders of Walpack Center Historic District, which is significant as a well-preserved example of an early rural service center dating from the mid-1800s to the early 1900s. Located in an isolated valley, the village marketplace, which was supported by local farmers, diminished with the advent of the automobile.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Listed. Walpack Center Historic District. 07/17/1980. Contributing.

CONSULT DOCUMENTS SHPO Letter 3/12/01

SUMMARY The pin-connected Pratt pony truss bridge is supported on ashlar abutments. In 1944 the trusses were strengthened with the addition of welded plates to the vertical, diagonal, and lower chords. Outriggers were added, and channel sections were welded to the floor beams. The span is one of the few documented truss spans in the county, and it was fabricated by a notable company. The bridge was constructed within the period of significance of the district, and it is a contributing element under Criterion C.

INFOR MATION

Bibliography: Pamela Thurber, "The Groton Iron Bridge Company," Historic Ithaca & Tompkins, NY, Newsletter Fall 1983, New Series Vol. 1,2, pp. 1-4.
Office of New Jersey Heritage. Sussex County, Walpack File.

Physical Description: The pin-connected Pratt pony truss bridge supported on ashlar abutments spans 70' and carries an 11'-6" width roadway. The truss members are standard sections, and they have been strengthened with welded plates. Outriggers were added to the trusses, and channel sections were welded to the floor beams. The deck was replaced with a metal grate deck. The dates of the alterations to the span are not documented. No plans for the bridge were located.

Technological and Historical Significance: The Pratt pony truss bridge, located in the Walpack Center Historic District, was constructed in 1889 by the Groton Bridge & Manufacturing Co., as is documented on a plaque located on top of one of the trusses. The bridge is significant because it is a documented example of an uncommon bridge type constructed by a noted bridge manufacturer. It was built within the period of significance of the district, and it is a contributing element (Criteria A & C).

The Groton Bridge & Manufacturing Company, of Groton, New York, was formed in 1877 under the name of the Groton Iron Bridge Company. The company was formed as the result of a merger between the Groton Iron Works, a blacksmith shop owned by Charles and Lyman Perrigo, and the Groton Separator Works, a manufactory of agricultural equipment owned by Daniel Spencer and Frederick Avery. It became a major bridge manufacturer primarily constructing small Pratt truss bridges in New York State. The firm was run by Ellery Colby and Frederick Avery during its first ten years of operation. Colby was a significant figure in New York State bridge building who later formed the Owego Bridge Company. In 1887, the name of the firm was changed to the Groton Bridge and Manufacturing Company, and it expanded operations. During this period, the company constructed many spans throughout the nation, the largest being an eleven-span bridge in Little Rock, Arkansas in 1896, and a multi-span crossing of the Anacostia River at Pennsylvania Avenue in Washington, D.C. in 1890 (replaced in 1936 by the John Phillip Sousa Bridge). In 1899, the firm became part of the American Bridge Company, and continued operation, primarily in New York State, until it folded in 1920.

The Walpack Center Historic District is an example of one of the first forms of urbanism in the country, the rural service center. Rural service centers thrived from the mid-nineteenth century through the early twentieth century, providing a marketplace for the local agricultural industry. Walpack Center was geographically isolated, located in a valley between two ridges of the Kittatinny Mountains. The geography of the area dictated a need for a local marketplace because travel was difficult. The farmers in the area depended on the local market to sell their goods, and the local people depended on it to obtain goods. With the advent of the automobile, travel became easier and this interdependence no longer existed. The town did not expand with increased transportation, as other service centers did, because of its isolated location. Building in the town came to almost a complete end in the early 1900s, and the town retains much of its late 18th century character. The architecture is not sophisticated, but rather ordinary, reflecting the lifestyle of the rural town during its peak. The bridge is located at the edge of town within the historic district, and it was constructed in 1889, during the period of significance.

Boundary Description and Justification: The bridge is an eligible contributing resource to the National Register-listed Walpack Center Historic District (1980). The bridge is completely within the boundaries of the historic district delineated in the nomination (refer to NR Sussex Co. File at HPO). The eligible resource includes the bridge as well as its surroundings.

PHOTO: 1902:36-39 (08/92) REVISED BY (DATE): QUAD: Lake Maskenozha

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1900X01 **CO** SUSSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED ROY ROAD OVER PAPAKATING CREEK **FACILITY** ROY ROAD

TOWNSHIP WANTAGE TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 2 **LENGTH** 45 ft **WIDTH** 22 ft

CONSTRUCTION DT 1939 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT HARVEY SNOOK, CO. ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane collector road over a small stream set in farm land.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 2-span continuous slab bridge supported on a concrete substructure is flanked by standard county-design 2-rail concrete railings. The waterway opening at the west side is blocked off by vegetation. One of over 25 pre-1945 slab bridges in the county, the span is a representative example of a common bridge type, and it is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 1905:24-26 (08/92) REVISED BY (DATE): QUAD: Branchville

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1900X09 **CO** SUSSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 565 OVER PAPAKATING CREEK **FACILITY** CR 565

TOWNSHIP WANTAGE TOWNSHIP

TYPE THRU GIRDER **DESIGN** PARTIALLY ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 77 ft **WIDTH** 20 ft

CONSTRUCTION DT 1929 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT HARVEY SNOOK, CO. ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane road over a shallow stream through farmland.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The riveted steel thru girder with encased floorbeams bridge is supported on scored concrete abutments. The span appears unaltered. One of over 6 thru girder bridges in the county, the span is an example of a common type, and its details are not unusual. It is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 1904:25-26 (08/92) REVISED BY (DATE): QUAD: Hamburg

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1900X10 **CO** SUSSEX **OWNER** COUNTY **MILEPOINT** 7.14

NAME & FEATURE INTERSECTED CR 565 OVER WEST BRANCH OF PAPAKATING CREEK **FACILITY** CR 565

TOWNSHIP WANTAGE TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 42 ft **WIDTH** 30.8 ft

CONSTRUCTION DT 1923 **ALTERATION DT** Unknown **SOURCE** PLANS

DESIGNER/PATENT HARVEY SNOOK, CO. ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane county road with narrow shoulders over a small stream in a wooded undeveloped area. Several commercial buildings dating from the 1940s through the 1970s are located about 1000' south of the bridge.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased stringer bridge supported on concrete abutments and a steel pile bent is flanked by standard county-design 2-rail concrete railings. The encased beams are spalling, and the span is not well-preserved. A modern bent with rolled I-section posts and cap beam was added at an unknown date making the bridge a 2-span structure. The bridge is an altered example of a common type. It is neither technologically nor historically distinguished.

INFOR MATION

PHOTO: 1904:27-28 (08/92) REVISED BY (DATE): QUAD: Branchville

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1900X13 **CO** SUSSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 628 OVER WEST BRANCH OF PAPAKATING CREEK **FACILITY** CR 628

TOWNSHIP WANTAGE TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 27 ft **WIDTH** 20.8 ft

CONSTRUCTION DT 1935 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT HARVEY SNOOK, CO. ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane county road over a small stream through undeveloped farmland.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased stringer bridge is supported on stone abutments from a previous span with concrete extensions. The span is flanked by standard county-design 2-rail concrete railings. One of over 25 pre-1945 stringer bridges in the county, the span is a representative example of a common type in the state, and it is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 1904:23-24 (08/92) REVISED BY (DATE): QUAD: Branchville

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1900X17 **CO** SUSSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 519 OVER WEST BRANCH OF PAPAKATING CREEK **FACILITY** CR 519

TOWNSHIP WANTAGE TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 37 ft **WIDTH** 24 ft

CONSTRUCTION DT 1940 **ALTERATION DT** **SOURCE** PLANS/INSCRIPTION

DESIGNER/PATENT HARVEY SNOOK, CO. ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane county road over a small stream through farmland with single-family farm houses dating from the late 1800s to the early 1900s.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed encased stringer bridge supported on concrete abutments is flanked by standard county-design 2-rail concrete railings. One of over 25 pre-1945 stringer bridges in the county, the span is an example of a common type, and it is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 1904:21-22 (08/92) REVISED BY (DATE): QUAD: Branchville

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1900X24 **CO** SUSSEX **OWNER** COUNTY **MILEPOINT** 0.06

NAME & FEATURE INTERSECTED LIBERTYVILLE-PLUMBSTOCK ROAD OVER CLOVE BROOK **FACILITY** CR 647

TOWNSHIP WANTAGE TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 57 ft **WIDTH** 25 ft

CONSTRUCTION DT 1941 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT HARVEY SNOOK, CO. ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane county road over a small stream adjacent to farmland and a sparsely developed residential area of single-family homes built in the 1950s.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased stringer bridge was originally supported on scored concrete abutments. One end is now shored up with steel members. The span is flanked with standard county-design 2-rail concrete railings. One of over 25 pre-1945 stringer bridges in the county, the altered span is an example of a common bridge type, and it is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 1904:19-20 (08/92) REVISED BY (DATE): QUAD: Hamburg

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1900X43 **CO** SUSSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 651 OVER CLOVE RIVER **FACILITY** CR 651

TOWNSHIP WANTAGE TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 25 ft **WIDTH** 24 ft

CONSTRUCTION DT 1939 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane county road over a small stream in a wooded sparsely developed residential area. Houses in the area date from the 1950s through the 1970s.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span encased stringer bridge supported on a concrete substructure is flanked by guide rails. In 1955 concrete repairs were made to the north abutment. One of over 25 pre-WW II stringer bridges in the county, the span is an example of a common type, and it is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 1905:36,37 (08/92) REVISED BY (DATE): QUAD: Port Jervis South

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1900X50 **CO** SUSSEX **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 651 OVER BRANCH CLOVE BROOK **FACILITY** CR 651

TOWNSHIP WANTAGE TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 23 ft **WIDTH** 25 ft

CONSTRUCTION DT 1934 **ALTERATION DT** 1980ca **SOURCE** PLANS

DESIGNER/PATENT HARVEY SNOOK, CO. ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane county road over a small stream in a wooded undeveloped area surrounded by farmland.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span reinforced concrete slab bridge supported on concrete abutments is flanked by modern guide rails. The short-span was constructed on a slight skew. One of over 10 pre-1945 slab bridges in the county, the span is an example of a common type, and it is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 1905:34,35 (08/92) REVISED BY (DATE): QUAD: Port Jervis South

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1903152 **CO** SUSSEX **OWNER** NJDOT **MILEPOINT** 30.14

NAME & FEATURE INTERSECTED NJ 23 OVER BRANCH PACOCK BROOK & DELWARE-OSTG MAINLINE **FACILITY** NJ 23

TOWNSHIP HARDYSTON TOWNSHIP

TYPE DECK GIRDER **DESIGN** JACK ARCH (CONCRETE) **MATERIAL** Steel

 # SPANS 4 **LENGTH** 213 ft **WIDTH** 30 ft

CONSTRUCTION DT 1931 **ALTERATION DT** **SOURCE** INSCRIPTION/PLANS

DESIGNER/PATENT ERIE RR OFFICE OF ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries NJ 23, a 2-lane highway with shoulders and 1 sidewalk, over a small stream and a track of the New York Susquehanna and Western Railroad. Set in a wooded undeveloped area, buildings used for light industry built in the 1940s are located to one side of the bridge.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed deck girder with floorbeams bridge is supported by concrete abutments and steel pier bents. The main span of the bridge is concrete encased, and the span has a concrete jack arch deck. Railroads used concrete jack arches longer than highway bridge designers. The bridge is finished with standard-design concrete balustrades. The span is a late example of a common type, and it is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 1903:38-40 (08/92) REVISED BY (DATE): QUAD: Franklin

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1903154 **CO** SUSSEX **OWNER** NJDOT **MILEPOINT** 31.84

NAME & FEATURE INTERSECTED NJ 23 OVER BRANCH FRANKLIN LAKE **FACILITY** NJ 23

TOWNSHIP FRANKLIN BOROUGH

TYPE MULTI GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 40 ft **WIDTH** 30 ft

CONSTRUCTION DT 1928 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries NJ 23, a 2-lane highway, over a small stream in a predominantly commercial area. A few early 1900s homes are located along NJ 23 near the bridge, and the local businesses were developed in the 1950s and 1960s.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed encased multi-girder bridge supported on concrete abutments is flanked by standard design concrete balustrades. Guide rail was added in front of the balustrades. The bridge is an example of a common type, and it is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 1903:15-16 (08/92) REVISED BY (DATE): QUAD: Franklin

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1903158 **CO** SUSSEX **OWNER** RAILROAD **MILEPOINT** 33.52

NAME & FEATURE INTERSECTED HUDSON BRANCH OVER NJ 23 **FACILITY** HUDSON BRANCH

TOWNSHIP HAMBURG BOROUGH

TYPE THRU GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 76 ft **WIDTH** 14.3 ft

CONSTRUCTION DT 1908 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge carries a track of the Lehigh and Hudson River Railroad over NJ 23, a 2-lane highway with shoulders. The bridge is set in a wooded area, and commercial businesses along NJ 23 date to the 1980s. The L&H River RR was originally part of the New York Susquehanna & Western RR.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed riveted steel thru girder with floorbeams bridge is supported on concrete abutments that are wide enough to accommodate another span beside it. The ends of the concrete wingwalls are stepped. The span exhibits no unusual construction details and is a representative example of a common type in New Jersey. It is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 1903:29-30 (08/92) REVISED BY (DATE): QUAD: Hamburg

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1904153 **CO** SUSSEX **OWNER** NJDOT **MILEPOINT** 37.6

NAME & FEATURE INTERSECTED NJ 23 OVER BRANCH OF WALLKILL RIVER **FACILITY** NJ 23

TOWNSHIP WANTAGE TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 22 ft **WIDTH** 30 ft

CONSTRUCTION DT 1926 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries NJ 23, a 2-lane highway with shoulders, over a small stream in a commercial area developed from the 1950s to the 1980s.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The concrete slab bridge supported on concrete abutments is flanked by standard design concrete balustrades. Guide rails were added along the face of the balustrades. One of over 10 pre-WW II slab bridges in the county, the span is an example of a common type, and it is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 1904:14-15 (08/92) REVISED BY (DATE): QUAD: Hamburg

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1904154 **CO** SUSSEX **OWNER** NJDOT **MILEPOINT** 39.34

NAME & FEATURE INTERSECTED NJ 23 OVER PAPAKATING CREEK, LEHIGH & NORTHEAST RR **FACILITY** NJ 23

TOWNSHIP WANTAGE TOWNSHIP

TYPE MULTI GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 4 **LENGTH** 280 ft **WIDTH** 54 ft

CONSTRUCTION DT 1941 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries NJ 23, a 2-lane divided highway with a grass median, shoulders, and sidewalks, over a shallow watercourse and the abandoned r-o-w of the Lehigh and Northeastern Railroad. The span is located in a wooded area interspersed with commercial buildings dating from the 1950s to the 1970s.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 4-span skewed encased multi-girder bridge is supported on concrete stub abutments and pier bents. The girders that span over the water are deeper than the girders at the other spans. The spans are of unequal length. Standard design concrete balustrades finish the bridge. Exhibiting no distinctive construction details, the span is an example of a common bridge type, and it is neither technologically nor historically noteworthy.

INFOR MATION

PHOTO: 1904:16-18 (08/92) REVISED BY (DATE): QUAD: Hamburg

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1907152 **CO** SUSSEX **OWNER** NJDOT **MILEPOINT** 3.03

NAME & FEATURE INTERSECTED NJ 284 OVER BRANCH OF WALLKILL RIVER **FACILITY** NJ 284

TOWNSHIP WANTAGE TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 38 ft **WIDTH** 30.3 ft

CONSTRUCTION DT 1921 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries NJ 284, a state road formerly designated NJ 8, over a small stream in a farming and residential area. A late 1800s farm house and a house constructed in the 1950s are contiguous to the span.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed encased stringer bridge supported on concrete abutments is flanked by concrete parapets. Guide rails were added in front of the parapets. One of over 25 pre-1945 stringer bridges in the county, the span is an example of a common bridge type, and it is neither technologically nor historically distinguished.

INFOR MATION

PHOTO: 432:18-19 (08/92) REVISED BY (DATE): QUAD: Hamburg

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1907157 **CO** SUSSEX **OWNER** NJDOT **MILEPOINT** 6.63

NAME & FEATURE INTERSECTED NJ 284 OVER BRANCH OF WALLKILL RIVER **FACILITY** NJ 284

TOWNSHIP WANTAGE TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 39 ft **WIDTH** 28.6 ft

CONSTRUCTION DT 1921 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries NJ 284, a 2-lane state road formerly designated NJ 8, over a small stream in a wooded undeveloped setting.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed encased stringer bridge supported on concrete abutments is flanked by flat paneled concrete parapets. Guide rails were placed in front of the parapets. One of over 25 pre-1945 stringer bridges in the county, the span is an example of a common type, and it is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 1905:32,33 (08/92) REVISED BY (DATE): QUAD: Unionville

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1911151 **CO** SUSSEX **OWNER** NJDOT **MILEPOINT** 98.81

NAME & FEATURE INTERSECTED US 206 OVER LUBBERS RUN **FACILITY** US 206

TOWNSHIP BYRAM TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 25 ft **WIDTH** 40 ft

CONSTRUCTION DT 1928 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries US 206, a 2-lane highway with shoulders that was formerly designated NJ 31, over a small stream in a wooded area. The buildings in the area along the highway are commercial and date from the 1960s to the present. A house dating to the 1910s located to one side of the bridge was converted for commercial use.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased stringer bridge supported on a concrete substructure has standard design concrete balustrades. The fasciae are paneled. One of over 25 pre-1945 stringer bridges in the county, the span is an short example of a common type. It is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 1901:35-36 (08/92) REVISED BY (DATE): QUAD: Stanhope

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1911154 **CO** SUSSEX **OWNER** NJDOT **MILEPOINT** 103

NAME & FEATURE INTERSECTED US 206 OVER BRANCH PEQUEST RIVER **FACILITY** US 206

TOWNSHIP ANDOVER BOROUGH

TYPE CULVERT **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 2 **LENGTH** 33 ft **WIDTH** 33 ft

CONSTRUCTION DT 1910 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT DL&W OFFICE OF ENGINEERING **BUILDER** DAVID W. FLICKWIR

SETTING / CONTEXT The bridge carries a 2-lane highway with shoulders over a small stream in a wooded residential area dating from the early 1900s to the 1920s. The bridge is skewed beneath a concrete arch tunnel, 1911155, built at the same time to carry the r-o-w of the DL&W RR NJ Cutoff (abandoned) at the Pequest Fill. The cutoff is a significant engineering achievement noted for its concrete structures, large cuts and fills, and avoided creating any highway railroad grade crossings along its 28.45 mile length.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Not Individually Eligible. Delaware, Lackawanna & Western Railroad New Jersey Cutoff Historic District, Eligible. Contributing.

CONSULT DOCUMENTS SHPO Opinion 3/22/94, Letter 03/12/01.

SUMMARY The 2-span concrete culvert supported on a concrete substructure is part of a 2-tier structure, and it spans on a skew beneath the concrete arch tunnel (1911155) that was constructed at the same time. Individually the culvert is not distinguished, however, it is one of the original concrete structures built as part of the 1908-1911 NJ Cutoff, a technologically significant engineering achievement noted for its use of reinforced concrete for bridges and structures and for completely grade separating the railroad and highway crossings. The structure is not individually eligible for listing in the National Register of Historic Places but is eligible as a contributing element of the Delaware, Lackawanna & Western Railroad New Jersey Cutoff Historic District under Criteria A and C.

INFORMATION

BIBLIOGRAPHY:
"The New Cut-off Line of the Lackawanna Railroad", Wheaton, F.L., Engineering News, Vol.60, No.7, August 13, 1908.
Short summary of DL&W Cut-off, Engineering News, Vol.60, No.3, July 16, 1908. pg.72.
"Some Concrete Culverts and Small Bridges on the Slateford-Hopatcong Cut-off of the Delaware, Lackawanna & Western R.R.", Engineering News, Vol.62, No.14, September 30, 1909.
Condit, Carl W., American Building Art The Twentieth Century, 1961.
Taber, Thomas Townsend, The Delaware, Lackawanna & Western Railroad in the Nineteenth Century. 1977.
Taber, T.T. and Taber, T.T. III, The Delaware, Lackawanna & Western Railroad in the Twentieth Century, Vols. I and II. 1980.
Lefferts, H. Leedom Jr., and Piefer, David R., Northwest New Jersey: An Inventory and History of Historic Engineering and Industry. 1979.

Physical Description: The 2-span reinforced concrete culvert spans beneath a concrete arch tunnel (1911155) that carries abandoned RR r-o-w over the road. The culvert is inscribed with the date of construction, 1910, on the fascia. The span exhibits typical construction and appears unaltered.

Historical and Technological Significance: The concrete culvert, constructed in 1910, is not individually distinguished, but it is significant because it was built, along with the concrete arch tunnel that spans above it, as part of the construction of the New Jersey Cut-Off of the Delaware, Lackawanna, & Western RR. The New Jersey Cut-Off, built in 1908-1911, is historically and technologically distinguished in the areas of engineering and transportation (Criteria A, C). The cut-off is an important engineering accomplishment of the early 20th century. The Delaware, Lackawanna & Western RR (DL&W) designed and built the line to improve the efficiency of train travel across the mountainous terrain of northwestern New Jersey in Warren, Sussex, and Morris counties from Slateford, Pennsylvania to the DL&W mainline near Lake Hopatcong. The design and construction of a railroad that rises and falls just eleven feet over its length of 28.45 miles while crossing the mountains and valleys of northwestern New Jersey is remarkable even today. The decision to use reinforced concrete exclusively for all structures along the route was a pioneering action that attracted the attention of the engineering profession. The railroad's use of reinforced concrete did much to prove the material to be as strong and durable as the engineers of the early-20th century had anticipated. The DL&W also made full use of the moldable qualities of the material, designing not just functional structures, but also aesthetically pleasing ones that enhance the beauty of the railroad.

Sixteen structures are included in the NJDOT Historic Bridge Survey, but other structures, including viaducts, tunnels, and stations, were observed within Warren and Sussex counties. The structures not included in this survey appear to have integrity consistent with those bridges and tunnels that are included.

The New Jersey Cutoff is the culmination of over 55 years of efforts by the company to improve its route across New Jersey to New York City. The Delaware, Lackawanna and Western Railroad (DL&W), composed of a network of smaller railroads in Pennsylvania, New York and New Jersey, was formed in 1853 for the purpose of moving anthracite coal from the mining regions of northeastern Pennsylvania to market locations. It started from the merger of the Liggett's Gap RR and the Delaware & Cobbs Gap RR, which had been chartered and developed around 1850 by parties interested in carrying the coal to the Erie RR to the west and to the Delaware River to the east.

As the anthracite coal mining industry grew, so did the desire to increase the access to markets. In reaching to the east the DL&W needed a connection in New Jersey. They incorporated the Warren Railroad in the 1851 to carry trains from the Delaware River at Columbia (Warren County, NJ) to Central Railroad of New Jersey tracks in Hampton (Hunterdon County, NJ). From there the coal could be moved eastward to Elizabethport (near Newark, NJ). Commuters also traveled this route to get to New York City. In the late 1860s the DL&W became dissatisfied with the CNJ connections and sought their own access to the New York markets. In 1868 they leased the Morris & Essex RR, which was developed in the 1830s and 1840s in Morris, Essex and Hudson counties and the 1850s in Warren County. The M&E crossed New Jersey from Hoboken to Phillipsburg on the Delaware River.

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
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Though the DL&W controlled several railroads (like the M&E, Warren, Valley, etc.), each was operated separately until 1899, when new DL&W president William Truesdale centralized control of the company. This move allowed for increased efficiency for the railroad as a whole. In addition to the reorganization, Truesdale undertook an ambitious plan to modernize the routes (All background information gathered from Taber, 1977).

In seeking a more efficient, less circuitous route to replace the old 1851 Warren Railroad right-of-way, the DL&W considered three plans to build a completely new route (Taber and Taber, 1980:34-36). The plan chosen was a completely new line that would include massive cuts and fills to virtually eliminate grade changes. The existing line was nearly 40 miles long, had 57 curves comprising almost 13 miles of track, and a maximum grade of 60.2 feet per mile with a total rise and fall of 248 feet. The new layout, known as the New Jersey Cut-Off, limited the number and degree of curves and saved over 11 miles of track from the circuitous old line. This was the most expensive choice, costing $11,065,511.43 when completed (Taber and Taber, 1980:39), but the anticipated benefits for the railroad outweighed the cost.

Beginning in 1908 and under the direction of DL&W Chief Engineer George Ray, layout and design of the cut-off began. The line was to be 28.45 miles long, with a total rise and fall of just 11 feet and less than 5 miles of curved track. The new route would require 73 structures, including two massive viaducts, twelve overhead highway bridges and numerous crossings of roads and minor watercourses. Over 14 million cubic yards of both cut and fill were needed to create the relatively flat crossing of the hills and valleys of northwestern New Jersey (Taber and Taber, 1980:36).

Mr. Ray decided that reinforced concrete would be used for all structures along the route. This was the first time such a decision was made, causing the nickname of the "reinforced concrete railroad" to be used by the engineering profession when discussing the cut-off (Taber and Taber, 1980:36). Reinforced concrete was a state-of-the-art building material with yet unknown ultimate capabilities. It was thought to be as strong and durable as stone, and seemingly more permanent than wood or even steel.

Uncommon methods were used for the construction of the fills along the route. While the traditional method of building a wooden trestle to run dumping trains on was used for most fills, tracking was hung from suspended cables for the fills of greater magnitude. Dumping trains would carry fill onto the suspended tracks and dump the fill material from there. Most of the fill used on the cutoff was taken from the many cuts that were made, but even that was not enough. The DL&W bought 760 acres of farm land from which the contractors could dig additional fill. Five million pounds of dynamite was used to make the cuts. The Pequest Fill (Milepoint 55.85, Green Township, Sussex County) was the largest along the cut-off and in 1908 was claimed to be the "largest railway embankment ever made" (Engineering News, 1908:72). It was over 3 miles long and was up to 140 feet high. Over 6.5 million cubic yards of fill were necessary to reach the proper grade on this fill (Taber and Taber, 1980:36).

The DL&W chose to use similar structures for similar uses along the line. Where highway bridges were needed to cross their tracks, they designed reinforced concrete deck arch bridges, a bridge type that was capable of relatively long spans while providing dynamic and graceful forms. At least eleven deck arches were built in New Jersey, (1900G12, 1900G13, 1900K07, 1900C17, 2153166, 2153165, 2153164, 2153163, 2153162, 2153161, 2153160), all of them single span structures with one of two types of balustrades. Though design adjustments had to be made for roadway alignment and foundation conditions, the deck arch bridges are very similar structures.

Reinforced concrete arch tunnels were constructed where the cut-off crossed over roads or small waterways. These structures often supported high fill embankments as the cut-off crossed a valley. Over 35 of these structures were built along the line, and several of them are included in the Historic Bridge Survey (Wasigan and Simpson roads in Warren County, 2117152, and 1911155 in Sussex County). Slab-roofed tunnels and box culverts were also built to carry the right-of-way over roads and streams (1900C18).

The largest structures along the line were the two multi-span viaducts; the Delaware River Viaduct (2114159) in Knowlton Township and the Paulins Kill Viaduct (Milepoint 70.63, near Hainesburg in Knowlton Township). Both are open spandrel arch bridges that span valleys and larger water courses. The 9-span Delaware River Viaduct crosses the river as well as the highways that parallel it on both sides. It is 1,450 feet long and carries trains 65 feet above the river. The nine span structure has seven open spandrel arches and two deck arch approach spans on the Pennsylvania end. The 7-span Paulins Kill Viaduct in Hainesburg (Warren County) is 1100 feet long, but it is more graceful and magnificent as it rises 115 feet above the valley floor. It passes over the Paulins Kill River, the New York, Susquehanna and Western Railroad and the valley they run through (viaduct not included in the bridge survey because no roadway is associated with it). It was the most impressive structure on the DL&W main line prior to the building of the Tunkhannock Viaduct in Nicholson, Pennsylvania, completed in 1915.

Around the turn of the century, reinforced concrete arches were generally limited to relatively short and often single span bridges. The dead load carried by the arches was reduced with the introduction of open spandrel arches. The lighter structures were capable of longer spans and more aesthetically pleasing large bridges. The Walnut Lane bridge (1906-8) over Wissahickon Creek in Philadelphia was a forerunner of the type, though it used virtually no steel reinforcement in the two ribs (Condit, 1961:198). The use of reinforcement made the possibilities even greater. Under Ray's direction, the length and number of spans increased to create massive structures that dominated the landscape.

The New Jersey Cut-Off was divided into sections for bidding. Seven contractors were each awarded one section of the line, including contractors from as far away as Billings, Montana and Roanoke, Virginia. Each contract included all clearing, grading and masonry construction (Wheaton, 1908).

In addition to its engineering significance, the railroad right-of-way ranks historically as one of the most significant in the state, owing to the impact moving coal across the state had on the development of transportation systems within New Jersey. The Lehigh Valley Railroad played a significant role in the development of transportation and transportation-driven development in the northern half of the state, and the cut-off stands as one of the most ambitious remnants of the coal era in the state.

In summation, the viaducts, tunnels, overpasses, cuts, and fills on the New Jersey Cut-Off (1908-1911) form part of a unified design that was, and still is, one of the most remarkable engineering achievements of the early 20th century in the region. Furthermore, the New Jersey Cut-Off is one of the most visible remnants of the DL&W, and is illustrative of the history of one of the largest movers of coal that contributed to the transportation-driven economic growth of the northern half of the state. The New Jersey Cut-Off is a significant part of

the western New Jersey historic landscape and transportation systems.

Boundary Description and Justification: The significance of the structure is based, in part, on its historic association and physical connection with a right-of-way that is both historically and technologically important. In New Jersey, the potential historic corridor appears to be limited to the railroad right-of-way. The potential historic corridor is approximately 28 miles long stretching from the Delaware River to the eastern junction at Hopatcong, Morris County. The New Jersey Cut-Off's western junction is in Slateford, Pennsylvania on the west bank of the Delaware River. The entire route and all its related structures were not surveyed as part of this project, but those portions of the route that were surveyed or observed as part of the 1991-1993 Historic Bridge Survey have integrity of setting and original design and appear to representative of the overall state of preservation and completeness of the route in Sussex and Warren counties.

PHOTO: 1901:5-7 (08/92) REVISED BY (DATE): QUAD: Stanhope

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1911155 **CO** SUSSEX **OWNER** RAILROAD **MILEPOINT** 53.44

NAME & FEATURE INTERSECTED NJ CUTOFF OVER US 206 **FACILITY** NJ CUTOFF OF DL&W RR

TOWNSHIP ANDOVER BOROUGH

TYPE TUNNEL **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 32 ft **WIDTH** 43 ft

CONSTRUCTION DT 1910 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT DL&W OFFICE OF ENGINEERING **BUILDER** DAVID W. FLICKWIR

SETTING / CONTEXT The bridge carries the abandoned DL&W RR NJ Cutoff over US 206 and a minor stream in a wooded residential area dating from the early 1900s to the 1920s. It is part of a 2-tier arrangement with the highway crossing the stream on 1911154. The Cutoff is an historically important route that was constructed to improve moving anthracite coal from Pennsylvania to markets east. Also a significant engineering achievement, the line was constructed with major cuts and fills, and avoided creating any highway railroad grade crossings along its 28.45 mile length.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Delaware, Lackawanna & Western Railroad New Jersey Cutoff Historic District, Eligible. Contributing.

CONSULT DOCUMENTS SHPO Opinion 3/22/94, Letter 03/12/01.

SUMMARY The concrete arch tunnel supported on a concrete substructure spans over 1911154. The high embankment over the tunnel was originally part of the Pequest Fill. Guide rail has been placed at the approaches. The span, 1 of 7 in the county built as part of the 1908-1911 NJ Cutoff. It is a technologically significant engineering achievement noted for its use of reinforced concrete for bridges and structures and for completely grade separating the railroad and highway crossings. The structure is not individually eligible for listing in the National Register of Historic Places but is eligible as a contributing element of the Delaware, Lackawanna & Western Railroad New Jersey Cutoff Historic District under Criteria A and C.

INFOR MATION

PHOTO: 1901:3-4 (08/92) REVISED BY (DATE): QUAD: Stanhope

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1911159 **CO** SUSSEX **OWNER** NJDOT **MILEPOINT** 105.87

NAME & FEATURE INTERSECTED US 206 OVER PEQUEST RIVER **FACILITY** US 206

TOWNSHIP ANDOVER TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 29 ft **WIDTH** 40 ft

CONSTRUCTION DT 1931 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries US 206, a 2-lane highway with shoulders formerly designated as NJ 31, over a small stream in a sparsely developed commercial area. A strawberry farm is located at one side of the bridge and a kennel is at the other side.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased stringer bridge supported on a concrete substructure has standard design concrete balustrades. Guide rails were added in front of the balustrades. One of over 25 pre-1945 stringer bridges in the county, the span is an example of a common type, and it is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 1901:8-10 (08/92) REVISED BY (DATE): QUAD: Newton West

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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1911160 **CO** SUSSEX **OWNER** NJDOT **MILEPOINT** 106.1

NAME & FEATURE INTERSECTED US 206 OVER BRANCH OF PEQUEST RIVER **FACILITY** US 206

TOWNSHIP ANDOVER TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 23 ft **WIDTH** 40 ft

CONSTRUCTION DT 1931 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries US 206, a 2-lane highway with shoulders formerly designated NJ 31, over a small watercourse. The bridge is set in a commercial area developed in the 1960s.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span concrete slab bridge supported on a concrete substructure has standard design concrete balustrades. Guide rails were added to the face of the balustrades. The short span is an example of a common type, and it is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 1901:11-12 (08/92) REVISED BY (DATE): QUAD: Newton West

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1912150 **CO** SUSSEX **OWNER** NJDOT **MILEPOINT** 116.28

NAME & FEATURE INTERSECTED US 206 OVER DRY BROOK & CONRAIL (ABANDONED) **FACILITY** US 206

TOWNSHIP BRANCHVILLE BOROUGH

TYPE MULTI GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 4 **LENGTH** 245 ft **WIDTH** 54 ft

CONSTRUCTION DT 1940 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries US 206, a 2-lane median-divided state highway with wide shoulders and sidewalks, over a small stream and Conrail r-o-w that was originally the location of the Sussex Railroad, the first railroad built in Sussex County. The r-o-w was part of the DL&W RR when the span was constructed. The highway was formerly designated NJ S31, and the span is set in a wooded undeveloped area.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 03/12/01

SUMMARY The 4-span skewed encased multi girder bridge supported by a concrete substructure has concrete sidewalks flanked by standard design concrete balustrades. Guide rails were added along each curbline. The bridge is an example of a common type, and it is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 1906:28-31 (08/92 JPH (5/96)) REVISED BY (DATE): QUAD: Branchville

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1912151 **CO** SUSSEX **OWNER** NJDOT **MILEPOINT** 117.43

NAME & FEATURE INTERSECTED US 206 OVER CULVERS BROOK **FACILITY** US 206

TOWNSHIP BRANCHVILLE BOROUGH

TYPE CULVERT **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 34 ft **WIDTH** 60 ft

CONSTRUCTION DT 1939 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries US 206, a 4-lane median-divided highway with grass-covered sidewalks that was formerly designated NJ S-31, over a small stream in a wooded undeveloped area.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed concrete culvert with concrete wingwalls is flanked by guide rails. It appears to be unaltered. The short-span bridge is an example of a common type, and it is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 1906:32,33 (08/92) REVISED BY (DATE): QUAD: Culvers Gap

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1912158 **CO** SUSSEX **OWNER** NJDOT **MILEPOINT** 122.46

NAME & FEATURE INTERSECTED US 206 OVER BRANCH OF BIG FLAT BROOK **FACILITY** US 206

TOWNSHIP SANDYSTON TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 21 ft **WIDTH** 38 ft

CONSTRUCTION DT 1929 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries US 206, a 2-lane highway with wide shoulders that was formerly designated NJ S-31, over a small watercourse in a wooded undeveloped area.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The short-span concrete slab bridge supported on concrete abutments was constructed on a skew. Guide rails flank either side of the roadway. One of over 10 pre-1945 slab bridges in the county, the span is an example of a common type, and it is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 1907:1-2 (07/92) REVISED BY (DATE): QUAD: Culvers Gap

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1912160 **CO** SUSSEX **OWNER** NJDOT **MILEPOINT** 122.83

NAME & FEATURE INTERSECTED US 206 OVER BIG FLAT BROOK **FACILITY** US 206

TOWNSHIP SANDYSTON TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 93 ft **WIDTH** 40 ft

CONSTRUCTION DT 1929 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries a 2-lane highway with shoulders over a shallow stream in a wooded undeveloped area. US 206 was formerly designated NJ S-31.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 2-span encased stringer bridge supported on a concrete substructure is flanked by standard design concrete balustrades. Guide rail was added in front of the balustrades. The abutments and piers have scoring. One of over 25 pre-1945 stringer bridges in the county, the span is an example of a common type in the state, and it is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 1902:24-25 (08/92) REVISED BY (DATE): QUAD: Culvers Gap

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1912163 **CO** SUSSEX **OWNER** NJDOT **MILEPOINT** 125.08

NAME & FEATURE INTERSECTED US 206 OVER LITTLE FLAT BROOK **FACILITY** US 206

TOWNSHIP SANDYSTON TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 37 ft **WIDTH** 40 ft

CONSTRUCTION DT 1929 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries US 206, a 2-lane highway with shoulders formerly designated as NJ S-31, over a small stream in a sparsely developed wooded area. The structures along the road in the area are commercial and date to the post-WW II era.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased stringer bridge supported on a concrete substructure is flanked by standard design concrete balustrades. Guide rails were added in front of the balustrades. One of over 25 pre-1945 stringer bridges in the county, the span is an example of a very common type, and it is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 1902:26-27 (08/92) REVISED BY (DATE): QUAD: Culvers Gap

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1922150 **CO** SUSSEX **OWNER** NJDOT **MILEPOINT** 17.64

NAME & FEATURE INTERSECTED NJ 15 OVER BEAVER RUN **FACILITY** NJ 15

TOWNSHIP LAFAYETTE TOWNSHIP

TYPE STONE ARCH **DESIGN** ELLIPTICAL **MATERIAL** Stone

 # SPANS 1 **LENGTH** 22 ft **WIDTH** 30 ft

CONSTRUCTION DT 1915 **ALTERATION DT** Unknown **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane state road and sidewalks over a small stream in a mixed commercial and residential area dating from the early 1900s through the 1920s. A town park with a pool is located to one side of the span.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span stone arch bridge has been widened at an unknown dates by 9'-8" to the south with a corrugated metal pipe, and by 8' to the north with concrete T beams. Concrete wingwalls, sidewalks and 2-rail concrete railings date to the widening. The span is not well-preserved, and alterations have compromised its visual integrity. The bridge is not distinguished.

INFOR MATION

PHOTO: 1906:42-44 (08/92) REVISED BY (DATE): QUAD: Newton East

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1923150 **CO** SUSSEX **OWNER** NJDOT **MILEPOINT** 35.21

NAME & FEATURE INTERSECTED NJ 94 OVER WALLKILL RIVER **FACILITY** NJ 94

TOWNSHIP HAMBURG BOROUGH

TYPE THRU GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 86 ft **WIDTH** 40 ft

CONSTRUCTION DT 1929 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries NJ 94, a 2-lane highway with shoulders that was formerly designated NJ 31, over a shallow watercourse in a wooded setting. The Sussex County Municipal Utility Authority and other light industrial buildings constructed in the 1950s are contiguous to the bridge.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased thru girder bridge supported on concrete abutments was built on a large skew. The abutments and wingwalls have horizontal linear scoring. Guide rail was added in front of the thru girders, and a chain-link fence was placed on top of the east girder. One of over 6 thru girder spans in the county, the bridge is an example of a common statewide type, and it is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 1903:35-36 (08/92) REVISED BY (DATE): QUAD: Hamburg

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 1923151 **CO** SUSSEX **OWNER** NJDOT **MILEPOINT** 35.26

NAME & FEATURE INTERSECTED NJ 94 OVER ABANDONED HANFORD BRANCH **FACILITY** NJ 94

TOWNSHIP HAMBURG BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 43 ft **WIDTH** 40 ft

CONSTRUCTION DT 1934 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries NJ 94, a 2-lane highway with sidewalks that was formerly designated NJ 31, over the abandoned r-o-w of the Hanford Branch of the New York Susquehanna and Western Railroad. The bridge is set in a wooded area with light industrial buildings dating from the 1950s to the present.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The slightly skewed encased stringer bridge supported on scored concrete abutments is flanked by standard design concrete balustrades. Guide rails were added at the sidewalks along the curbline. The span is not well-preserved, and it is a representative example of a common type in the state. One of over 25 pre-1945 stringer bridges in the county, the span is neither technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 1903:34,37 (08/92) REVISED BY (DATE): QUAD: Hamburg

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2001001 **CO** UNION **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED SNYDER AVENUE OVER PASSAIC RIVER **FACILITY** SNYDER AVENUE

TOWNSHIP BERKELEY HEIGHTS TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 90 ft **WIDTH** 30 ft

CONSTRUCTION DT 1927 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT BAUER(UNION) & HOPKINS(MORRIS) **BUILDER** HENRY E. TERRILL

SETTING / CONTEXT The bridge is located in a wooded area along the Passaic River, which at this location is the boundary between Union and Morris Counties. A late-20th century water treatment plant is located along the river nearby. The bridge carries 2 lanes and two sidewalks over the river.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 2-span stringer bridge rests on concrete abutments and pier. The round-nose pier and the wingwalls are rusticated. The stringers are completely encased in concrete, and the fascia is paneled. The concrete parapet is also paneled, and the posts at the center of the bridge have plaques from the two counties. The bridge is not technologically or historically distinguished. It is one of over 25 remaining stringer bridges in Union County built before World War II.

INFOR MATION

PHOTO: 156:13-15 (05/92) REVISED BY (DATE): QUAD: Chatham

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2001010 **CO** UNION **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED DIAMOND HILL ROAD OVER GREEN BROOK **FACILITY** DIAMOND HILL ROAD

TOWNSHIP BERKELEY HEIGHTS TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 43 ft **WIDTH** 25 ft

CONSTRUCTION DT 1925 **ALTERATION DT** 1949 **SOURCE** PLAQUE

DESIGNER/PATENT BAUER(UNION)& VAN EMBURGH(SOM) **BUILDER** SNOOK & SONS

SETTING / CONTEXT The bridge is located in a wooded area at the confluence of two streams. The skewed structure crosses one of the streams, carrying 2 lanes and 2 shoulders. The stream crossed is Green Brook, the dividing line between Union and Somerset Counties.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Historic District Status Unresolved.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span stringer bridge has a concrete substructure. The encased stringer bridge was built in 1925, and it was widened in 1949 with a reinforced concrete slab superstructure placed on widened abutments and pier. The parapets match one another, but the bridge has not retained the integrity of its original steel beam design. The structure is not technologically or historically distinguished, nor was it prior to the widening.

INFOR MATION

PHOTO: 158:16-18 (05/92) REVISED BY (DATE): QUAD: Chatham

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2001013 **CO** UNION **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PLAINFIELD AVENUE OVER GREEN BROOK **FACILITY** PLAINFIELD AVENUE

TOWNSHIP BERKELEY HEIGHTS TOWNSHIP

TYPE DECK ARCH, CULVERT **DESIGN** BARREL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 31 ft **WIDTH** 46 ft

CONSTRUCTION DT 1916 **ALTERATION DT** 1968 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT JACOB L.BAUER, COUNTY ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in a wooded area with a late-20th century residential complex nearby. The structure carries a three-lane road over the stream that divides Union and Somerset Counties.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 1916 reinforced concrete arch bridge was widened on both faces in 1968. The reinforced concrete box culverts constructed at each face doubled the width of the skewed bridge from about 25 feet to about 50 feet. The stream flows over a concrete invert slab placed in 1968. The 1968 parapet is concrete with an aluminum railing. The bridge is not distinguished technologically or historically.

INFOR MATION

PHOTO: 163:4-5 (05/92) REVISED BY (DATE): QUAD: Chatham

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2001017 **CO** UNION **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED SPRINGFIELD AVENUE OVER PASSAIC RIVER & GLADSTONE RR **FACILITY** SPRINGFIELD AVENUE

TOWNSHIP BERKELEY HEIGHTS TOWNSHIP

TYPE THRU GIRDER **DESIGN** PARTIALLY ENCASED **MATERIAL** Steel

 # SPANS 11 **LENGTH** 447 ft **WIDTH** 38 ft

CONSTRUCTION DT 1936 **ALTERATION DT** **SOURCE** PLAQUES

DESIGNER/PATENT JACOB L.BAUER, COUNTY ENGINEER **BUILDER** HICKEY&HOUGHTON, BETH.STL

SETTING / CONTEXT The bridge is located in a post-World War II light industrial and commercial area. It carries 2 lanes of traffic and 2 cantilevered sidewalks over the Passaic River and the Gladstone Branch of the New Jersey Transit system.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The main span of the bridge is a steel thru-girder, with 10 concrete slab approach spans. The entire substructure is concrete. Some of the piers have arched struts between the columns, but most at the approach spans have simple columns at the corners of each span. The thru-girder is encased below the deck, as are the floorbeams and longitudinal diaphragm at the centerline of the roadway. Paneled concrete parapets line the sidewalks. The bridge is technologically and historically undistinguished.

INFOR MATION

PHOTO: 158:7-9 (05/92) REVISED BY (DATE): QUAD: Chatham

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2001150 **CO** UNION **OWNER** NJDOT **MILEPOINT** 38.62

NAME & FEATURE INTERSECTED US 1&9 OVER RAHWAY RIVER & HAZELWOOD AVENUE **FACILITY** US 1&9

TOWNSHIP RAHWAY CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 6 **LENGTH** 306 ft **WIDTH** 50 ft

CONSTRUCTION DT 1928 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in an area of mixed use and age, with high-rise housing, light industrial and small commercial structures. The bridge carries a 4-lane divided highway with 2 sidewalks over the Rahway River and a 2-lane collector street.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 11/22/91, Letter 6/30/95.

SUMMARY The 6-span stringer bridge sits on 5-column concrete bents and scored abutments. Three river piers have cutwater foundations for the bents. The encased stringers are deeper over the street and river spans than over the 2 spans at the south abutment. A concrete balustrade encloses the bridge, as well as a staircase to the lower road. It was determined eligible because it "is representative of multi-span concrete encased girder technology and a major link in a highway system at a major crossing".

INFOR MATION

PHOTO: 150:14-16, (04/92) REVISED BY (DATE): QUAD: Perth Amboy

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2001153 **CO** UNION **OWNER** RAILROAD **MILEPOINT** 0.5

NAME & FEATURE INTERSECTED LINDEN INDUSTRIAL TRACK OVER US 1&9 **FACILITY** LINDEN INDUSTRIAL TRACK

TOWNSHIP LINDEN CITY

TYPE THRU GIRDER **DESIGN** PARTIALLY ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 114 ft **WIDTH** 12.4 ft

CONSTRUCTION DT 1940ca **ALTERATION DT** **SOURCE** STYLE

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge is located in an area of late-20th century commercial and industrial construction. The bridge carries one track over seven lanes of heavy traffic on a divided highway.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one-span thru-girder bridge sits on paneled concrete abutments with scored posts with stepped tops that stylistically date ca. 1940. The girders are encased except for the inside faces of the webs, exposing riveted knee braces connecting to floorbeams. Pin-connected lateral bracing is present below the rolled section stringers. A steel deck and curbing protects the girder from the ballasted track. The bridge is not technologically or historically distinguished.

INFOR MATION

PHOTO: 158:33-37 (05/92) REVISED BY (DATE): QUAD: Perth Amboy

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2001156 **CO** UNION **OWNER** RAILROAD **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED STATEN ISLAND RAPID TRANSIT OVER US 1&9 **FACILITY** SIRT LINE

TOWNSHIP LINDEN CITY

TYPE THRU GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 90 ft **WIDTH** 13.6 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT **BUILDER** McCLINTIC MARSHALL COMPNY

SETTING / CONTEXT The bridge is located next to a large tank storage complex and near a highway interchange. It carries one track of the Staten Island Rapid Transit line over the four northbound lanes of US 1 & 9.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Staten Island RR Historic District, Eligible. Contributing.

CONSULT DOCUMENTS SHPO Comments 2/27/95, Letter 6/30/95

SUMMARY The steel thru-girder bridge sits on scored concrete abutments. Rolled floorbeams are supported by the built-up girders. Knee braces are present on the interior web stiffeners of the girders. The concrete deck does not extend to the web of the girders, but it has a curb that holds the ballast in place. The bridge is a representative example of a common bridge type. It is not technologically or historically distinguished.

INFOR MATION

PHOTO: 151:30-32 (04/92) REVISED BY (DATE): QUAD: Elizabeth

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2002005 **CO** UNION **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED VALLEY ROAD OVER RAHWAY RIVER **FACILITY** VALLEY ROAD

TOWNSHIP CLARK TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 4 **LENGTH** 149 ft **WIDTH** 29.3 ft

CONSTRUCTION DT 1926 **ALTERATION DT** 1977 **SOURCE** PLAQUE

DESIGNER/PATENT JACOB L.BAUER, COUNTY ENGINEER **BUILDER** ARTHUR E. SMITH

SETTING / CONTEXT The bridge is located in Rahway River Park, a linear greenway following the winding river through the post-World War II residential area. A dam 100' upstream from the bridge has created a recreational lake. The bridge carries 2 lanes of traffic and two sidewalks over the river.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Potential Rahway River Park, May contribute.

CONSULT DOCUMENTS DOE 10/28/83. SHPO Letter 6/30/95.

SUMMARY The four-span stringer bridge sits on concrete roundnose piers and abutments. The stringers are encased except for the additional sidewalk stringer on the downstream face. The sidewalk was added in 1977, outside of the paneled parapet and has chain-link fence for a railing. The other sidewalk is inside the parapet, which has a pipe railing set in the cap. The bridge is a representative example of a common bridge type, and is not technologically or historically distinguished.

INFOR MATION

PHOTO: 159:15-18 (05/92) REVISED BY (DATE): QUAD: Roselle

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2002019 **CO** UNION **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED RARITAN ROAD OVER RESERVOIR **FACILITY** RARITAN ROAD

TOWNSHIP CLARK TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 104 ft **WIDTH** 40 ft

CONSTRUCTION DT 1927 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT JACOB L.BAUER, COUNTY ENGINEER **BUILDER** JOSEPH F. BURKE, CONTRCTR

SETTING / CONTEXT The bridge is located in a late-20th century residential area that surrounds a reservoir used for local water supply. It carries a busy 2-lane road and 2 sidewalks over the reservoir.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 3-span encased stringer bridge bears on concrete abutments and piers. The fascia stringers are paneled, as are the concrete parapets. A pipe railing has been added to the top of the parapets. The bridge is a representative example of a common bridge type, being one of over 25 extant pre-World War II stringer spans in Union County. It is not technologically or historically distinguished.

INFOR MATION

PHOTO: 155:27-28 (05/92) REVISED BY (DATE): QUAD: Perth Amboy

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2002027 **CO** UNION **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED GOODMANS CROSSING OVER ROBINSONS BRANCH RAHWAY RIVER **FACILITY** GOODMANS CROSSING

TOWNSHIP CLARK TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 48 ft **WIDTH** 28 ft

CONSTRUCTION DT 1910 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge is located in an area dominated by late-20th century multi-unit housing complexes. It carries a 2-lane road over a stream with wooded banks.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The simple span stringer bridge rests on concrete abutments. The stringers are encased except for their bottom flanges. The concrete parapets are paneled on both faces. The fascia stringer is also paneled. The abutments have been repaired with gunite in a few places. The bridge is a representative example of a common bridge type. It is not technologically or historically distinguished.

INFOR MATION

PHOTO: 155:25-26 (05/92) REVISED BY (DATE): QUAD: Perth Amboy

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2002150 **CO** UNION **OWNER** NJDOT **MILEPOINT** 44.03

NAME & FEATURE INTERSECTED US 1&9 OVER ELIZABETH RIVER 7 LOCAL STREETS **FACILITY** US 1&9 (ELIZABETH RIVER VIADUCT)

TOWNSHIP ELIZABETH CITY

TYPE MULTI GIRDER **DESIGN** ENCASED **MATERIAL** Steel Rein. Concrete

 # SPANS 42 **LENGTH** 185200 ft **WIDTH** 46.6 ft

CONSTRUCTION DT 1929 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The long viaduct carries 4 lanes of divided traffic over a meandering river and local streets in an late-19th century brick and frame row houses, cleared land, and commercial blocks in a mixed-use section of Elizabeth. The buildings have been altered, and the area does not appear to have historic district potential. The viaduct is later than the surrounding buildings, and, because of its size and age, is an intrusive element in the neighborhood.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 9/11/91, Letter 6/30/95.

SUMMARY Built as part of the NJ 25 metropolitan traffic plan designed by the Department in response to the opening of the Holland Tunnel, the 42-span viaduct composed of reinforced concrete and steel multi-girder spans is historically and technologically significant. The reinforced concrete girders are not a commonly used bridge type in the state, and historically the span represents a major structure built by the Department to resolve the efficient flow of thru traffic through an urban area.

INFOR MATION

Bibliography:
NJDOT: Plan File; 2002150.
State Highway Commission. "Report of the State Highway Engineer to the New Jersey State Highway Commission in the matter of a comprehensive State Highway System for the State of New Jersey, in accordance with Senate Concurrent Resolution Number 3," 1926.
TAMS. "Routes U.S. 1 & 9 Corridor Historic Engineering Survey Historical Narrative and Assessment of Significance," June, 1991.
Johannesson, Sigvald. "Lincoln Highway from Jersey City to Elizabeth, New Jersey," American Society of Civil Engineers Proceedings, (November, 1933), pp. 1389-1412.
S. Johannesson. "Viaduct Design and Structure," Engineering News-Record, Vol. 100, No. 1, (Jan. 5, 1928), pp. 5-8.

Physical Description: The 1,852-foot long, 42-span viaduct is composed of reinforced concrete multi-girder, encased steel thru girder, and encased deck multi-girder spans. It was built with a vertical clearance of 22' over mean high water. The whole is finished with standard-design concrete balustrades enclosing the cantilevered safety walks on each side of the 48.5-foot roadway. The elevated viaduct that crosses three city street and the meandering Elizabeth River three times is accessed by a 325' approach ramp on the south end and a 470' ramp on the north end. Because the structure crosses six features, it is made up of skewed and 90 degree crossings with steel girders at the feature crossings linked by two- or three-span continuous reinforced concrete deck multi-girder and floor beam spans. The earth-filled ramps have concrete retaining walls and are finished with the same balustrade as the viaduct itself. The ramps are flanked by surface local roads.

The northerly end of the viaduct over Elizabeth Avenue is a 90-degree crossing composed of three span continuous haunched concrete encased deck multi girders. The five girders with a floor beam and stringer flooring system bear on shoes on concrete abutments or bents. The three crossing spans to the south are encased steel deck multi-girders at various skews. They are supported on reinforced concrete columns with bracketed struts. The southerly terminus of the viaduct that crosses the Elizabeth River and paralleling Pearl Street is composed of four encased skewed thru girders supported on concrete columns and a concrete abutment at the south approach ramp. The approach spans are primarily 90-degree two-span continuous reinforced concrete deck multi-girders with cantilevered end sections. They have a haunched profile and are supported on concrete columns with decorative corner brackets. The design with flexible twin columns, set 2' or 3' apart and joined at their bases, and the cantilevered sections at all expansion points to ensure that the joints do not bind and that the joints develop elastic movements only. When adjacent to a skewed crossing span, a third span is used on one face to compensate for the skew. This results in the skew being compensated for in the end spans only. A concrete deck which is integral with the floor beams and stringers is used throughout. The viaduct appears to survive unaltered.

Historical and Technological Significance: The Elizabeth River Viaduct was designed and built the New Jersey State Highway Department as part of the historically and technologically significant Route 1 Extension, the approximately 13-mile long arterial highway from the end of the 1927 Holland Tunnel to Bayway Circle on the south side of Elizabeth. Considered to be America's first "super highway," the carefully considered and designed roadway is distinguished by a variety of innovative engineering solutions to carrying a wide, limited access, high-speed highway through congested areas and some difficult terrain. The portion of the highway between the tunnel toll plaza and what was Airport Circle on the north side of Newark is carried under and over Jersey City (Hudson County) streets and water features on a variety of distinguished bridges and viaducts, including in the spectacular Pulaski Skyway cantilevered thru truss spans over the Passaic and Hackensack rivers. That approximately 7.25 mile-long section of the route, which is predominantly open cut through the Bergen Hill or elevated viaduct, is not of traditional design, and it is technologically and historically significant.

Southerly of Airport Circle the highway was planned as a surface road with some grade crossings. The 1,852'-long, 1929 Elizabeth River Viaduct, which crosses three city streets and an S-curve in the river, is the most significant original structure associated with the Route 1 Extension south of Airport Circle because of its size, design, and state of preservation. The structure employs the same distinctive engineering solutions, like the flexible twin column bents for the reinforced concrete approaches and the concrete railings and curbs, as the elevated portion of the important roadway. Beyond its common history with the other structures on the Route 1 Extension, the viaduct is technologically significant as an engineering solution to a specific transportation problem. It reflects thinking on economics of travel and construction and long-term maintenance and structure performance. While not innovative technology, the complex structure does reflect

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then-current engineering concepts, and the approaches are a design not common in the state (criteria A, C).

The final design of the viaduct and the other structures on the route was based on the decision to use encased steel whenever possible. "Complete designs were made of a number of types of viaduct structures, both of concrete and of steel with a concrete or cement-mortar protection, with various span lengths. Comparative estimates of cost indicated that if the subsurface conditions were good and the span lengths uniform, a reinforced-concrete structure with a moderate span length (say up to 40ft.) would be economical. If, however, the subsurface conditions were such that greater span lengths were advisable, or if the surface conditions required a longer or skew spans of varying lengths, a steel structure of simple supported girders or trusses was indicated as the more economical" (Johannesson, "Viaduct Design ... ," p. 6). Because much of Route 1 Extension passed through developed areas with existing street and railroad patterns, it was only at certain places, like the Elizabeth River Viaduct, that it possible to use reinforced concrete structures. Additionally, "no attempt was made to distort the alignment for the purpose of improving the angle of a crossing over highways, railroads, and rivers, because any saving in construction would have been overbalanced greatly by the consequent additional cost of vehicle operation" (Johannesson, "Lincoln Highway ...," p. 1392). Thus the design of the viaduct reflects the thinking and decision making that went into the design of one of the most important, early vehicular transportation routes in the country.

The Route 1 Extension, or Route 25 as it was later designated, was designed by the New Jersey State Highway Department, William G. Sloan, State Highway Engineer. Morris Goodkind was the State Bridge Engineer, and the design engineer for the project was Sivgald Johannesson, who later became the head of the planning section of the Department.

Boundary Description and Justification: Although the viaduct was built as one component of a historically significant road development campaign, only the north approximately 7.25 miles of the highway are evaluated as a potential historic district. Most of the southern portion of the highway as a whole has lost its integrity of original design and never was technologically significant. The viaduct, however, is technologically significant based on its design and integrity of original design. The significant boundary is limited to the substructure and superstructure of the elevated portion of the 1,852-foot long, 42-span structure and the earth-filled approach ramps at either end. The mixed-use late-19th and early-20th century neighborhood surrounding the structure in Elizabeth does not possess historic district potential.

PHOTO: 152:32-39A (05/92) REVISED BY (DATE): QUAD: Elizabeth

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2002151 **CO** UNION **OWNER** NJDOT **MILEPOINT** 44.6

NAME & FEATURE INTERSECTED CONRAIL ELIZABETH BRANCH (CNJ) OVER US 1&9 **FACILITY** CONRAIL ELIZABETH BRANCH (CNJ)

TOWNSHIP ELIZABETH CITY

TYPE THRU GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 5 **LENGTH** 126 ft **WIDTH** 19.7 ft

CONSTRUCTION DT 1915 **ALTERATION DT** 1934, 1987 **SOURCE** PLANS

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER** J. F. CHAPMAN & SONS, INC.

SETTING / CONTEXT The bridge carries one active railroad track over a divided highway in an urban area in Elizabeth. The freight line was built by the CNJ RR in 1915. It was widened to accommodate development and improvement of the Route 1 Extension, the 1925-32 approach road for the Holland Tunnel that was developed by the state 1925-1932. The road is the prototype of the "superhighway" in this country. The highway is at grade in this section. It is elevated in Hudson County.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Historic District Status Unresolved.

CONSULT DOCUMENTS SHPO Finding 9/11/91, Letter 6/30/95.

SUMMARY The bridge has been so compromised by subsequent changes that it no longer characterizes the ca. 1930 building campaign for the "superhighway." The removal of the majority of the superstructure and the modifications to the substructure in 1987 have altered the visual integrity of the original bridge. In addition, the recent changes to the US 1&9 roadway and the isolation of this element from the other structures of the historic route was an important aspect of it being undistinguished.

INFOR MATION

PHOTO: (1991) REVISED BY (DATE): QUAD: Elizabeth

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2002152 **CO** UNION **OWNER** NJDOT **MILEPOINT** 44.64

NAME & FEATURE INTERSECTED MAGNOLIA AVENUE OVER US 1&9 **FACILITY** MAGNOLIA AVENUE

TOWNSHIP ELIZABETH CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 6 **LENGTH** 222 ft **WIDTH** 30.7 ft

CONSTRUCTION DT 1934 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER** J. F. CHAPMAN & SONS, INC.

SETTING / CONTEXT The viaduct carries a local street over a divided highway in a mixed use area of Elizabeth. The viaduct was built after the 1925-1932 completion of the Route 1 Extension approach road to the Holland Tunnel, but it was apparently part of the conceptual plan for the route.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 9/11/91, Letter 6/30/95.

SUMMARY The overpass that consists of encased stringers and reinforced concrete T beam spans has no elements that would be considered unusual or innovative. It was, however, determined by the SHPO to "be a self-contained, ornamented, relatively intact viaduct which may be associated with public sponsorship and typical of highway viaducts of the period." The structure has a high level of integrity with the only alterations being removal of the asphalt paving block wearing surface and the added fence.

INFOR MATION

PHOTO: (1991) REVISED BY (DATE): QUAD: Elizabeth

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2003006 **CO** UNION **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED KENILWORTH BOULEVARD OVER RAHWAY RIVER **FACILITY** KENILWORTH BOULEVARD

TOWNSHIP CRANFORD TOWNSHIP

TYPE BOX BEAM **DESIGN** **MATERIAL** Prestressed Concrete

 # SPANS 2 **LENGTH** 72 ft **WIDTH** 46 ft

CONSTRUCTION DT 1925 **ALTERATION DT** 1992 **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge is located in a Union County Park, and carries a two-lane road across the Rahway River. The bridge was under construction at the time it was inspected.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 02/08/90

SUMMARY The superstructure of the two-span stringer bridge is being completely replaced with prestressed concrete box beams. The original concrete substructure remains, with new concrete caps on top of the pier and abutments. The new structure will have stone parapets. The bridge has not retained the integrity of its original design. The original structure was a common bridge type that was evaluated as not eligible, and the new bridge is not old enough to be evaluated as historically significant.

INFOR MATION

PHOTO: None (05/92) REVISED BY (DATE): QUAD: Roselle

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2003008 **CO** UNION **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED EASTMAN STREET OVER RAHWAY RIVER **FACILITY** EASTMAN STREET

TOWNSHIP CRANFORD TOWNSHIP

TYPE THRU GIRDER **DESIGN** PARTIALLY ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 85 ft **WIDTH** 30 ft

CONSTRUCTION DT 1918 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT JACOB L.BAUER, COUNTY ENGINEER **BUILDER** AMERICAN.BRIDGE, DVR.BLR.WRKS

SETTING / CONTEXT The bridge is located in a potential large historic district of early-20th century residences. The bridge carries a two-lane street and two sidewalks over the Rahway River, a winding waterway that is bounded by parklands for much of its length. The homes in the district are well-preserved examples of picturesque and academic Colonial Revival styles. Bridges 2003014, 2003072, both thru-girder spans, and 2003025, a reinforced concrete arch, are also located in the potential district.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Agreed Potential Cranford Historic District. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one-span thru-girder bridge sits on concrete abutments. The rolled floorbeams are encased except for the bottom flanges. The cantilevered sidewalks are enclosed with fence-like metal railings. The bridge is a representative example of a common early-20th century bridge type, and is not technologically or historically distinguished by itself. It is significant because it was constructed during the period of significance of the potential district.

INFOR MATION

PHOTO: 159:6-7 (05/92 JPH (5/96)) REVISED BY (DATE): QUAD: Roselle

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2003014 **CO** UNION **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED SPRINGFIELD AVENUE OVER RAHWAY RIVER **FACILITY** SPRINGFIELD AVENUE

TOWNSHIP CRANFORD TOWNSHIP

TYPE THRU GIRDER **DESIGN** PARTIALLY ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 86 ft **WIDTH** 30 ft

CONSTRUCTION DT 1916 **ALTERATION DT** 1979 **SOURCE** PLAQUE

DESIGNER/PATENT JACOB L.BAUER, COUNTY ENGINEER **BUILDER** LOGAN CONSTRUCTION CO.

SETTING / CONTEXT The bridge is located on a main street in Cranford, and it carries two lanes and two sidewalks over the Rahway River. The neighborhood is dominated by well-preserved, architecturally significant early-20th century picturesque and academic Colonial Revival dwellings. The neighborhood has historic district potential. Two other thru-girder bridges contribute to the potential district, and one reinforced concrete arch bridge.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Not Individually Eligible. Agreed Potential Cranford Historic District. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one-span thru-girder bridge is supported by concrete abutments with wingwalls. The rolled floorbeams are encased except for the bottom flanges. The cantilevered sidewalks have reinforced concrete decks and the original iron railings. The bridge deck was replaced in 1979, with a slight crest curve and curbs on the inside face of the girders. Though a representative example of a common bridge type, the bridge is significant as a contributing element to the potential historic district.

INFOR MATION

PHOTO: 159:43-44 (05/92) REVISED BY (DATE): QUAD: Roselle

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2003016 **CO** UNION **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED NORTH UNION AVENUE OVER RAHWAY RIVER **FACILITY** NORTH UNION AVENUE

TOWNSHIP CRANFORD TOWNSHIP

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 120 ft **WIDTH** 40 ft

CONSTRUCTION DT 1916 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT JACOB L.BAUER, COUNTY ENGINEER **BUILDER** WELDON CONTRACTING COMPNY

SETTING / CONTEXT The bridge is located in Sperry Park, a casually landscaped Union County park that is part of a greenway along the Rahway River. The bridge carries a two-lane, two sidewalk street over the river. The surrounding neighborhood is dominated by post-WW II residences and commercial structures. The park does not have landscape architecture significance.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Potential Union County Park System Multiple Property nomination, May contribute.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single reinforced concrete arch bridge has been rehabilitated with gunite on the fascias as well as the intrados. The repairs do not detract from the structural integrity. The original metal railings that cross the bridge are flanked at the approaches by concrete parapets. The 1916 bridge is a representative example of a common bridge type from the early-20th century, and is one of 9 pre-World War II deck arches in the county. The bridge is not technologically or historically distinguished.

INFOR MATION

PHOTO: 157:34 (05/92) REVISED BY (DATE): QUAD: Roselle

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2003025 **CO** UNION **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED EASTMAN STREET OVER RAHWAY RIVER **FACILITY** EASTMAN STREET

TOWNSHIP CRANFORD TOWNSHIP

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 105 ft **WIDTH** 29.8 ft

CONSTRUCTION DT 1913 **ALTERATION DT** 1985ca **SOURCE** NJDOT/STYLE

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge carries two lanes and two sidewalks over the Rahway River. A greenway borders the winding river through the county, and this bridge is located next to McConnell Park. The neighborhood surrounding the park and bridge is early-20th century residences predominantly in the picturesque and academic Colonial Revival style. The area has historic district potential. The district includes three other bridges, all thru-girder spans from the period of significance of the district.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Agreed Potential Cranford Historic District. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The reinforced concrete deck arch bridge has paneled spandrels and wingwalls. The arch creates a vertical crest curve over the bridge, which is skewed. A metal railing is bolted to the curb at the spandrel wall. Though the railing is not original, it is not intrusive into the character of the bridge or its surroundings. The bridge is significant because it was built during the period of significance of a potential historic district but is not technologically distinguished in its own right.

INFOR MATION

PHOTO: 159:4-5 (05/92) REVISED BY (DATE): QUAD: Roselle

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NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2003045 **CO** UNION **OWNER** COUNTY **MILEPOINT** 0.0
NAME & FEATURE INTERSECTED LINCOLN AVENUE OVER RAHWAY RIVER **FACILITY** LINCOLN AVENUE
TOWNSHIP CRANFORD TOWNSHIP
TYPE BRICK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Brick
 # SPANS 3 **LENGTH** 73 ft **WIDTH** 48 ft
CONSTRUCTION DT 1875 **ALTERATION DT** Demolished **SOURCE** COUNTY ENGINEER
DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge is located in a wooded greenway along the Rahway River with some late-20th century residences nearby. The bridge carries a two-lane street with two sidewalks over the Rahway River downstream from National Register-listed Droescher's Mill. A dam approximately 300' upstream creates a mill pond and adds to the park-like atmosphere of the mill and bridge.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No
CONSULT STATUS Bridge was Individually Eligible. Potential Union County Park System Multiple Property nomination, May have contributed.
CONSULT DOCUMENTS SHPO Finding 07/18/90, Letter 03/12/01.

SUMMARY The 1875 three-span brick arch bridge no longer carries the load of traffic. A Bailey truss was placed over the arches in 1985 due to the crumbling state of the southern arch. The arches are skewed using a ribbed pattern consisting of approximately 2' wide ribs stepped along the intrados. The arches have a stone fascia, and a metal railing that was placed in 1926. The ribbed brick intrados is a unique feature; the arches are deteriorating. Despite this, the bridge remains individually eligible for listing in the National Register of Historic Places under Criterion C.

INFOR MATION

Bibliography:
Cranford Board of Trade. Cranford, New Jersey. 1913.
County Engineer Office; Bridge File.

Physical Description: The 1875 three-span brick arch has a ribbed intrados. The bricks were laid in a stepped pattern to provide for the skew of the bridge as it crossed the waterway. Each rib is approximately 2' wide, and is stepped 6" from the preceding rib. The spandrel walls are ashlar with a concrete cap. The arches all have gauged ring stones. A concrete footing is present at the base of each arch, with a short buttress protruding from the upstream face of the structure. In 1926, the original metal railing was replaced with another metal railing, each type being finely detailed for this important bridge.

The arch action of the spans has been lost. The ashlar spandrel wall has fallen into the river, as have parts of the brick arches which has caused the bridge to fail.

In 1985, a Bailey truss was placed over the arch structure to carry the vehicular traffic across the river and the deteriorated arch. Additional precautions have been made for pedestrians to cross the bridge in a safe manner, with chain-link fencing and beam guide rails marking sidewalks.

Historical and Technological Significance: The ca. 1875 three-span brick arch bridge with the stepped intrados is a rare example of its design. No other example has been identified on a highway in the state. However, deterioration has cause the arch action of the span to fail. It is evaluated as not eligible due to its loss of structural integrity. The date of construction is based on the style and type, but it has not been documented.

PHOTO: 157:28-33 (05/92 JPH (5/96)) REVISED BY (DATE): QUAD: Roselle

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2003072 **CO** UNION **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED SPRINGFIELD AVENUE OVER RAHWAY RIVER **FACILITY** SPRINGFIELD AVENUE

TOWNSHIP CRANFORD TOWNSHIP

TYPE THRU GIRDER **DESIGN** PARTIALLY ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 76 ft **WIDTH** 31.4 ft

CONSTRUCTION DT 1914 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT JACOB L.BAUER, COUNTY ENGINEER **BUILDER** JAS. E. GANO

SETTING / CONTEXT The bridge is located in a potential historic district of predominantly early-20th century picturesque and academic Colonial Revival dwellings. The homes are well-maintained and well-preserved. The bridge carries a two-lane road with two sidewalks over the Rahway River, a winding waterway that has a wooded greenway along both banks through most of Union County.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Agreed Potential Cranford Historic District. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The thru-girder bridge sits on concrete abutments. The floorbeams are built-up, and encased stringers support the concrete deck. The original iron railings remain along the cantilevered sidewalks, with pipe railings bolted to the top flanges of the girders to protect pedestrians from traffic. The bridge is not technologically or historically distinguished, but is eligible because it contributes to a potential historic district.

INFOR MATION

PHOTO: 159:1-3 (05/92) REVISED BY (DATE): QUAD: Roselle

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2003157 **CO** UNION **OWNER** NJDOT **MILEPOINT** 50.74

NAME & FEATURE INTERSECTED US 22 OVER ECHO LAKE **FACILITY** US 22

TOWNSHIP MOUNTAINSIDE BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 26 ft **WIDTH** 81 ft

CONSTRUCTION DT 1929 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located at the edge of Echo Lake Park, a wooded reserve area with a small lake. Post-World War II single family dwellings and small commercial buildings are along US 22 near the bridge. The structure carries a four-lane divided highway and two sidewalks over a creek that feeds Echo Lake.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased stringer span sits on concrete abutments. The low-rise bridge is very wide for its relatively short span. The concrete balustrades flank the sidewalks on each side of the road. The highway is divided by a Jersey-type barrier. The bridge is a representative example of a common bridge type designed by the New Jersey State Highway Department Bridge Division. It is not technologically or historically distinguished.

INFOR MATION

PHOTO: 159:8-9 (05/92) REVISED BY (DATE): QUAD: Roselle

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2003158 **CO** UNION **OWNER** NJDOT **MILEPOINT** 51.82

NAME & FEATURE INTERSECTED US 22 WB OVER MOUNTAIN AVENUE **FACILITY** US 22 WESTBOUND

TOWNSHIP MOUNTAINSIDE BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 55 ft **WIDTH** 32 ft

CONSTRUCTION DT 1941 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located in an area of late-20th century commercial development. The structure carries two lanes of one-directional traffic, one shoulder and two sidewalks over a one-lane access ramp from a divided highway to a local street.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased simple-span stringer bridge sits on concrete abutments. The substructure is detailed with a Moderne entablature and fluted pilasters. The pilasters at the abutment corners rise into the stepped posts of the concrete balustrade. The bridge is a representative example of a common bridge type and style used by the State Highway Department for grade crossing elimination bridges. It is not technologically or historically distinguished.

INFOR MATION

PHOTO: 159:10-12 (05/92) REVISED BY (DATE): QUAD: Roselle

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2003160 **CO** UNION **OWNER** NJDOT **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED SPRINGFIELD AVENUE (CR 509 SPUR) OVER US 22 **FACILITY** SPRINGFIELD AVENUE (CR 509 SPUR)

TOWNSHIP SPRINGFIELD TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 127 ft **WIDTH** 42 ft

CONSTRUCTION DT 1941 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located in a post-World War II commercial area. It carries a four-lane county route with a mountable median and two sidewalks over a four-lane divided highway.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span encased stringer bridge bears on a concrete substructure. The abutments have Moderne detailing and fluted pilasters. The pier is an eight-column bent with a concrete cap. The fluted pilasters at the fascia of the abutments and pier rise into stepped posts in the concrete balustrade. The bridge is not distinguished, but is a representative example of a common bridge type and style used by the State Highway Department Bridge Division.

INFOR MATION

PHOTO: 158:22-23 (05/92) REVISED BY (DATE): QUAD: Roselle

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2003161 **CO** UNION **OWNER** NJDOT **MILEPOINT** 53.12

NAME & FEATURE INTERSECTED US 22 EB OVER RAHWAY RIVER **FACILITY** US 22 EASTBOUND

TOWNSHIP UNION TOWNSHIP

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 60 ft **WIDTH** 46.1 ft

CONSTRUCTION DT 1917 **ALTERATION DT** 1926 **SOURCE** PLAQUES

DESIGNER/PATENT JACOB L.BAUER, COUNTY ENGINEER **BUILDER** AVERILL MATTHEWS (1917)

SETTING / CONTEXT The bridge is located in the Rahway River Parkway, a greenway following the river through Union County. The bridge carries three lanes of one-directional traffic, two shoulders and two sidewalks over the river. Opposing traffic is carried over the same water feature on 2003162. Post-World War II commercial structures line US 22 in the area. The bridges are located in the wooded linear greenway that parallels the river through most of the county.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Potential Rahway River Park, May contribute. Potential Union County Park System Multiple Property nomination, May contribute.

CONSULT DOCUMENTS DOE 10/28/83. SHPO Letter 6/30/95.

SUMMARY The plain, single-span reinforced concrete arch was built in 1917 and widened in-kind in 1926. The two faces of the bridge match, as do the concrete balustrades with paneled posts. Although the bridge is now a state-maintained structure, it was designed and built by the county. The bridge is not technologically or historically distinguished, but is a representative example of a common bridge type.

INFOR MATION

PHOTO: 158:24-25 (05/92) REVISED BY (DATE): QUAD: Roselle

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2003162 **CO** UNION **OWNER** NJDOT **MILEPOINT** 53.12

NAME & FEATURE INTERSECTED US 22 WB OVER RAHWAY RIVER **FACILITY** US 22 WESTBOUND

TOWNSHIP UNION TOWNSHIP

TYPE RIGID FRAME **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 54 ft **WIDTH** 44 ft

CONSTRUCTION DT 1941 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located in Rahway River Parkway, a forested greenway that follows the river through most of Union County. The bridge carries two lanes of one-directional traffic, two shoulders and two sidewalks over the river. Post-World War II structures line the highway in the vicinity of the bridge. The greenway does not appear to have historical or landscape architecture significance, and in this section the bridge is not related to it as there is no linkage between the two.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Potential Rahway River Park, May contribute. Potential Union County Park System Multiple Property nomination, May contribute.

CONSULT DOCUMENTS DOE 10/28/83. SHPO Letter 6/30/95.

SUMMARY The rigid frame bridge is nicely detailed. The concrete abutments have paneled posts at the corners. At the approaches are banded concrete bullnose parapets flanking a concrete balustrade. The balusters are octagonal and rise directly from the sidewalk to the scored concrete top rail. The posts are scored vertically. This is an early example of this common post WW II detailing and balustrade, but the rigid frame structure is not technologically or historically distinguished.

INFOR MATION

PHOTO: 158:26-29 (05/92) REVISED BY (DATE): QUAD: Roselle

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2003166 **CO** UNION **OWNER** NJDOT **MILEPOINT** 54.83

NAME & FEATURE INTERSECTED US 22 OVER CHESTNUT STREET (CR 626) **FACILITY** US 22

TOWNSHIP UNION TOWNSHIP

TYPE THRU GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 149 ft **WIDTH** 50 ft

CONSTRUCTION DT 1929 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located in a residential area with well-maintained single family dwellings of mixed-20th century construction. It carries a four-lane divided highway with 2 sidewalks over a busy 4-lane collector road.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 2-span thru-girder bridge sits on a concrete substructure. The abutments and wingwalls are scored. The 7-column bent has octagonal columns with a brace near the tops. The encased girders support encased floorbeams that are braced with longitudinal diaphragms. The cantilevered sidewalks are enclosed by a metal railing with concrete posts. Concrete obelisks mark the four ends of the girders, but are missing original luminaries. The bridge is a representative example of a common NJDOT design.

INFOR MATION

PHOTO: 156:29-31 (05/92) REVISED BY (DATE): QUAD: Roselle

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2003167 **CO** UNION **OWNER** NJDOT **MILEPOINT** 55.08

NAME & FEATURE INTERSECTED US 22 EB OVER BURKE PARKWAY **FACILITY** US 22 EASTBOUND

TOWNSHIP UNION TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 68 ft **WIDTH** 30 ft

CONSTRUCTION DT 1941 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located in a wooded area with some mid- to late-20th century commercial and residential structures nearby. The bridge carries two lanes of one-directional traffic of a divided highway and one sidewalk over a two-lane road. The bridge is skewed. A similar structure (2003168) is located 10' to the north carrying westbound traffic.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The concrete encased stringer bridge sits on concrete abutments. The abutments are detailed with shallow pilasters and entablature. The center pilaster is fluted, as are the fascia pilasters at the abutment corners. The concrete balustrade has stepped posts rising from the fascia pilasters. The bridge is a representative example of a common bridge type. It is not technologically or historically distinguished.

INFOR MATION

PHOTO: 156:33-34 (05/92) REVISED BY (DATE): QUAD: Roselle

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2003168 **CO** UNION **OWNER** NJDOT **MILEPOINT** 55.26

NAME & FEATURE INTERSECTED US 22 WB OVER BURKE PARKWAY **FACILITY** US 22 WESTBOUND

TOWNSHIP UNION TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 65 ft **WIDTH** 30 ft

CONSTRUCTION DT 1941 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located in a wooded area. Some residential and commercial structures in the vicinity are of mid- to late-20th century construction. The bridge carries two lanes and one sidewalk over a two-lane street. 10' to the south of the bridge another structure (2003167) carries the eastbound traffic of the divided highway.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed one-span encased stringer bridge sits on concrete abutments with vertically scored wingwalls. The abutments are detailed with Moderne pilasters, some of which are fluted, and banded decoration. The concrete balustrade has stepped posts at the abutments. The bridge is a common type and style designed by the New Jersey State Highway Department Bridge Division, and it is not technologically or historically distinguished.

INFOR MATION

PHOTO: 156:35-36 (05/92) REVISED BY (DATE): QUAD: Roselle

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2004001 **CO** UNION **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED SOUTH FRONT STREET OVER ELIZABETH RIVER **FACILITY** SOUTH FRONT STREET

TOWNSHIP ELIZABETH CITY

TYPE SINGLE LEAF BASCULE **DESIGN** STRAUSS HEEL TRUNNION **MATERIAL** Steel

 # SPANS 1 **LENGTH** 158 ft **WIDTH** 17.8 ft

CONSTRUCTION DT 1920 **ALTERATION DT** 1976 **SOURCE** PLANS/COUNTY ENGNR

DESIGNER/PATENT STRAUSS BASCULE BRIDGE COMPANY **BUILDER** AMERICAN BRIDGE COMPANY

SETTING / CONTEXT The bridge is located in an industrial area that is in the process of being cleared and redeveloped for recreational use. The one-lane bridge crosses a small waterway near its outlet into the Arthur Kill. The waterway is now used only for pleasure craft, as only a few hundred feet of the river are navigable. The bridge provides access to a concrete plant located along the Arthur Kill.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed Strauss heel trunnion bridge has a Warren thru-truss moveable span. The bridge bears on concrete abutments. The concrete counterweight has been repaired several times. The original gearing is housed above the roadway, along with electric motors from 1940. The only operational moveable-span bridge in Union County, the bridge is a well-preserved example of an uncommon type and is historically and technologically noteworthy.

INFOR MATION

Bibliography:
Hool and Kinne. Movable and Long-Span Steel Bridges. 1943.
Union County Engineer. Bridge File: EL1. 1902 Bauer Atlas of Union County.
Waddell, J.A.L. Bridge Engineering. 1925.

Physical Description: The 158'-long single-leaf Strauss heel trunnion bascule bridge has a rivet-connected Warren with verticals moveable span fabricated of traditionally composed members. Because the bridge is skewed, the trusses are different lengths; 131-8" on the west truss, 116'-5" on the east truss. The roadway is 17'-8" wide. The substructure is concrete. The flooring system, which includes an open grate deck, was strengthened in 1976, and the concrete counterweight, carried overhead by a framed truss that pivots on two trunnions when the bridge is in operation, was repaired in 1976. The operating machinery, made up of open gear sets and line shafts, is located in a corrugated metal-clad machinery closure adjacent to the operating strut fitted with a rack and the operating pinion. The controls are located in the small, gable-roofed brick tender's house adjacent to the span. A standard-design metal railing encloses the cantilevered sidewalk. The bridge is well preserved.

Historical and Technological Significance: The 1920 Strauss heel trunnion single-leaf bascule bridge, designed by the Strauss Bascule Bridge Company of Chicago and fabricated by American Bridge Company's Pencoyd plant, is a well-preserved example of a proprietary bridge type that is not common in New Jersey (criterion C). The heel trunnion is a variation on the patented articulated parallel-moving counterweight design Joseph B. Strauss developed in 1905. Unlike the articulated counterweight bridges, in the heel trunnion design the counterweight trunnion is a fixed pivotal point. It is located at the top of a stationary tower supported by the main column and an auxiliary column. The counterweight is carried by one end of a trussed frame. The other end of this trussed frame is connected by a pivot to a link which in turn attaches to the inclined end post of the thru truss superstructure by a pin. This arrangement provides a parallelogram of linkages with the side formed by the triangular counterweight tower with the initially mentioned fixed pivotal point. Near the center of the tower is an "operating strut" with a rack that is pulled by the operating pinion causing the parallelogram to close up thereby opening the leaf. This is one of only two documented road-carrying heel trunnion bridges in New Jersey; NJ 7 over the Passaic River in Bergen County (0208150) is the other. Several more survive on the state's rail lines.

Boundary Description and Justification: The bridge is evaluated as individually significant, and the boundary is limited to the superstructure and substructure of the bridge itself and the tender's house.

PHOTO: 152:14-20A (04/92) REVISED BY (DATE): QUAD: Elizabeth

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US
November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2004002 **CO** UNION **OWNER** COUNTY **MILEPOINT** 0.0
NAME & FEATURE INTERSECTED SOUTH FIRST STREET OVER ELIZABETH RIVER **FACILITY** SOUTH FIRST STREET
TOWNSHIP ELIZABETH CITY
TYPE SINGLE LEAF BASCULE **DESIGN** STRAUSS OVERHEAD **MATERIAL** Steel
 # SPANS 1 **LENGTH** 80 ft **WIDTH** 24.8 ft

CONSTRUCTION DT 1908 **ALTERATION DT** 1984 **SOURCE** PLANS/COUNTY ENGNR
DESIGNER/PATENT STRAUSS BASCULE BRIDGE COMPANY **BUILDER**

SETTING / CONTEXT The bridge is located in an industrial area that is undergoing clearing and redevelopment for recreational use. The bridge carries a 2-lane road over a tidal river. This section of the river is used for recreational marine traffic only.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No
CONSULT STATUS Individually Eligible.
CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 1908 Strauss overhead articulated counterweight bridge is supported on a concrete substructure. The moveable span is riveted Warren pony trusses, and the concrete counterweight is enclosed by a lattice screen. Although the bridge was fixed in 1984 after the tenders shanty burned, the bridge remains as one of the earliest and most complete patented Strauss overhead counterweight bridges in the state. The bridge is a historically and technologically distinguished structure.

INFOR MATION

Bibliography:
Union County Engineer Office. Bridge File: 2004002.
Waddell, J.A.L. Bridge Engineering. 1925. 1902 Bauer Map of Union County.

Physical Description: The 80'-long single leaf bascule bridge is a Strauss articulated overhead counterweight type supported on a concrete substructure. The lift span is a rivet-connected Warren pony truss span with a 24'-8" roadway. It is traditionally composed of built-up members as are the trunnion columns, tower, and counterweight linkages that permit the counterweight to pivot and move parallel to itself during operation of the bridge. A distinctive detail of the 1907 bridge is the lattice, or lacing as it is identified on the Strauss Bascule and Concrete Bridge Company plans, enclosure of the counterweight that is located 30' above the roadway. The superstructure is remarkably complete. The steel grid deck was installed in 1976 as part of an upgrading of the floor system. The most significant alteration to the bridge is the loss of the operator's shanty and controls as the result of a fire in 1984. The bridge has consequently been fixed in the closed position, but the gear sets and shafts are still in place. Plans for the original mechanical systems are preserved in the County Engineer's office. The original pipe railings and safety gates are still place.

Historical and Technological Significance: The 1908 Strauss overhead articulated counterweight bascule bridge designed by the Strauss Bascule and Concrete Bridge Company of Chicago, Illinois, is one of the earliest and most complete examples of the technologically important bridge type in the state (criterion C). In addition to its early date of construction, this example of what would go on in the early-20th century to become the most popular moveable bridge type in the country is distinguished by the fact that it has an enclosure around the raw concrete counterweight. The metal lattice enclosure or screen was an aesthetic consideration, and the detail has been identified on only one other bridge in New Jersey; the 1906 Federal Street bridge in Camden (043B008). J. B. Strauss (1870-1938) invented the pivoting counterweight linkage used at the South First Street bridge, and he applied for a patent in 1905, the same year the first bridge of this type was built in Cleveland. That year he also founded the Strauss Bascule and Concrete Bridge Company in Chicago to market his bridge designs. Strauss went on to become the most widely respected moveable-span bridge engineer of the pre-World War II era.

Strauss reasoned that if, unlike the traditional trunnion bridge, which operates like a seesaw and moves in a vertical plane on a horizontal steel pivot, the entire weight of the counterweight could be concentrated at the end (tail) of the moveable leaf, it would then be possible to use a lighter counterweight. Such an arrangement also meant a shorter tail end to the leaf, thus saving on materials that the "counterweight could be made in such shape that no pit is required to receive it when the leaf is in the upright position'" (Waddell, p. 704). The patented linkage, or arms, ensures that the counterweight will always move in a series of parallel positions and thus maintain the position of the weight at the tail end of the leaf.

When the Strauss overhead counterweight span at South First Street was erected, it was the first bridge at the crossing. A 1902 county map shows the area next to the industrialized Arthur Kill-Newark Bay waterfront as platted but not developed. The bridge was built just upstream from the South Front Street span. In 1984 a fire destroyed the original operator's house, electric motor that operated the span, and the controls. It was not replaced, and the bridge was fixed in the closed position at that time. A machinery plan for the bridge survives, so how the operating mechanism was arranged is well documented. Despite the loss of the operator's house, the superstructure survives in a remarkably complete state of preservation making this bridge one of the most important of its type in New Jersey. It is one of at least five Strauss overhead counterweight trunnion bridges built between 1907 and 1938 remaining in the state. Others include 043B008, 01M0001, 03H8001, and 1707150.

Boundary Description and Justification: The bridge is evaluated as individually distinguished. The significant boundary is thus limited to the substructure and superstructure and the operator's shanty.

PHOTO: 152:6A-13A (04/92) REVISED BY (DATE): QUAD: Elizabeth

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2004150 **CO** UNION **OWNER** NJDOT **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED VAUXHALL ROAD OVER US 22 **FACILITY** VAUXHALL ROAD

TOWNSHIP UNION TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 120 ft **WIDTH** 40 ft

CONSTRUCTION DT 1940 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located in a commercial area of mid- to late-20th century construction. The bridge carries a two-lane road with two sidewalks over a four-lane divided highway with Jersey-type barriers.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span encased stringer bridge is supported by a concrete substructure. The abutments are detailed with Moderne pilasters and entablature. The pier is an eight-column bent. Closed course staircases service both abutments on the south face of the bridge. A concrete balustrade with an added high pedestrian fence crosses the bridge. The bridge is representative of the well-detailed State Highway Department designs, but it is not technologically or historically distinguished.

INFOR MATION

PHOTO: 153:21-22 (04/92) REVISED BY (DATE): QUAD: Roselle

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2004151 **CO** UNION **OWNER** NJDOT **MILEPOINT** 56.7

NAME & FEATURE INTERSECTED US 22 OVER ELIZABETH RIVER **FACILITY** US 22

TOWNSHIP HILLSIDE TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 71 ft **WIDTH** 60 ft

CONSTRUCTION DT 1940 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located on a divided highway lined with mid- to late-20th century commercial structures. The bridge carries the four-lane divided highway and two sidewalks over the Elizabeth River. The river is located in Elizabeth River Park, a greenway that follows the waterway most of the way through the county.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Potential Union County Park System Multiple Property nomination, Might be Noncontributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one-span stringer bridge bears on concrete abutments. The stringers are deep, web-stiffened steel beams that are encased in concrete. The concrete balustrades are typical of pre-World War II State Highway Department Bridge Division designs. A New Jersey-type barrier divides the highway. The bridge is a representative example of a common bridge type and style, and it is not technologically or historically distinguished.

INFOR MATION

PHOTO: 153:23-24 (04/92) REVISED BY (DATE): QUAD: Elizabeth

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2004152 **CO** UNION **OWNER** NJDOT **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BLOY STREET OVER US 22 **FACILITY** BLOY STREET

TOWNSHIP HILLSIDE TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 77 ft **WIDTH** 30 ft

CONSTRUCTION DT 1940 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located in an area of altered turn-of-the-century residences mixed with late-20th century commercial buildings. The bridge carries a two-lane street with two sidewalks over a four-lane divided highway.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span stringer bridge is supported by concrete abutments with Moderne entablature and pilasters. The encasement at the bottom flanges has been removed. Closed-course staircases are present at both abutments on the west face of the bridge. A concrete balustrade encloses the stairs and crosses the bridge with an added pedestrian fence. The bridge is a representative example of a common pre-WWII State Highway Department design. It is not technologically or historically distinguished.

INFOR MATION

PHOTO: 153:16-18 (04/92) REVISED BY (DATE): QUAD: Elizabeth

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2004153 **CO** UNION **OWNER** NJDOT **MILEPOINT** 57.12

NAME & FEATURE INTERSECTED US 22 OVER LIBERTY AVENUE & CONRAIL **FACILITY** US 22

TOWNSHIP HILLSIDE TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 15 **LENGTH** 535 ft **WIDTH** 78 ft

CONSTRUCTION DT 1931 **ALTERATION DT** 1960 **SOURCE** NJDOT

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located in an area of post-World War II commercial development. It carries a four-lane divided highway with shoulders and two sidewalks over an urban area that includes a railroad, a two-lane street, an access road to a shopping center, and a parking lot.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 15-span viaduct is supported on a concrete substructure of column bents and hammerhead piers. In 1960 the structure was widened its full length with stringers, and it has a new parapet and railing on the north side. The south side is the original with 12 spans of 3-span continuous concrete girders and 3 spans of simple encased steel girders. The bridge is distinguished only by its length. Otherwise it is an altered, common example of a NJDOT design and is not historically noteworthy.

INFOR MATION

PHOTO: 153:12-15 (04/92) REVISED BY (DATE): QUAD: Elizabeth

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2004155 **CO** UNION **OWNER** NJDOT **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED HILLSIDE AVENUE OVER US 22 **FACILITY** HILLSIDE AVENUE

TOWNSHIP HILLSIDE TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 77 ft **WIDTH** 30 ft

CONSTRUCTION DT 1940 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located along US 22, a divided highway that is lined with post-World War II commercial buildings. Single family dwellings of the same era are also nearby. The bridge carries a two-lane road with two sidewalks over the four-lane highway with shoulders.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one-span encased stringer bridge bears on concrete abutments that are finished with Moderne detailing. The well-detailed bridge with a concrete balustrade is a representative of a common design by the State Highway Department Bridge Division for grade crossing elimination prior to World War II. It is not technologically or historically distinguished.

INFOR MATION

PHOTO: 153:8-9 (04/92) REVISED BY (DATE): QUAD: Elizabeth

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2004157 **CO** UNION **OWNER** NJDOT **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED NORTH BROAD STREET (CR 623) OVER US 22 & CONRAIL **FACILITY** NORTH BROAD STREET (CR 623)

TOWNSHIP HILLSIDE TOWNSHIP

TYPE THRU GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 5 **LENGTH** 220 ft **WIDTH** 40 ft

CONSTRUCTION DT 1929 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT LEHIGH VALLEY RR ENGNRS OFFICE **BUILDER** BETHLEHEM STEEL COMPANY

SETTING / CONTEXT The bridge is located in an area of post-World War II commercial structures. It carries a local two-lane road with two sidewalks over a four-lane divided highway and four sets of railroad tracks. The tracks are part of the Lehigh Valley Railroad's main line, which was developed in 1888. It branched off the existing route in South Plainfield and headed to Jersey City via Newark. The original double-track was expanded to four tracks in 1901. Conrail took control of the line in 1976.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge is composed of three types, all on a concrete substructure of 3-column hammerhead piers and abutments with wingwalls. The span over the tracks is a steel thru girder with floorbeams and stringers. The span over the highway is 3 deck girder span with floorbeams. There are also three encased stringer spans. A metal railing and new high pedestrian fence cross the span. None of the bridge types is distinguished technologically nor is the bridge historically noteworthy.

INFOR MATION

PHOTO: 153:6-7 (04/92) REVISED BY (DATE): QUAD: Elizabeth

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2004158 **CO** UNION **OWNER** STATE AGENCY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED ABANDONED PUBLIC SERVICE TROLLEY OVER US 22 **FACILITY** ABANDONED PUBLIC SERVICE TROLLEY

TOWNSHIP HILLSIDE TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 80 ft **WIDTH** 22.7 ft

CONSTRUCTION DT 1933 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located in an area of late-20th century commercial development. The bridge crosses a four-lane divided highway. The span is fenced off at deck level so that nothing crosses it. It used to be a Public Service trolley right-of-way but that service has been discontinued.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span encased stringer bridge bears on concrete abutments and a pier with arched struts between the columns. The wingwalls flanking the abutments are scored, but the abutments project approximately 2 feet from the face of the wingwalls. The concrete balustrade is a standard state-designed detail on this representative example of a common pre-World War II bridge type. The bridge is technologically and historically undistinguished.

INFOR MATION

PHOTO: 153:10-11 (04/92) REVISED BY (DATE): QUAD: Elizabeth

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2006151 **CO** UNION **OWNER** NJDOT **MILEPOINT** 28.42
NAME & FEATURE INTERSECTED NJ 27 OVER ROBINSONS BRANCH RAHWAY RIVER **FACILITY** NJ 27
TOWNSHIP RAHWAY CITY
TYPE BRICK ARCH **DESIGN** PARABOLIC **MATERIAL** Brick
 # SPANS 3 **LENGTH** 72 ft **WIDTH** 80 ft

CONSTRUCTION DT 1890ca **ALTERATION DT** Unknown **SOURCE** STYLE
DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in a greenway that follows the Robinson's Branch of the Rahway River through a neighborhood of post-World War II residences. The bridge carries four lanes of traffic and two sidewalks over the stream.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes
CONSULT STATUS Individually Eligible. Potential Union County Park System Multiple Property nomination, May contribute.
CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The three-span brick arch bridge sits on ashlar footings. Concrete repairs were used to buttress the piers and form cutwater piers at the base of the arches. The spandrel walls are rusticated ashlar as are the ringstones. The bridge appears to have been widened in kind by 15'-20' on each side, and the stone parapets moved out with the face of the bridge. The bridge is a significant example of a brick arch bridge, one of four in Union County.

INFOR MATION

Bibliography:
Robinson, E. Atlas of Union County, New Jersey. 1882.
Sanborn Insurance Atlas, Rahway, New Jersey, 1923.

Physical Description: The handsome three-span brick arch bridge rests on ashlar footings with concrete buttressing at the upstream face of the piers. The spandrel walls are ashlar, as are the ringstones. The bridge is 80' in width from the outside faces of the ashlar parapets. Approach guide rails do not cross the bridge or connect to the stone of the parapets. Iron signposts naming Robinson's Branch are present at the approaches to the bridge.

Historical and Technological Significance: The well-preserved ca. 1875 three-span brick arch bridge is a significant example of its type in the region based on its size and state of preservation (criterion C). The brick arch is a bridge type that was used in north New Jersey in the 1870s, 1880s, and early 1890s. No specific information about the date of construction or the builder could be located. The date is based on stylistic comparison with the 1875 Lincoln Avenue bridge (2003006).

On initial field inspection it appeared that the bridge had been widened in-kind at some point, but after researching old atlases and insurance maps, the bridge appears to have been 80' wide since at least 1882. The construction of such a wide bridge signifies the importance of the structure in the transportation system of the city, county, and state. The bridge is well-preserved, and is still very functional in its ability to handle traffic loads imposed on it in the late-20th century. It is the widest of three identified brick arch bridges in Union County.

Boundary Description and Justification: The bridge is evaluated as individually distinguished. The significant boundary is limited to the span itself.

PHOTO: 151:9-12 (04/92 JPH (5/96)) REVISED BY (DATE): QUAD: Perth Amboy

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US
November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2006152 **CO** UNION **OWNER** NJDOT **MILEPOINT** 29.05

NAME & FEATURE INTERSECTED NJ 27 OVER RAHWAY RIVER **FACILITY** NJ 27

TOWNSHIP RAHWAY CITY

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 2 **LENGTH** 102 ft **WIDTH** 62 ft

CONSTRUCTION DT 1914 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge is located in an open park surrounded by post-World War II residential and small-scale commercial structures. The bridge carries a four-lane state route and two sidewalks over the Rahway River.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Potential Union County Park System Multiple Property nomination, May contribute.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The reinforced concrete deck arch bridge has two spans. The skewed bridge has been coated with gunite in many places. The original iron railings enclose the bridge along both sidewalks. Although it is the only 2-span example of its type in the county, which has eight other reinforced concrete deck arch bridges, the bridge is not early nor is it technologically or historically distinguished. The more distinguished local example of the type is 2013022

INFOR MATION

PHOTO: 151:17-18 (04/92) REVISED BY (DATE): QUAD: Perth Amboy

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2007020 **CO** UNION **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED LIBERTY AVENUE OVER ELIZABETH RIVER **FACILITY** LIBERTY AVENUE

TOWNSHIP HILLSIDE TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 60 ft **WIDTH** 43.9 ft

CONSTRUCTION DT 1921 **ALTERATION DT** **SOURCE**

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge is located in a county park surrounded by residences from the early- through the late-20th century. A dam approximately 30 feet upstream from the bridge creates a small recreational lake. The bridge carries a two-lane road with two sidewalks over the river.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Potential Union County Park System Multiple Property nomination, May contribute.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span stringer bridge sits on a concrete substructure. The bridge is nicely detailed, with paneled posts at the abutments and pier, and haunched fascia stringer encasement. The concrete balustrade has posts with oval panels. The bridge is a representative example of a common pre-World War II bridge type in New Jersey. It is not technologically or historically distinguished.

INFOR MATION

PHOTO: 153:25-27 (04/92) REVISED BY (DATE): QUAD: Elizabeth

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2007032 **CO** UNION **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CONANT STREET OVER STREAM 8-5 **FACILITY** CONANT STREET

TOWNSHIP HILLSIDE TOWNSHIP

TYPE CULVERT **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 130 ft **WIDTH** 30 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The opening of the culvert is located in a greenway, near an elevated railroad track. The culvert winds under a local two-lane street and the track, which is elevated above the roadway on a bridge with a rusticated ashlar substructure.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The culvert is only 15' wide at the opening, but increases in span below the street because it is skewed. A pipe railing is mounted in the concrete over the outlet. Concrete wingwalls and channel protection bound the stream at the outlet. The structure is not technologically or historically distinguished.

INFOR MATION

PHOTO: 153:28 (04/92) REVISED BY (DATE): QUAD: Elizabeth

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2007151 **CO** UNION **OWNER** UNKNOWN **MILEPOINT** 34.0

NAME & FEATURE INTERSECTED NJ 27 (CHERRY ST) OVER CONRAIL ELIZABETH BRANCH **FACILITY** NJ 27 (CHERRY STREET)

TOWNSHIP ELIZABETH CITY

TYPE THRU TRUSS **DESIGN** WARREN **MATERIAL** Steel

 # SPANS 1 **LENGTH** 93 ft **WIDTH** 36 ft

CONSTRUCTION DT 1921 **ALTERATION DT** **SOURCE** INSCRIPTION/PLANS

DESIGNER/PATENT CRR NJ CHIEF ENGINEERS OFFICE **BUILDER** AMERICAN BRIDGE COMPANY

SETTING / CONTEXT The bridge is located in a neighborhood of late-19th and early-20th century residences, with a school nearby. The span carries a two-lane road with two sidewalks over one abandoned track. The Elizabeth Branch of the Central RR of New Jersey was developed in the 1830's and originally operated with horse-drawn streetcars. By 1840 it was using steam engines and soon was expanded to Somerville from Elizabeth. It was four-tracked by 1882. This branch of the line went out of use in 1967.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Central Railroad of NJ Main Line Corridor. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95. DOE 11/30/95.

SUMMARY The 6-panel Warren thru truss span has concrete abutments. The riveted members are built-up from angles, plates and lacing. Struts between the top chords have lattice webs. The bottom chord is encased, as are the stringers and floorbeams. The cantilevered sidewalks retain the original metal railings. One of 5 similar spans built by the CNJ in the vicinity, this one is not as old or interestingly detailed as several of the others. It is not technologically notable. Tuttle Parkway is noteworthy.

INFOR MATION

PHOTO: 154:22-25 (05/92) REVISED BY (DATE): QUAD: Elizabeth

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2008158 **CO** UNION **OWNER** RAILROAD **MILEPOINT** 16.86

NAME & FEATURE INTERSECTED LEHIGH VALLEY MAIN LINE RR OVER NJ 28 **FACILITY** LEHIGH VALLEY MAIN LINE RAILROAD

TOWNSHIP ROSELLE PARK BOROUGH

TYPE MULTI GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 3 **LENGTH** 235 ft **WIDTH** 24 ft

CONSTRUCTION DT 1927 **ALTERATION DT** 1959 **SOURCE** PLANS

DESIGNER/PATENT LEHIGH VALLEY RR OFF. OF ENGNR **BUILDER**

SETTING / CONTEXT The bridge is located in a 20th century residential and commercial area. The ca. 1914 brick factory that manufactured Marconi Wireless equipment through the war is adjacent to the bridge. It carries 2 tracks over a 4-lane state route divided by a mountable median. The railroad was developed by the Lehigh Valley Railroad in the late-1880s. The grade crossing was eliminated prior to 1908. The line is used by NJT and Conrail.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Central Railroad of NJ Main Line Corridor. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95. DOE 11/30/95

SUMMARY The three-span deck girder bridge is supported on ashlar piers, one concrete abutment and one ashlar abutment. The deeper end span was placed in 1959. It sits on the concrete abutment and an ashlar pier with a concrete cap. The pier was reduced in height to accommodate the deeper 1959 girders. The existing girders were modified to extend down to the new bearings. Each track is supported by a pair of girders that have lateral K-bracing. The bridge is not historically distinguished.

INFOR MATION

PHOTO: 157:20-24 (05/92) REVISED BY (DATE): QUAD: Roselle

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2009010 **CO** UNION **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED ELIZABETH AVENUE OVER STORM SEWER (ELIZABETH RIVER TRIBUTARY) **FACILITY** ELIZABETH AVENUE

TOWNSHIP LINDEN CITY

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 28 ft **WIDTH** 40 ft

CONSTRUCTION DT 1931 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge is located in a post-World War II residential neighborhood. It carries an Y-intersection of two two-lane roads over a storm sewer.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge is a concrete box culvert that is entirely underground. It has no technological or historical distinction.

INFOR MATION

PHOTO: 158:39 (05/92) REVISED BY (DATE): QUAD: Elizabeth

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2009014 **CO** UNION **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED ELIZABETH AVENUE OVER WEST BROOK **FACILITY** ELIZABETH AVENUE

TOWNSHIP LINDEN CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 30 ft **WIDTH** 36 ft

CONSTRUCTION DT 1925 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT JACOB L.BAUER, COUNTY ENGINEER **BUILDER** WILLIAMS AND CACCHIONE

SETTING / CONTEXT The bridge is located in an early- to mid-20th century industrial area. It carries a two-lane road with two sidewalks over a channel lined with concrete walls.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed one-span stringer bridge sits on concrete abutments. The stringers are encased and support a concrete deck. The bridge has paneled concrete parapets. The bridge is not technologically or historically distinguished, being one of over 25 pre-World War II extant stringer bridges in Union County.

INFOR MATION

PHOTO: 151:26-27 (04/92) REVISED BY (DATE): QUAD: Roselle

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2009015 **CO** UNION **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED LINDEN AVENUE OVER PEACH ORCHARD BROOK **FACILITY** LINDEN AVENUE

TOWNSHIP LINDEN CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 26 ft **WIDTH** 22 ft

CONSTRUCTION DT 1925 **ALTERATION DT** **SOURCE** COUNTY ENGINEER OFFC

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge is located in a post-World War II industrial area. It carries a two-lane road with shoulders across a stream.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed stringer bridge sits on concrete abutments with wingwalls. The stringers are encased, and support a concrete deck. Pipe railings are set in the curbs of the bridge at both fascias. Three utility mains span the stream at the west face of the bridge. The bridge is not technologically or historically distinguished.

INFOR MATION

PHOTO: 151:28-29 (04/92) REVISED BY (DATE): QUAD: Elizabeth

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2009024 **CO** UNION **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED UNION STREET OVER PEACH ORCHARD BROOK **FACILITY** UNION STREET

TOWNSHIP LINDEN CITY

TYPE STRINGER/CULVERT **DESIGN** **MATERIAL** Steel, Concrete

 # SPANS 1 **LENGTH** 28 ft **WIDTH** 36 ft

CONSTRUCTION DT 1922 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge carries a two-lane residential street over a stream that is carried underground several blocks under Union Street. The inlet of the stream into the underground culvert is 30' from the west edge of the roadway.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY According to the County Engineer, the bridge is a skewed underground structure composed of stringers on concrete abutments and a box culvert system. The bridge is neither historically nor technologically distinguished.

INFOR MATION

PHOTO: 158:40 (05/92) REVISED BY (DATE): QUAD: Elizabeth

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2009025 **CO** UNION **OWNER** CITY OR MUNC. **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CLINTON STREET OVER STREAM 9-1-4 **FACILITY** CLINTON STREET

TOWNSHIP LINDEN CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 26 ft **WIDTH** 36 ft

CONSTRUCTION DT 1923 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge is located in a 1950s residential area. It carries a two-lane street with two sidewalks over an underground stream in a channel used for a storm water collection.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY According to the County Engineer, the one-span encased stringer bridge rests on concrete abutments. The roadway is slightly raised at the bridge. In 1939, the City of Linden relocated the stream to a pipe that runs along the street. A smaller pipe carries local drainage under the bridge to the other pipe. Fill was placed under the structure to about 2' below the deck. The bridge is not technologically or historically distinguished.

INFOR MATION

PHOTO: 158:38 (05/92) REVISED BY (DATE): QUAD: Elizabeth

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2010037 **CO** UNION **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED W.R.TRACY DRIVE OVER SURPRISE LAKE **FACILITY** W.R.TRACY DRIVE

TOWNSHIP MOUNTAINSIDE BOROUGH

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 27 ft **WIDTH** 24 ft

CONSTRUCTION DT 1935 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge is located in the Watchung Reservation, a large park where wildlife dominates the area. The structure carries a two-lane road with narrow shoulders across a narrow point in Surprise Lake.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one-span slab bridge sits on fieldstone abutments. A concrete railing of posts and two rails crosses the bridge at each face. The bridge is not technologically or historically distinguished.

INFOR MATION

PHOTO: 158:20-21 (05/92) REVISED BY (DATE): QUAD: Roselle

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2011007 **CO** UNION **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED SOUTH STREET OVER STREAM 3-51 **FACILITY** SOUTH STREET

TOWNSHIP NEW PROVIDENCE BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 29 ft **WIDTH** 40 ft

CONSTRUCTION DT 1928 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge is located next to a park in a post-World War II commercial area. It carries a two-lane street with two sidewalks over a stream.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one-span stringer bridge bears on concrete abutments. The stringers have deteriorated encasement, and support a concrete deck with bituminous paving. Well-detailed paneled concrete parapets frame the bridge and match the fascia paneling. A representative example of a common pre-World War II type, the bridge is not technologically or historically distinguished.

INFOR MATION

PHOTO: 156:9-10 (05/92) REVISED BY (DATE): QUAD: Chatham

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2011039 **CO** UNION **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED SOUTH STREET OVER STREAM 3-51-2 **FACILITY** SOUTH STREET

TOWNSHIP NEW PROVIDENCE BOROUGH

TYPE SLAB **DESIGN** **MATERIAL** Concrete

 # SPANS 1 **LENGTH** 38 ft **WIDTH** 40 ft

CONSTRUCTION DT 1928 **ALTERATION DT** 1983 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge is located in a late-20th century commercial area surrounded by early- to mid-20th century residences. The bridge carries three lanes of traffic and two sidewalks over a channeled stream.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed concrete slab superstructure sits on concrete abutments that are flanked by concrete flumes upstream and downstream. The substructure remains from 1928. The superstructure was originally stringers, but in 1983 it was replaced by a slab, with the fascia beams salvaged from the original bridge. A new aluminum railing crossed the bridge at each face. The bridge is not technologically or historically distinguished.

INFOR MATION

PHOTO: 156:7-8 (05/92) REVISED BY (DATE): QUAD: Chatham

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2011055 **CO** UNION **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED DIVISION AVENUE OVER STREAM 3-51 **FACILITY** DIVISION AVENUE

TOWNSHIP NEW PROVIDENCE BOROUGH

TYPE STRINGER **DESIGN** JACK ARCH (BRICK) **MATERIAL** Steel

 # SPANS 1 **LENGTH** 22 ft **WIDTH** 25.3 ft

CONSTRUCTION DT 1905ca **ALTERATION DT** 1931 **SOURCE** STYLE/COUNTY ENGNR

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge is located in a well-maintained 1920s residential neighborhood. It carries a two-lane road with one sidewalk over a minor stream.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The short stringer bridge is supported on ashlar abutments. Brick jack-arches that have been coated with gunite are supported by the stringers at the bottom flanges. A concrete paneled parapet was placed at each face of the bridge in 1931. The age of the structural components of the bridge is undocumented, but can be dated by style to circa 1905. The bridge is not technologically or historically distinguished.

INFOR MATION

PHOTO: 156:5-6 (05/92) REVISED BY (DATE): QUAD: Chatham

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2011062 **CO** UNION **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CENTRAL AVENUE OVER PASSAIC RIVER **FACILITY** CENTRAL AVENUE

TOWNSHIP NEW PROVIDENCE BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 89 ft **WIDTH** 30 ft

CONSTRUCTION DT 1928 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT BAUER(UNION) & HOPKINS(MORRIS) **BUILDER** A. L. TRIMPI

SETTING / CONTEXT The bridge is located in Passaic River Park, a greenway located along the river which separates Union and Morris Counties. The bridge carries a two-lane residential street with two sidewalks over the river. The residences are from the mid- to late-20th century.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span stringer bridge is supported by rusticated concrete abutments and a pier. The encased stringers support a concrete deck and paneled parapets. The original light standards have been removed from the parapet posts. The bridge is a representative example of a common type and it is not technologically or historically distinguished.

INFOR MATION

PHOTO: 156:11-12 (05/92) REVISED BY (DATE): QUAD: Chatham

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2012001 **CO** UNION **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED STELLE AVENUE OVER CEDAR BROOK **FACILITY** STELLE AVENUE

TOWNSHIP PLAINFIELD CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 26 ft **WIDTH** 36.3 ft

CONSTRUCTION DT 1917 **ALTERATION DT** **SOURCE**

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge is located in a park that follows Cedar Brook through a 1920s single family residential area with a 1950s multi-unit housing nearby. The bridge carries a two-lane road and two sidewalks over the cobblestone-lined stream.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one-span stringer bridge sits on concrete abutments. The stringers are encased except for the bottom flanges. The pipe railings that cross the bridge are set directly in the concrete sidewalks. The short bridge, one of over 25 pre-World War II stringer spans in the county, is not technologically or historically distinguished.

INFOR MATION

PHOTO: 155:13-14 (05/92) REVISED BY (DATE): QUAD: Plainfield

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2012003 **CO** UNION **OWNER** CITY OR MUNC. **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PARK AVENUE OVER CEDAR BROOK **FACILITY** PARK AVENUE

TOWNSHIP PLAINFIELD CITY

TYPE CULVERT **DESIGN** **MATERIAL** Concrete

 # SPANS 2 **LENGTH** 30 ft **WIDTH** 40 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge is located on heavily travelled two-lane street that passes through a mixed 20th century neighborhood of residences and homes converted to commercial space. It carries the road over a stream that has been channeled underground and acts as the storm water collector.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The reinforced concrete box culvert bridge is underground. The structure is part of a storm water collection system that outlets into Cedar Brook. The channeled stream surfaces approximately 1000' downstream from this bridge, where a pipe railing is set in concrete over the opening of the culvert. The structure is not technologically or historically distinguished.

INFOR MATION

PHOTO: 163:6-7 (05/92) REVISED BY (DATE): QUAD: Plainfield

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2012004 **CO** UNION **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED FARRAGUT ROAD OVER GREEN BROOK **FACILITY** FARRAGUT ROAD

TOWNSHIP PLAINFIELD CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 46 ft **WIDTH** 36.2 ft

CONSTRUCTION DT 1925 **ALTERATION DT** **SOURCE** PLAQUES

DESIGNER/PATENT BAUER(UNION)& VAN EMBURGH(SOM) **BUILDER** CHARLES A. PETERSON

SETTING / CONTEXT The bridge is located in a residential area of single family homes from the first half of the 20th century. A 1920s school building is near the structure. The bridge carries two lanes and two sidewalks over Green Brook, the waterway dividing Union and Somerset Counties.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one-span stringer bridge sits on concrete abutments. One abutment has a concrete toe wall that was added at a later date. A stone retaining wall is present at the end of the eastern wingwall. The encased stringers support a concrete deck and paneled concrete parapets. The bridge is a representative example of a common bridge type, and is not technologically or historically distinguished.

INFOR MATION

PHOTO: 154:1-2 (05/92) REVISED BY (DATE): QUAD: Chatham

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2012010 **CO** UNION **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED ROOSEVELT AVENUE OVER GREEN BROOK **FACILITY** ROOSEVELT AVENUE

TOWNSHIP PLAINFIELD CITY

TYPE THRU GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 64 ft **WIDTH** 25.2 ft

CONSTRUCTION DT 1922 **ALTERATION DT** **SOURCE** PLAQUES

DESIGNER/PATENT BAUER(UNION)& VAN EMBURGH(SOM) **BUILDER** DOVER BOILER WORKS

SETTING / CONTEXT The bridge is located in a residential area of ca.1900 single family dwellings with later infill structures. The area does not appear to have historic district potential. The bridge carries a one-way one-lane road with two parking lanes and two sidewalks over the stream that separates Union and Somerset Counties.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one-span thru-girder bridge is supported on concrete abutments. The substructure has been repaired with gunite and with concrete toe walls. The built-up riveted girders support rolled floorbeams and encased stringers that have exposed bottom flanges. The sidewalks are cantilevered from the girder on built-up brackets, with original picket fence-like railings. The bridge is a representative example of a common bridge type, and is not technologically or historically distinguished.

INFOR MATION

PHOTO: 155:6-9 (05/92) REVISED BY (DATE): QUAD: Plainfield

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2012011 **CO** UNION **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED RANDOLPH ROAD OVER CEDAR BROOK **FACILITY** RANDOLPH ROAD

TOWNSHIP PLAINFIELD CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 36 ft **WIDTH** 30 ft

CONSTRUCTION DT 1922 **ALTERATION DT** 1930 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge is located in a park that follows Cedar Brook through a 1920s residential neighborhood. It carries two lanes and two sidewalks across the cobblestone-lined stream.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one-span stringer bridge sits on concrete abutments. The original superstructure was removed and replaced in 1930 with similar encased steel stringers. The concrete sidewalks have metal picket fence-like railings. The bridge is a representative example of a common bridge type, and it is not technologically or historically distinguished.

INFOR MATION

PHOTO: 155:15-16 (05/92) REVISED BY (DATE): QUAD: Plainfield

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2012014 **CO** UNION **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED SANDFORD AVENUE OVER GREEN BROOK **FACILITY** SANDFORD AVENUE

TOWNSHIP PLAINFIELD CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 54 ft **WIDTH** 35 ft

CONSTRUCTION DT 1919 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT JACOB BAUER(UNION)& SOM CO ENG **BUILDER** ARTHUR E. SMITH

SETTING / CONTEXT The bridge is located in a single-family dwelling neighborhood with houses dating from around 1900. The bridge carries a two-lane street with two sidewalks over the stream that forms the boundary between Union and Somerset Counties.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span stringer bridge sits on concrete abutments and a "round nose" pier. Concrete walls line the channel, protecting buildings that are close to the stream from slope erosion. The stringers are encased (except for one) in concrete. The bridge has concrete balustrades with paneled posts and scored fascias. The bridge is a representative example of a common type, and is not technologically or historically distinguished.

INFOR MATION

PHOTO: 155:42-43 (05/92) REVISED BY (DATE): QUAD: Chatham

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2012018 **CO** UNION **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED NORWOOD AVENUE OVER GREEN BROOK **FACILITY** NORWOOD AVENUE

TOWNSHIP PLAINFIELD CITY

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 80 ft **WIDTH** 36 ft

CONSTRUCTION DT 1917 **ALTERATION DT** **SOURCE** PLAQUES

DESIGNER/PATENT BAUER(UNION) & DOUGHTY(SOM) **BUILDER** F. W. SCHWIERS JR. COMPANY

SETTING / CONTEXT The bridge is located in a neighborhood of single family dwellings dating from the first half of the 20th century. It carries a two-lane street with two sidewalks over a stream. Green Brook is the dividing line between Union and Somerset counties.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The reinforced concrete arch bridge has concrete abutments and wingwalls. The arch has been repaired with gunite throughout. The bridge is bounded by concrete balustrades that are parallel with the vertical crest over the span. Pipe railings are present at the approaches, attached to the concrete end posts of the balustrade. The bridge is a representative example of a common early-20th century bridge type. It is not technologically or historically distinguished. 2013022 is more noteworthy.

INFOR MATION

PHOTO: 155:39-40 (05/92) REVISED BY (DATE): QUAD: Chatham

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2012020 **CO** UNION **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED RAYMOND AVENUE OVER GREEN BROOK **FACILITY** RAYMOND AVENUE

TOWNSHIP PLAINFIELD CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 58 ft **WIDTH** 36 ft

CONSTRUCTION DT 1931 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT COLLINS(UNION) & O.SMITH(SOM) **BUILDER** RICHARDS & GASTON INC.

SETTING / CONTEXT The bridge is located at the border of Union and Somerset Counties. It carries a two-lane road with shoulders and sidewalks over Green Brook. The stream is the transition between a 1920s residential area and a large scale commercial area lining US 22.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span stringer bridge is supported on a concrete substructure. The round nose pier and abutments are unadorned, as they rise only a few feet above the water. The encased stringers support the concrete deck. The balustrades with paneled posts are typical of county-designed bridges. The bridge is a representative example of a common bridge type, of which over 25 from the pre-WW II era remain in the county, and it is not technologically or historically distinguished.

INFOR MATION

PHOTO: 154:39-40 (05/92) REVISED BY (DATE): QUAD: Chatham

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2012021 **CO** UNION **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WESTERVELT AVENUE OVER GREEN BROOK **FACILITY** WESTERVELT AVENUE

TOWNSHIP PLAINFIELD CITY

TYPE THRU GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 57 ft **WIDTH** 28.2 ft

CONSTRUCTION DT 1916 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT BAUER(UNION) & DOUGHTY(SOM) **BUILDER** ARTHUR E. SMITH

SETTING / CONTEXT The bridge is located at the border of Union and Somerset Counties. It carries one lane of one-directional traffic and two cantilevered sidewalks over the stream.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed one-span thru-girder bridge sits on concrete abutments. The members of the bridge are riveted, built-up beams with the exception of the rolled stringers, which are encased except for the bottom flange. The built-up floorbeams hang from the girders, connecting to each girder's bottom flange. This is an uncommon detail on an otherwise ordinary bridge type. The sidewalks are cantilevered from the girder. The bridge is not technologically or historically distinctive.

INFOR MATION

PHOTO: 155:44,1-5 (05/92) REVISED BY (DATE): QUAD: Plainfield

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2012036 **CO** UNION **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WATCHUNG AVENUE OVER GREEN BROOK **FACILITY** WATCHUNG AVENUE

TOWNSHIP PLAINFIELD CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 78 ft **WIDTH** 40 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** STYLE

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge is located in a mid-20th century commercial area in downtown Plainfield. The bridge crosses Green Brook, the boundary between Union and Somerset Counties. It carries a two-lane road with parking lanes and sidewalks over the waterway.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span encased stringer bridge sits on a masonry substructure. The piers and abutments are stone with a concrete cap that was added when the new superstructure was placed in 1930. The stringers support a concrete deck with a concrete balustrade at one face. The other face of the roadway bridge abuts a structure supporting a commercial building which is also built over the brook. The bridge is not technologically or historically distinguished.

INFOR MATION

PHOTO: 155:10-12 (05/92) REVISED BY (DATE): QUAD: Plainfield

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2012037 **CO** UNION **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED NETHERWOOD AVENUE OVER GREEN BROOK **FACILITY** NETHERWOOD AVENUE

TOWNSHIP PLAINFIELD CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 55 ft **WIDTH** 35.9 ft

CONSTRUCTION DT 1928 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT J. BAUER(UNION) & O.SMITH(SOM) **BUILDER** ARTHUR E. SMITH

SETTING / CONTEXT The bridge is located in a residential area of mid-20th century single-family dwellings mixed with 1920s bungalows. The bridge carries two lanes of traffic and two sidewalks over the stream that divides Union and Somerset Counties.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span stringer bridge is supported by concrete abutments and a cutwater pier. The stringers are encased, and support the concrete deck. Paneled concrete parapets with paneled posts line the faces of the bridge above the paneled fascia stringers. The bridge is a representative example of a common bridge type. It is not technologically or historically distinguished.

INFOR MATION

PHOTO: 154:43-44 (05/92) REVISED BY (DATE): QUAD: Chatham

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2012051 **CO** UNION **OWNER** CITY OR MUNC. **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PROSPECT AVENUE OVER CEDAR BROOK **FACILITY** PROSPECT AVENUE

TOWNSHIP PLAINFIELD CITY

TYPE CULVERT **DESIGN** **MATERIAL** Concrete

 # SPANS 2 **LENGTH** 28 ft **WIDTH** 39.6 ft

CONSTRUCTION DT 1929 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge is an underground structure. It is located below a two-lane residential street of mixed 20th century construction. The "stream" that it crosses is part of the storm water collection system of the City of Plainfield. The opening of the channel is approximately 1000' downstream from this structure.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span concrete culvert bridge is unmarked above ground. According to the County Engineer, it is a reinforced concrete two-cell culvert. The bridge is not technologically or historically distinguished.

INFOR MATION

PHOTO: 155:20 (05/92) REVISED BY (DATE): QUAD: Plainfield

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2012052 **CO** UNION **OWNER** CITY OR MUNC. **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WATCHUNG AVENUE OVER CEDAR BROOK **FACILITY** WATCHUNG AVENUE

TOWNSHIP PLAINFIELD CITY

TYPE CULVERT **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 2 **LENGTH** 26 ft **WIDTH** 36 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** COUNTY ENGINEER OFFC

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge is entirely underground. It is located below a two-lane residential street in a mixed-20th century neighborhood. The "stream" is part of the City of Plainfield's storm sewer system. The stream outlets from underground approximately 2500' downstream from this structure.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY According to the County Engineer, the two-span bridge is a reinforced concrete two-cell culvert. The stream outlets from its underground location on the grounds of a nearby middle school. At the structure outlet a pipe railing is set in the concrete above the opening. The bridge is not technologically or historically distinguished. A photograph of the outlet (not at this site) is attached.

INFOR MATION

PHOTO: 155:21,163:9 (05/92) REVISED BY (DATE): QUAD: Plainfield

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2012053 **CO** UNION **OWNER** CITY OR MUNC. **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PUTNAM AVENUE OVER CEDAR BROOK **FACILITY** PUTNAM AVENUE

TOWNSHIP PLAINFIELD CITY

TYPE CULVERT **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 23 ft **WIDTH** 60 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** COUNTY ENGINEER OFFC

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge is located entirely underground. It carries a two-lane street in a residential neighborhood of mixed-20th century construction. The "stream" crossed is part of the local storm sewer system. The culvert outlet is approximately 3000' downstream from the structure. A photograph of the outlet, which is approximately 3000' downstream from this structure, is also attached.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge is unmarked at street level. According to the County Engineer, the structure is a single-cell reinforced concrete box culvert. The outlet is more than half a mile from the structure, on the grounds of the local middle school. A pipe railing is set in the concrete over the opening of the culvert. The bridge is technologically and historically undistinguished.

INFOR MATION

PHOTO: 155:22 (05/92) REVISED BY (DATE): QUAD: Plainfield

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2012150 **CO** UNION **OWNER** NJDOT **MILEPOINT** 0.38

NAME & FEATURE INTERSECTED MORRIS AVENUE (NJ 82) OVER RAHWAY RIVER **FACILITY** MORRIS AVENUE (NJ 82)

TOWNSHIP SPRINGFIELD TOWNSHIP

TYPE STONE ARCH **DESIGN** BARREL **MATERIAL** Stone

 # SPANS 3 **LENGTH** 90 ft **WIDTH** 55.8 ft

CONSTRUCTION DT 1872 **ALTERATION DT** 1935 **SOURCE** NJDOT/PLANS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in a linear greenway that follows the Rahway River as it winds through Union County. The bridge carries a four-lane state route over the river.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Potential Rahway River Park, May contribute.

CONSULT DOCUMENTS SHPO Finding 8/13/82, Letter 6/30/95. DOE 10/28/83.

SUMMARY The 3-span stone arch bridge stone with a rubble stone intrados has vermiculated-finish coursed ashlar spandrel walls and ringstones. The intrados of the arches have been coated with gunite. In 1935 the county added concrete balustrades at both faces. The bridge was determined not eligible "on the basis of evidence presented in" two studies dated 1980 and 1982 for the Route 82 Rahway River bridge replacement. A Section 4(f) evaluation was done and is dated May, 1985.

INFOR MATION

PHOTO: 156:40-44 (05/92) REVISED BY (DATE): QUAD: Roselle

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2012151 **CO** UNION **OWNER** RAILROAD **MILEPOINT** 0.1

NAME & FEATURE INTERSECTED RAHWAY VALLEY-HILTON BRANCH RR OVER MORRIS AVENUE (NJ 82) **FACILITY** RAHWAY VALLEY HILTON BRANCH RR

TOWNSHIP UNION TOWNSHIP

TYPE THRU GIRDER **DESIGN** PARTIALLY ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 50 ft **WIDTH** 10 ft

CONSTRUCTION DT 1915 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge is located in a commercial area of post-World War II development. The structure carries one abandoned track of the Rahway Valley Hilton Branch Railroad.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one-span thru-girder bridge is supported on concrete abutments with wingwalls. The floorbeams are completely encased in the concrete deck, with knee braces on the inside face of the riveted girders. The abutments are wide enough for two pairs of girders. The bridge is a representative example of a common bridge type, and it is not technologically or historically distinguished.

INFOR MATION

PHOTO: 156:37-39 (05/92) REVISED BY (DATE): QUAD: Roselle

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2013007 **CO** UNION **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WHITTIER STREET OVER RAHWAY RIVER **FACILITY** WHITTIER STREET

TOWNSHIP RAHWAY CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 74 ft **WIDTH** 36.1 ft

CONSTRUCTION DT 1925 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge is located in a linear greenway that follows the Rahway River through Union County. Surrounding the greenway are mixed 19th- and 20th-century single family dwellings. The bridge carries two lanes and two sidewalks over the waterway.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Potential Rahway River Park, May contribute. Potential Union County Park System Multiple Property nomination, May contribute.

CONSULT DOCUMENTS DOE 10/28/83. SHPO Letter 6/30/95.

SUMMARY The two-span stringer bridge sits on concrete abutments and a round nose pier. The stringers are encased in concrete, with the fascia stringer paneled. The concrete parapets are also paneled and broken by paneled posts. The structure is a representative example of a common pre-World War II bridge type, and is not technologically or historically distinguished.

INFOR MATION

PHOTO: 151:21-22 (04/92) REVISED BY (DATE): QUAD: Perth Amboy

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2013008 **CO** UNION **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED JEFFERSON AVE OVER ROBINSONS BRANCH RAHWAY RIVER **FACILITY** JEFFERSON AVENUE

TOWNSHIP RAHWAY CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 60 ft **WIDTH** 30 ft

CONSTRUCTION DT 1924 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge is located in a residential area of early- through late-20th century single-family dwellings. It carries a two-lane road with two sidewalks over a stream.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span stringer bridge is supported on a concrete pier and ashlar abutments that have concrete caps. The stringers are encased in concrete, with paneled fascias. The concrete parapets are paneled, as are the posts. Metal pipe railings are present on top of the walls that parallel the channel at the four corners of the bridge. The structure is a representative example of a common pre-World War II bridge type, and is not technologically or historically distinguished.

INFOR MATION

PHOTO: 151:13-14 (04/92) REVISED BY (DATE): QUAD: Perth Amboy

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2013009 **CO** UNION **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED EAST HAZELWOOD AVE OVER SOUTH BRANCH RAHWAY RIVER **FACILITY** EAST HAZELWOOD AVENUE

TOWNSHIP RAHWAY CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 85 ft **WIDTH** 40 ft

CONSTRUCTION DT 1921 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT JACOB L.BAUER, COUNTY ENGINEER **BUILDER** CHARLES A. PETERSON

SETTING / CONTEXT The bridge is located between a 1960s high-rise apartment building and a late-19th century single family dwelling neighborhood. The bridge carries a busy two-lane street with sidewalks over the South Branch of the Rahway River.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span stringer bridge sits on concrete abutments and a pier. The stringers are encased, with paneled fascias. The concrete parapets are also paneled. The bridge is a representative example of a common pre-World War II bridge type. It is not technologically or historically distinguished.

INFOR MATION

PHOTO: 150:12-13 (04/92) REVISED BY (DATE): QUAD: Perth Amboy

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2013010 **CO** UNION **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED IRVING STREET OVER ROBINSONS BRANCH RAHWAY RIVER **FACILITY** IRVING STREET

TOWNSHIP RAHWAY CITY

TYPE STONE ARCH **DESIGN** ELLIPTICAL **MATERIAL** Stone, Brick

 # SPANS 3 **LENGTH** 68 ft **WIDTH** 66.2 ft

CONSTRUCTION DT 1875ca **ALTERATION DT** 1924 **SOURCE** STYLE/PLAQUE

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in downtown Rahway City, surrounded by mid- to late-19th century commercial structures and 20th century multi-unit housing. The bridge is on a two-lane street with parking lanes and sidewalks. It crosses the Robinson Branch of the Rahway River, a waterway that is channeled through the city with rubble stone as well as concrete retaining walls.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The undocumented three-span bridge is a combination of stone and brick arches founded on rusticated ashlar cutwater piers and abutments. The center section of each arch is stone, with 13' of brick arch widening on each side at an unknown date. The spandrels are coursed ashlar with gauged ringstones. In 1924, paneled concrete parapets were added by the county. One of only two stone arch spans in the county (2012150 is other), this bridge is historically and technologically distinguished.

INFORMATION

Bibliography:
Robinson, E. Atlas of Union County, New Jersey. 1882.; Sanborn Insurance Atlas, Rahway, New Jersey, 1886, 1891, 1896, 1901, 1908, 1915, 1923.
1902 Bauer Atlas of Union County.

Physical Description: The three-span arch bridge is a combination of stone and brick arches. The center portion of the bridge is a stone arch structure, approximately 40' wide. On each side of the stone arch is a brick arch approximately 13' wide. The arches are founded on ashlar footings with cutwater pier heads. In 1924, paneled concrete parapets were added to the structure above the ashlar spandrel walls.

The bridge underside is inaccessible from the street as the parapets abut buildings and privacy walls that follow the banks of the river to the edge of the sidewalk. Stone retaining walls line the banks of the river in this densely developed urban setting.

Historical and Technological Significance: The ca. 1875 stone and brick arch bridge is one of the oldest bridges in Rahway, and is one of two stone arch spans in the county. The stone structure dates stylistically to circa 1875. The date of the brick arch extensions is not known, but research of 19th- and early-20th century atlases and maps show the bridge to be 66' wide, its present width, as early as 1882.

Despite the 1924 concrete parapet, the structural integrity of the arches has been maintained, and the bridge ranks as a locally significant example of a bridge technology that is not common in the county (criterion C). The other stone arch bridge, the 1872 Morris Avenue (NJ 82) over the Rahway River (2012150) was determined not eligible by the SHPO in 1985.

Boundary Description and Justification: The bridge is evaluated as individually distinguished, and the significant boundary is limited to the span itself.

PHOTO: 150:32-34 (04/92) REVISED BY (DATE): QUAD: Perth Amboy

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2013013 **CO** UNION **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED EAST INMAN AVENUE OVER SOUTH BRANCH RAHWAY RIVER **FACILITY** EAST INMAN AVENUE

TOWNSHIP RAHWAY CITY

TYPE PONY TRUSS **DESIGN** PRATT HALF HIP **MATERIAL** Steel

 # SPANS 1 **LENGTH** 54 ft **WIDTH** 22.3 ft

CONSTRUCTION DT 1890ca **ALTERATION DT** 1932, 1956 **SOURCE** STYLE/COUNTY ENGNR

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge is located in an area dominated by modern commercial and warehouse facilities. The bridge carries a two-lane road and two cantilevered sidewalks over the South Branch of the Rahway River.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The half-hip pin-connected Pratt pony truss bridge sits on ashlar abutments with concrete seats. In 1931-32, the bridge was widened and strengthened by the addition of welded plates to most of the members and new vertical sections. A new steel deck was added in 1956. Through all of the repairs and modifications to the bridge, the original structure has not retained its design integrity. Despite it being the only pony truss in the county, it is not technologically or historically distinguished.

INFOR MATION

PHOTO: 150:6-11 (04/92) REVISED BY (DATE): QUAD: Perth Amboy

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2013020 **CO** UNION **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CENTRAL AVENUE OVER ROBINSONS BRANCH RAHWAY RIVER **FACILITY** CENTRAL AVENUE

TOWNSHIP RAHWAY CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 53 ft **WIDTH** 39.5 ft

CONSTRUCTION DT 1921 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT JACOB L.BAUER, COUNTY ENGINEER **BUILDER** T. FOSTER CALLAHAN

SETTING / CONTEXT The bridge is located in a linear greenway that follows the Robinsons Branch of the Rahway River through an area of early- through late-20th century single-family dwellings. The structure carries a two-lane street and two sidewalks over the stream.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Potential Rahway River Park, May contribute. Potential Union County Park System Multiple Property nomination, May contribute.

CONSULT DOCUMENTS DOE 10/28/83. SHPO Letter 6/30/95.

SUMMARY The two-span stringer bridge is supported on earlier stone abutments and a stone pier that has been widened on both sides with concrete. The stringers are concrete-encased, and the fascia encasement is paneled. The concrete parapet is also paneled, and is flanked at the approaches by pipe railings. The bridge is a representative example of a common bridge type, and it is not technologically or historically distinguished.

INFORMATION

PHOTO: 151:7-8 (04/92) REVISED BY (DATE): QUAD: Perth Amboy

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2013022 **CO** UNION **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED NEW CHURCH STREET OVER ROBINSONS BRANCH RAHWAY RIVER **FACILITY** NEW CHURCH STREET

TOWNSHIP RAHWAY CITY

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 97 ft **WIDTH** 30.1 ft

CONSTRUCTION DT 1907 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT JACOB L.BAUER, COUNTY ENGINEER **BUILDER** ARTHUR E. SMITH

SETTING / CONTEXT The bridge is located in a neighborhood of first quarter of the 20th century houses that have been altered. The area does not possess historic district potential. The structure carries a two-lane road with two sidewalks over the Robinsons Branch of the Rahway River.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Individually Eligible. Potential Rahway River Park, May contribute. Potential Union County Park System Multiple Property nomination, May contribute.

CONSULT DOCUMENTS DOE 10/28/83. SHPO Letter 6/30/95.

SUMMARY The reinforced concrete deck arch bridge has scored spandrels and wingwalls. The concrete has been repaired selectively with gunite. A metal fence-like railing crosses the bridge, with concrete posts at the ends and third points of the span. The handsome structure is the earliest of nine reinforced concrete deck arch bridges in Union County. It is a well-preserved representative example of a common technology from the early-20th century.

INFOR MATION

PHOTO: 151:15-16 (04/92) REVISED BY (DATE): QUAD: Perth Amboy

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2013023 **CO** UNION **OWNER** COUNTY **MILEPOINT** 0.0
NAME & FEATURE INTERSECTED LAWRENCE STREET OVER RAHWAY RIVER **FACILITY** LAWRENCE STREET
TOWNSHIP RAHWAY CITY
TYPE SWING SPAN **DESIGN** CENTER BEARING **MATERIAL** Steel
 # SPANS 3 **LENGTH** 234 ft **WIDTH** 22 ft

CONSTRUCTION DT 1912 **ALTERATION DT** Various **SOURCE** PLAQUES,COUNTY ENGNR
DESIGNER/PATENT JACOB L.BAUER, COUNTY ENGINEER **BUILDER** OWEGO BRIDGE COMPANY

SETTING / CONTEXT The bridge is located in an industrial area of early-20th century construction. A green area follows the Rahway River through this area. The bridge carries a two-lane road with two cantilevered sidewalks over the river.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No
CONSULT STATUS Bridge was Not Individually Eligible. Potential Rahway River Park, May have contributed. Potential Union County Park System Multiple Property nomination. May have contributed.
CONSULT DOCUMENTS DOE 10/28/83, SHPO Letter 6/30/95

SUMMARY The Pratt thru-truss bridge with deck girder approach spans was originally a 21' wide riveted center-bearing swing span. It was extensively altered in 1930 when it was widened approximately 5'. The verticals and diagonals were reinforced with welded plates, and the cantilevered sidewalks were added. The bridge was "fixed", and the operating mechanism has been removed. The numerous alterations and inoperable condition make the bridge an undistinguished example of a well-represented bridge type.

INFOR MATION

Bibliography:
Darnell, Victor. Directory of American Bridge Companies. 1984.
Union County Engineer. Bridge File: RA23.

Physical Description: The main span of the 3-span bridge is a 158'-7' long, 10-panel Pratt thru truss rim-bearing swing span bridge of riveted construction. The approach spans are rolled section deck girders with floor beams and stringers. The substructure is concrete. The members are traditionally composed with built-up box sections for the top chord and inclined end posts, laced verticals, and diagonals and counters of angles joined by battens. There are numerous welded repairs and reinforcing.

In 1930, the originally 21' out-to-out bridge was widened 5', and most of the members were strengthened by welding steel plates to the existing fabric. The cantilevered sidewalks were also added in the 1930 project. The brackets were welded to the bottom chord of the trusses. New stringers were installed in the approach spans, and the concrete substructure was extended inkind to accommodate the widening. Floor beams were spliced. The original portal brace was replaced in 1930, and again in 1991 with a channel section welded to the inclined end posts. Many of the original riveted connections have been replaced by welds. The truss span was fixed in place in 1970 with new rocker bearings. Most of the operating machinery has been removed.

Historical and Technological Significance: The significance of the 1912 center-bearing swing span bridge fabricated by the Owego Bridge Company of Owego, New York has been lost due to major alterations that have irreversibly changed its appearance and function. Originally measuring 21' out-to-out, and built with no sidewalks, the span was widened approximately 5' in 1930. In addition to splicing many of the transverse members, the diagonals and verticals were strengthened by the addition of section and/or plate welded to the original fabric and replacement of riveted connections with welded ones. In 1970 new bearings for the moveable span were installed, and the bridge was fixed in the closed position. Most operating machinery has also been removed.

The original bridge was built by the Owego Bridge Company of Owego, New York. The company was founded in 1891, and it was a viable concern well into this century. The 1912 span was the first to cross the Rahway River at Lawrence Street, but the present structure resembles the original in profile only. It is too altered to be evaluated as a significant example of a moveable bridge technology that is well represented in New Jersey.

PHOTO: 150:17-22 (04/92) REVISED BY (DATE): QUAD: Perth Amboy

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2013024 **CO** UNION **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MONROE STREET OVER RAHWAY RIVER **FACILITY** MONROE STREET

TOWNSHIP RAHWAY CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 112 ft **WIDTH** 35.9 ft

CONSTRUCTION DT 1919 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge is located in an area of urban transition from commercial to residential structures. The majority of nearby buildings are from the early 20th century. An electrical substation is located adjacent to the bridge. The bridge carries a two-lane street with two sidewalks over the Rahway River.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The three-span encased stringer bridge sits on earlier ashlar piers and abutments with concrete seats. The fascia encasement is paneled and the concrete balustrade with paneled posts is typical of county-designed bridges. Metal fences line the approaches of the bridge. The structure is a representative example of a common bridge type. It is not technologically or historically distinguished.

INFOR MATION

PHOTO: 150:27-28 (04/92) REVISED BY (DATE): QUAD: Perth Amboy

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2013025 **CO** UNION **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BRIDGE STREET OVER RAHWAY RIVER **FACILITY** BRIDGE STREET

TOWNSHIP RAHWAY CITY

TYPE THRU GIRDER **DESIGN** JACK ARCH (CONCRETE) **MATERIAL** Steel

 # SPANS 2 **LENGTH** 130 ft **WIDTH** 19.4 ft

CONSTRUCTION DT 1912 **ALTERATION DT** 1938 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge is located in an urban area at a transition from commercial to residential structures. The buildings were built in the early 20th century. The structure carried two lanes of traffic and one cantilevered sidewalk, but was closed in 1990 due its unsafe condition.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span thru-girder with rolled floorbeams bridge is supported on scored concrete abutments and a pier that were refaced in 1938. The deck is supported by concrete jack arches set between the stringers. The cantilevered sidewalk has its original iron lattice railing. The bridge is a complete example of a common bridge type, but is not technologically or historically distinguished. An earlier, notable, functioning examples remain in the county (2016059), and there are several in Cranford.

INFOR MATION

PHOTO: 150:23-26 (04/92) REVISED BY (DATE): QUAD: Perth Amboy

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2013029 **CO** UNION **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED HAMILTON STREET OVER ROBINSONS BRANCH RAHWAY RIVER **FACILITY** HAMILTON STREET

TOWNSHIP RAHWAY CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 65 ft **WIDTH** 40 ft

CONSTRUCTION DT 1930 **ALTERATION DT** 1970 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge is located in downtown Rahway. It carries a two-lane street with two sidewalks over the Robinson's Branch of the Rahway River.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 03/12/01

SUMMARY The two-span encased stringer bridge bears on a concrete substructure. The abutments and wingwalls are plain concrete, as is the roundnose pier. The concrete parapet spanning the bridge and following the wingwalls along the channeled stream are paneled. In 1970, a new reinforced concrete deck slab was constructed. The bridge is a well-preserved representative example of a common pre-World War II bridge type and design.

INFOR MATION

PHOTO: 150:35-36 (04/92) REVISED BY (DATE): QUAD: Perth Amboy

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2013030 **CO** UNION **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WEST GRAND AVENUE OVER RAHWAY RIVER **FACILITY** WEST GRAND AVENUE

TOWNSHIP RAHWAY CITY

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 98 ft **WIDTH** 39.5 ft

CONSTRUCTION DT 1917 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT JACOB L.BAUER, COUNTY ENGINEER **BUILDER** ARTHUR E. SMITH

SETTING / CONTEXT The bridge is located in a park that is surrounded by a mixed-use late-19th and 20th century area. The bridge carries a two-lane street with two sidewalks over the Rahway River.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Potential Rahway River Park, May contribute. Potential Union County Park System Multiple Property nomination, May contribute.

CONSULT DOCUMENTS DOE 10/28/83. SHPO Letter 6/30/95.

SUMMARY The one-span elliptical reinforced concrete arch bridge is supported on concrete footings. The face of the bridge is scored to accent the arch structure. The concrete parapet is parallel to the roadway, which has a vertical crest curve over the bridge. The bridge is a representative example of a common bridge type, being one of nine pre-World War II reinforced concrete deck arches in Union County. 2013022 is more notable. This one is not technologically or historically distinguished.

INFOR MATION

PHOTO: 150:29-31 (04/92) REVISED BY (DATE): QUAD: Perth Amboy

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2013050 **CO** UNION **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CHURCH STREET OVER RAHWAY RIVER **FACILITY** CHURCH STREET

TOWNSHIP RAHWAY CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 83 ft **WIDTH** 34.2 ft

CONSTRUCTION DT 1937 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT ROI C. COLLINS, CO ENGINEER **BUILDER** LOUIS DI FRANCESCO

SETTING / CONTEXT The bridge is located in a greenway that follows the Rahway River through Union County. Late-19th century through mid-20th century single-family dwellings surround the green area. The bridge carries a two-lane street with two sidewalks.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Potential Rahway River Park, May contribute. Potential Union County Park System Multiple Property nomination, May contribute.

CONSULT DOCUMENTS DOE 10/28/83. SHPO Letter 6/30/95.

SUMMARY The two-span stringer bridge sits on concrete abutments and a pier. Some stonework is present at the base of the wingwalls and at the nose of the cutwater pier. The face of the bridge has been constructed to appear like a two-span elliptical arch bridge. The parapets are arched to accent the appearance. The bridge is not technologically or historically distinguished.

INFOR MATION

PHOTO: 151:19-20 (04/92) REVISED BY (DATE): QUAD: Perth Amboy

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2013051 **CO** UNION **OWNER** COUNTY **MILEPOINT** 0.0
NAME & FEATURE INTERSECTED WHITTIER STREET OVER RAHWAY RIVER **FACILITY** WHITTIER STREET
TOWNSHIP RAHWAY CITY
TYPE BRICK ARCH **DESIGN** PARABOLIC **MATERIAL** Brick
 # SPANS 1 **LENGTH** 30 ft **WIDTH** 65 ft

CONSTRUCTION DT 1875ca **ALTERATION DT** 1953-54 **SOURCE** STYLE/COUNTY ENGNR
DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in a greenway that follows the Rahway River through Union County. The greenway is surrounded by late-19th century housing in this area. The bridge carries a two-lane street with two sidewalks. The greenway is a narrow park that does not appear to have any distinguishing features that would make it a potential historic district. It is casually landscaped. The bridge predates the greenway, and there is no access to the bridge from within the greenway.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No
CONSULT STATUS Not Individually Eligible. Potential Rahway River Park, May contribute. Potential Union County Park System Multiple Property nomination, May contribute.
CONSULT DOCUMENTS DOE 10/28/83. SHPO Letter 6/30/95.

SUMMARY The 30'brick arch bridge has ashlar spandrel walls and gauged ringstones at both faces and ashlar footings. Much of the intrados has been coated with gunite. The concrete parapets were added one at a time in 1953 and 1954, detracting from the historic character of the bridge, but its structural integrity is intact. The structure is a short, altered example of a well-represented type from the later-19th century. Other brick arch bridges (2013010) have been evaluated as more noteworthy than this.

INFOR MATION

Bibliography:
Robinson, E. Atlas of Union County, New Jersey. 1882.
Sanborn Insurance Atlas, Rahway, New Jersey. 1923.
1902 Bauer Atlas of Union County.

Physical Description: The one-span brick arch bridge sits on ashlar footings, and has rusticated ashlar spandrell walls and gauged ringstones. The span length is 30', a normal distance for a brick arch bridge. The intrados of the arch has been partially coated with gunite. In 1953 and 1954, concrete parapets were built above the spandrel walls (one each year).

Historical and Technological Significance: The single-arch bridge is the smallest of the four brick arch bridges identified in Union County. The others are all three-span bridges, and all are as well-preserved as this structure, if not better. Though the structural components of the bridge have been preserved, the addition of 1950s style parapets detracts from the historical integrity of the structure.

Through research of 19th and 20th century maps and atlases, it appears that the span has always been the width that it is now. The masonry arch bridges of the 1800s that do remain have in common the width of structure capable of handling the increased road use of the 20th century. This structure, though it is one of the older spans in the county, is not historically distinguished due to the existence of larger and more well-preserved examples of the same type of bridge. Technologically it employs a commonly used design for the situation in which it exists.

PHOTO: 151:23-25 (04/92) REVISED BY (DATE): QUAD: Perth Amboy

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2013150 **CO** UNION **OWNER** RAILROAD **MILEPOINT** 15.1

NAME & FEATURE INTERSECTED AMTRAK NORTHEAST CORRIDOR OVER ELMORA AVENUE (CR 439) **FACILITY** AMTRAK NORTHEAST CORRIDOR RAIL LINE

TOWNSHIP ELIZABETH CITY

TYPE THRU GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 83 ft **WIDTH** 76 ft

CONSTRUCTION DT 1916 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge is located in a post-World War II commercial area that runs along a busy four-lane county route. The bridge carries 6 electrified tracks of Amtrak's Northeast Corridor over that road. The RR line was developed by several different rail companies, and consolidated by the Pennsylvania Railroad in 1871 to form one main corridor for passenger traffic from New York to Washington. Amtrak took control of the Northeast Corridor in 1971, after the Penn Central RR went bankrupt.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single span thru-girder bridge with a ballasted deck sits on ashlar abutments with concrete seats. The riveted girders are encased above the bottom flange of the rolled floorbeams, which are encased except for the bottom flanges. The girders are encased above the concrete deck to the bottom of the top flanges. The bridge is a representative example of girder technology and is not technologically or historically distinguished.

INFOR MATION

PHOTO: 154:29-31 (05/92) REVISED BY (DATE): QUAD: Elizabeth

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2013151 **CO** UNION **OWNER** RAILROAD **MILEPOINT** 12.47

NAME & FEATURE INTERSECTED CONRAIL ELIZABETH BRANCH OVER ELMORA AVE (CR 439) **FACILITY** CONRAIL ELIZABETH BRANCH

TOWNSHIP ELIZABETH CITY

TYPE THRU GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 3 **LENGTH** 86 ft **WIDTH** 50 ft

CONSTRUCTION DT 1907 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT CRR NJ CHIEF ENGINEERS OFFICE **BUILDER**

SETTING / CONTEXT The bridge is located in a late-20th century commercial area. The bridge carries one abandoned track on a four-track-wide structure over a two-lane street. The rail line was developed in the 1830s in Elizabeth, and extended west to Phillipsburg, NJ, by 1852. The line was four-tracked from Elizabeth to Westfield by 1882. Use of this line was discontinued by the CNJ in 1967, when they diverted commuter traffic to the mainline of the Lehigh Valley Railroad.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Central Railroad of NJ Main Line Corridor. Contributing.

CONSULT DOCUMENTS DOE 11/30/95. SHPO Letter 6/30/95.

SUMMARY The three-span multi-thru girder bridge sits on steel bents and concrete abutments. The riveted bents are built-up using plates, angles and lattice bars. The rolled floorbeams support a steel plate deck. The girders are protected from the ballast with brick curbs above the deck. Pipe railings are present along inside the fascia girders at both faces of the bridge. The bridge is a representative example of a common bridge type, and is not technologically or historically distinguished.

INFOR MATION

PHOTO: 154:32-35 (05/92) REVISED BY (DATE): QUAD: Elizabeth

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2014071 **CO** UNION **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PARK DRIVE OVER STREAM 9-2-3 **FACILITY** PARK DRIVE

TOWNSHIP ROSELLE BOROUGH

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 26 ft **WIDTH** 34 ft

CONSTRUCTION DT 1938 **ALTERATION DT** **SOURCE**

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge is located in Warinanco Park, a large green area with a small lake and winding roads. The two-lane, two-sidewalk bridge crosses a stream leading from the lake.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Potential Union County Park System Multiple Property nomination, May contribute.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The concrete slab bridge sits on concrete abutments. The structure of the bridge is hidden behind a stone arch facade. The bridge has stone parapets and spandrel walls. It was adorned with stonework because of its location in a park. The bridge is not technologically or historically distinguished.

INFOR MATION

PHOTO: 157:44,1-2 (05/92) REVISED BY (DATE): QUAD: Elizabeth

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2016013 **CO** UNION **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PARK AVENUE OVER GREEN BROOK **FACILITY** PARK AVENUE

TOWNSHIP SCOTCH PLAINS TOWNSHIP

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 86 ft **WIDTH** 22.2 ft

CONSTRUCTION DT 1920 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT J. BAUER(UNION) & SOM CO ENGN **BUILDER** ARTHUR E. SMITH

SETTING / CONTEXT The bridge is located in a park setting with early- and late-20th century commercial structures surrounding the green area. The bridge carries two traffic lanes and two sidewalks over a stream. The waterway is Green Brook, which divides Union and Somerset Counties.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Potential Union County Park System Multiple Property nomination, May contribute.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one-span reinforced concrete arch bridge is skewed. The intrados and spandrel walls have been repaired with gunite throughout the structure. The concrete parapets are paneled, and are arched parallel to the vertical crest curve created by the arch. The bridge is not technologically or historically distinguished, being one of nine pre-World War II reinforced concrete deck arches in Union County. 2013022 is a more distinguished example of the type.

INFOR MATION

PHOTO: 158:10-11 (05/92) REVISED BY (DATE): QUAD: Chatham

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2016059 **CO** UNION **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED UNION AVENUE OVER GREEN BROOK **FACILITY** UNION AVENUE

TOWNSHIP SCOTCH PLAINS TOWNSHIP

TYPE THRU GIRDER **DESIGN** JACK ARCH (CONCRETE) **MATERIAL** Steel

 # SPANS 1 **LENGTH** 46 ft **WIDTH** 20 ft

CONSTRUCTION DT 1905 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT HUBBARD(UNION) & DOUGHTY(SOM) **BUILDER** LEVERING & GARRIGUES CO.

SETTING / CONTEXT The bridge is located at the southern end of the Watchung Reservation over Green Brook, the boundary between Union and Somerset counties. The brook is dammed approximately 20' upstream from the bridge. The bridge carries two lanes of traffic over the brook.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible. Potential Union County Park System Multiple Property nomination, May contribute.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one-span thru-girder bridge sits on concrete abutments. The riveted girders support rolled floorbeams. Concrete jack arches span between the floorbeams with tie-rods exposed in the arches. Pipe railings are bolted to the top flanges of the girders. The bridge is a well-preserved representative example of a thru-girder with jack arches, a common bridge type that is becoming increasingly rare.

INFOR MATION

PHOTO: 158:12-15 (05/92) REVISED BY (DATE): QUAD: Chatham

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2016076 **CO** UNION **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED ELIZABETH AVENUE OVER STREAM 10-7-17 **FACILITY** ELIZABETH AVENUE

TOWNSHIP SCOTCH PLAINS TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 52 ft **WIDTH** 36 ft

CONSTRUCTION DT 1931 **ALTERATION DT** 1939 **SOURCE** PLAQUE

DESIGNER/PATENT ROI C. COLLINS, CO ENGINEER **BUILDER** DAN CARRO & COMPANY

SETTING / CONTEXT The bridge is located at the edge of the wooded Brookside Park Wildlife Preserve. The street carried over the bridge separates the park from a 1960s residential area of single family dwellings. Two lanes and two shoulders cross the bridge over a stream.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The heavily skewed two-span stringer bridge is set on concrete abutments and a roundnose pier. The encased stringers support a concrete deck and paneled concrete parapets. The bridge was increased from a one-span to a two-span bridge in 1939 with the addition of the pier, the east span and abutment. The bridge is a representative example of a common bridge type. It is not technologically or historically distinguished.

INFOR MATION

PHOTO: 154:36-38 (05/92) REVISED BY (DATE): QUAD: Roselle

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2017033 **CO** UNION **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MEISEL AVENUE OVER STREAM 10-35 **FACILITY** MEISEL AVENUE

TOWNSHIP SPRINGFIELD TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 49 ft **WIDTH** 46 ft

CONSTRUCTION DT 1926 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT JACOB L.BAUER, COUNTY ENGINEER **BUILDER** J. F. CHAPMAN & SON

SETTING / CONTEXT The bridge is located in the Rahway River Parkway, a greenway that follows the river through most of Union County. The structure carries a two-lane road with two sidewalks over a stream that empties into the Rahway.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Potential Rahway River Park, May contribute. Potential Union County Park System Multiple Property nomination, May contribute.

CONSULT DOCUMENTS DOE 10/28/83. SHPO Letter 6/30/95.

SUMMARY The nicely-detailed 2-span encased stringer bridge bears on concrete abutments. The substructure is scored to appear as ashlar. The fascia encasement is paneled and slightly arched. The concrete balustrade has paneled posts with a textured finish. Although it is more elaborately finished than most other stringer bridges, it is still a representative example of a common bridge type. The bridge is not technologically or historically distinguished.

INFOR MATION

PHOTO: 158:30-32 (05/92) REVISED BY (DATE): QUAD: Roselle

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2019028 **CO** UNION **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED VAUXHALL ROAD OVER EAST BRANCH RAHWAY RIVER **FACILITY** VAUXHALL ROAD

TOWNSHIP UNION TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 42 ft **WIDTH** 40 ft

CONSTRUCTION DT 1928 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT BAUER(UNION) & STICKEL(ESSEX) **BUILDER** JOHN W. HELLER COMPANY

SETTING / CONTEXT The bridge is located in an area of post-World War II commercial development. The bridge carries a three-lane road with two sidewalks over a stream. The stream delineates the boundary between Union and Essex Counties.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one-span stringer bridge rests on concrete abutments that are rusticated at the corners. The skewed stringers are encased in concrete. The encasement at the fascia stringer is detailed with panels and a keystone at the center of the span. The concrete balustrade has paneled posts. Two of the posts bear plaques commemorating historic area events and war heroes. The bridge is a nicely-detailed joint-county span, but it is not technologically, stylistically or historically distinguished.

INFOR MATION

PHOTO: 156:1-2 (05/92) REVISED BY (DATE): QUAD: Roselle

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2019040 **CO** UNION **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED UNION AVENUE OVER ELIZABETH RIVER **FACILITY** UNION AVENUE

TOWNSHIP UNION TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 60 ft **WIDTH** 26 ft

CONSTRUCTION DT 1925 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge is located in a mid- to late-20th century industrial area. It carries a two-lane street with two sidewalks over a stream.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span stringer bridge sits on concrete abutments and a round nose pier. The stream bed under the bridge has an invert slab, and the wingwalls are rubble-course stone. The encased stringers support a reinforced concrete deck. Pipe railings are set in the concrete deck at each face of the bridge. The bridge is a representative example of a common bridge type in New Jersey. It is not a technologically or historically distinguished structure.

INFOR MATION

PHOTO: 153:19-20 (04/92) REVISED BY (DATE): QUAD: Elizabeth

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2020007 **CO** UNION **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED ELM STREET OVER STREAM 10-7-15 **FACILITY** ELM STREET

TOWNSHIP WESTFIELD TOWN

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 36 ft **WIDTH** 45 ft

CONSTRUCTION DT 1926 **ALTERATION DT** 1936, 1985 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge is located in downtown Westfield, in an area of 1960s commercial development. It carries a two-lane street with sidewalks over a stream that is part of the municipal storm water collection system.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY According to the County Engineer, the hidden underground single-span stringer bridge sits on concrete abutments. In 1936 most of the original superstructure was replaced with encased stringers. The structure mostly remains a stringer bridge, although in 1985 part of it was replaced with a slab. The bridge is not technologically or historically distinguished.

INFOR MATION

PHOTO: 159:13 (05/92) REVISED BY (DATE): QUAD: Roselle

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2020019 **CO** UNION **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED RAHWAY AVENUE OVER STREAM 10-7-15 **FACILITY** RAHWAY AVENUE

TOWNSHIP WESTFIELD TOWN

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 37 ft **WIDTH** 36 ft

CONSTRUCTION DT 1937 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge is located in a residential area of early- to mid-20th century structures. The bridge carries a two-lane road over a stream that is part of the municipal storm water collection system.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY According to the County Engineer, the hidden underground one-span skewed stringer bridge sits on concrete abutments. It is not a technologically or historically distinguished structure.

INFOR MATION

PHOTO: 159:14 (05/92) REVISED BY (DATE): QUAD: Roselle

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2022151 **CO** UNION **OWNER** RAILROAD **MILEPOINT** 20.5

NAME & FEATURE INTERSECTED AMTRAK NORTHEAST CORRIDOR OVER NJ 35 **FACILITY** AMTRAK NORTHEAST CORRIDOR RAIL LINE

TOWNSHIP RAHWAY CITY

TYPE DECK GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 106 ft **WIDTH** 70 ft

CONSTRUCTION DT 1913 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT PENNSYLVANIA RR OFFICE OF ENG **BUILDER** PENNSYLVANIA STEEL COMPANY

SETTING / CONTEXT The bridge is located in a busy commercial area of mid- to late-20th century construction. The span carries 6 electrified tracks over a four-lane highway at the junction of two state routes (NJ 35 and NJ27).

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed multi-deck-girder bridge sits on scored concrete abutments. Pairs of girders are joined by K-bracing at the bottom flanges and support a concrete deck. The decks are covered with ballast. Catenary structures carry electrification lines over each track. The bridge is not technologically or historically distinguished.

INFOR MATION

PHOTO: 159:19-21 (05/92) REVISED BY (DATE): QUAD: Perth Amboy

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2049161 **CO** UNION **OWNER** RAILROAD **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED HAND PLACE OVER AMTRAK NORTHEAST CORRIDOR **FACILITY** HAND PLACE

TOWNSHIP ELIZABETH CITY

TYPE THRU GIRDER **DESIGN** PARTIALLY ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 87 ft **WIDTH** 18 ft

CONSTRUCTION DT 1936 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge is located adjacent to a 1960s multi-unit housing complex. It carries a one-lane road with a closed sidewalk over four electrified tracks.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The riveted thru-girder bridge sits on ashlar abutments with concrete seats. The abutments continue beyond the superstructure to a width twice that in use. The girders are encased below the deck with the exception of the bottom flanges. The floorbeams are encased. The sidewalk is cantilevered from one girder, and is enclosed by a high corrugated metal barrier. The sidewalk is closed to pedestrians. The bridge is not technologically or historically distinguished.

INFOR MATION

PHOTO: 153:3-5 (04/92) REVISED BY (DATE): QUAD: Elizabeth

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2050150 **CO** UNION **OWNER** UNKNOWN **MILEPOINT** 1.477

NAME & FEATURE INTERSECTED GORDON STREET OVER ELIZABETH BRANCH RR **FACILITY** GORDON STREET

TOWNSHIP ROSELLE BOROUGH

TYPE THRU TRUSS **DESIGN** WARREN **MATERIAL** Steel, Wood

 # SPANS 6 **LENGTH** 171 ft **WIDTH** 21.4 ft

CONSTRUCTION DT 1911 **ALTERATION DT** 1990ca **SOURCE** PLAQUE, INSC., PLANS

DESIGNER/PATENT CRR NJ CHIEF ENGINEERS OFFICE **BUILDER** PA STEEL COMPANY, STEELTON, PA

SETTING / CONTEXT The bridge carries a two-lane road with one sidewalk over one abandoned track. The tracks run through an early-20th century industrial area. The Central RR of NJ developed the line in the 1830s as a streetcar line, and it soon evolved into a larger system, stretching from Elizabeth to Somerville. It was four-tracked by 1882. The early-20th century was marked by grade-crossing elimination projects, resulting in several bridges in this area.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Individually Eligible. Central Railroad of NJ Main Line Corridor. Contributing.

CONSULT DOCUMENTS DOE 11/30/95. SHPO Letter 6/30/95.

SUMMARY The 7-panel Warren thru truss bridge is supported by a concrete pier and abutment. The opposite abutment is stone with concrete and timber additions. The truss members are riveted, built-up of angles, plates and lacing bars. The south approach is a five-span continuous glulam structure supported by timber bents. The bridge, 1 of 5 over the main line in the area, is a technologically and historically distinguished example based on its age, design, and association.

INFOR MATION

PHOTO: 157:14-19 (05/92 JPH (5/96)) REVISED BY (DATE): QUAD: Roselle

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2050161 **CO** UNION **OWNER** UNKNOWN **MILEPOINT** 13.89

NAME & FEATURE INTERSECTED WALNUT STREET OVER ELIZABETH BRANCH RR **FACILITY** WALNUT STREET

TOWNSHIP ROSELLE BOROUGH

TYPE THRU TRUSS **DESIGN** WARREN **MATERIAL** Steel

 # SPANS 1 **LENGTH** 95 ft **WIDTH** 28 ft

CONSTRUCTION DT 1911 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT CRR NJ CHIEF ENGINEERS OFFICE **BUILDER** PA STEEL COMPANY, STEELTON, PA

SETTING / CONTEXT The bridge is located in an area of late-20th century commercial development. It carries a two-lane road and one sidewalk over one inactive track. The line is the Elizabeth Branch of the Central RR of New Jersey. The CNJ developed this line in the 1830s, and it was four-tracked from Elizabeth to Westfield by 1882, with lesser tracking extending to Somerville. The early-20th century was marked by construction of grade-crossing elimination bridges.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Individually Eligible. Central Railroad of NJ Main Line Corridor. Contributing.

CONSULT DOCUMENTS DOE 11/30/95. SHPO Letter 6/30/95.

SUMMARY The cambered Warren with verticals thru-truss bridge sits on concrete abutments. It has unusual design details including large asymmetric gusset plates and a longitudinal center strut. Some of the original sidewalk railings survive. The bridge, 1 of 5 similar spans built by the CNJ in the area, is technologically and historically distinguished based on its design, age, state of preservation, and associations.

INFOR MATION

PHOTO: 157:4-10 (05/92) REVISED BY (DATE): QUAD: Roselle

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2050162 **CO** UNION **OWNER** UNKNOWN **MILEPOINT** 1.192

NAME & FEATURE INTERSECTED CHILTON STREET OVER CONRAIL ELIZABETH BRANCH **FACILITY** CHILTON STREET

TOWNSHIP ELIZABETH CITY

TYPE THRU TRUSS **DESIGN** WARREN **MATERIAL** Steel

 # SPANS 1 **LENGTH** 96 ft **WIDTH** 36 ft

CONSTRUCTION DT 1926 **ALTERATION DT** **SOURCE** INSCRIPTION/PLANS

DESIGNER/PATENT CRR NJ CHIEF ENGINEERS OFFICE **BUILDER** MCCLINTIC-MARSHALL CO.

SETTING / CONTEXT The bridge is located in an area of late-19th century single family residences with 20th century intrusions. The bridge carries a two-lane one-way road with two sidewalks over one abandoned railroad track. The Central RR of NJ was developed in the 1830s from Elizabethport to Plainfield. It soon extended to Somerville, and later to Phillipsburg. The line was four-tracked in Elizabeth by 1882. In 1967, this branch went out of use by CNJ.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Central Railroad of NJ Main Line Corridor. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95. DOE 11/30/95.

SUMMARY The cambered Warren thru-truss bridge bears on concrete abutments. The members of the truss are riveted, built-up sections using angles and web plates. The bottom chord is encased, as are the floorbeams (bottom flange exposed) and stringers. Some of the blast plates remain in place. The sidewalks are cantilevered on both faces. The bridge, a common CNJ type, is the most recent example of five Warren thru truss bridges along this line in Union County. Tuttle Parkway is older and more noteworthy.

INFOR MATION

PHOTO: 154:18-21 (05/92) REVISED BY (DATE): QUAD: Elizabeth

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2053160 **CO** UNION **OWNER** UNKNOWN **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED LAKE AVENUE OVER CONRAIL & ROBINSON BRANCH RAHWAY RIVER **FACILITY** LAKE AVENUE

TOWNSHIP CLARK TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 4 **LENGTH** 210 ft **WIDTH** 34 ft

CONSTRUCTION DT 1936 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT LEHIGH VALLEY RR OFF. OF ENGNR **BUILDER**

SETTING / CONTEXT The bridge is located in an area dominated by late-20th century multi-unit housing and 1970's light industrial structures. The bridge carries a two-lane road with two sidewalks over two active tracks. The rail line was built by the Lehigh Valley Railroad in 1888 as the Jersey City Extension. It became the main line soon after the extension was finished. It was changed from four-tracks to double-track in the 1950s or 1960s. Conrail took over the line in 1976.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The four-span stringer bridge bears on a concrete substructure of stub abutments and 3-column hammerhead piers. The stringers are encased in concrete, and support a concrete deck. Four blast plates remain fastened to the stringers. The parapets are paneled concrete with guiderails attached at the approaches. The bridge is a representative example of a common pre-World War II bridge type in New Jersey. It is not technologically or historically distinguished.

INFOR MATION

PHOTO: 155:23-24 (05/92) REVISED BY (DATE): QUAD: Perth Amboy

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2053161 **CO** UNION **OWNER** UNKNOWN **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CENTRAL AVENUE OVER CONRAIL LEHIGH VALLEY LINE **FACILITY** CENTRAL AVENUE

TOWNSHIP CLARK TOWNSHIP

TYPE THRU GIRDER **DESIGN** PARTIALLY ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 129 ft **WIDTH** 30 ft

CONSTRUCTION DT 1934 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT LEHIGH VALLEY RR OFF. OF ENGNR **BUILDER**

SETTING / CONTEXT The bridge is located in an area of post-World War II industrial and commercial development. It carries a busy two-lane road with two sidewalks over two active tracks. The line was built by the Lehigh Valley Railroad in 1888 as part of its Jersey City Extension, which became the main line soon after its completion. The line was four-tracked in the early 1900s, but was returned to double-tracks in the 1950s or 1960s. Conrail took over the Lehigh Valley Railroad in 1976.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The three-span bridge is composed of one thru-girder span with a concrete tee-beam approach span on each end. The bridge is supported on stub abutments and 3-column concrete bents with a hammerhead cap under the tee-beams. The encased floorbeams are extended outside the girders by cantilevered sidewalk brackets, with the fascia beam paneled the length of the bridge below metal fence-like railings. It is not a technologically or historically distinguished bridge.

INFOR MATION

PHOTO: 156:27-28 (05/92) REVISED BY (DATE): QUAD: Roselle

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2054160 **CO** UNION **OWNER** CITY OR MUNC. **MILEPOINT** 10.0

NAME & FEATURE INTERSECTED FIFTH AVENUE OVER STATEN ISLAND RAPID TRANSIT **FACILITY** FIFTH AVENUE

TOWNSHIP ROSELLE BOROUGH

TYPE THRU GIRDER **DESIGN** PARTIALLY ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 74 ft **WIDTH** 30 ft

CONSTRUCTION DT 1928 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT W. MARTIN VAN WAGNER, BORO ENG **BUILDER** WELDON CONTRACTING CO.

SETTING / CONTEXT The bridge is located in a residential area developed between the 1920s and the 1940s. It carries a two-lane road with two sidewalks over two abandoned tracks of the Staten Island Rapid Transit line.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Staten Island RR Historic District, Eligible, May contribute.

CONSULT DOCUMENTS SHPO Finding 12/07/89 2/27/95, Letter 6/30/95.

SUMMARY The single-span thru-girder bridge sits on concrete abutments. The riveted girder is encased below the deck. The floorbeams are encased, as are the cantilevered sidewalk brackets. Chain-link fencing lines the sidewalks across the bridge, with parts of the original railing remaining as well. The bridge is a representative example of a common bridge type, and is not technologically or historically distinguished.

INFOR MATION

PHOTO: 157:25-27 (05/92) REVISED BY (DATE): QUAD: Roselle

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2062157 **CO** UNION **OWNER** STATE AGENCY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED HIGH STREET OVER NEW JERSEY TRANSIT MORRISTOWN LINE **FACILITY** HIGH STREET

TOWNSHIP SUMMIT CITY

TYPE RIGID FRAME **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 65 ft **WIDTH** 30 ft

CONSTRUCTION DT 1937 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT DL&W RR OFFICE OF ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located adjacent to 1920s Colonial Revival apartment complex. The bridge carries a two-lane road with two sidewalks over three electrified tracks of New Jersey Transit's Morristown Line. The Morristown Line was built as the Morris and Essex RR in 1835, and was later leased to the Delaware, Lackawanna and Western RR. The DL & W developed the line into a passenger route, building a more efficient route, the Boonton Line, for freight. NJ Transit now operates the tracks.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed steel frame bridge appears to be a stringer span on concrete abutments with wingwalls. The rivet-connected steel frames are visible only under the deck, where the exposed beams are haunched as they enter the concrete abutments that encase the rolled steel columns. The structure is significant as an example of an uncommon bridge type. Only one other steel frame bridge has been identified in the state, also from 1937 (0917150). It's unknown if the DL&W RR built any others of this type.

INFOR MATION

Bibliography:
Condit, Carl. American Building Art 20th Century. 1961.
Mensch, L.J. "Early Use of Rigid Frame Bridges." Civil Engineering. Vol. 5, No. 10 (October, 1935).

Physical Description: The skewed one-span steel frame bridge has the appearance of being a stringer bridge on concrete abutments. The rolled beam section of the frame is exposed steel. The seven beams are haunched as they enter the concrete abutments that are really the encasement for the rolled section columns of the steel frame. The haunched connections are built up of plates and angles that are rivet-connected to the rolled sections. The knee, which have the great concentration of stress distributions, has riveted stiffeners.

The concrete abutments are flanked by wingwalls at all four corners of the bridge. A high paneled concrete parapet crosses the bridge at both faces and continues above each wingwall for 5'-10'. Pedestrian fencing has been added to the top of the parapet along the sidewalks. The approach guide rails are fixed to the parapets.

Historical and Technological Significance: The steel frame bridge is technologically distinguished as a complete example of a pre-World War II bridge type that is not common in the state of New Jersey. The structure, built in 1937, is the only identified, highway-related example of its type in Union County, and is one of only two documented pre-World War II examples in the state.

The Delaware Lackawanna and Western Railroad built the bridge in 1937, long after their main grade crossing elimination campaign in the City of Summit. They built at least seven girder bridges in Summit in 1905, as they strove to improve their commuter service to New York City. It is not known if other steel frame bridges were built by the DL&W RR. The right-of-way, now used by NJT as its Morristown line, was originally used for both freight and passenger service. When traffic became heavy and profits were suffering, the D L & W built the Boonton cutoff to more efficiently handle freight. This portion of the line remained the commuter line, and is still used mainly for that purpose.

The other steel frame structure identified (0917150) was also built in 1937. It is located on the historically and technologically significant limited-access New Jersey approach to the Lincoln Tunnel. The tunnel and approach were designed for by the Port Authority of New York, Othmar Ammann, Chief Engineer.

Not to be confused with the reinforced concrete rigid frame bridge that was first used in this country in the early 1920s on Westchester County, New York parkways, the steel rigid frame bridge was largely the product of the invention of electric arch welding. Welding permitted the transformation of the individual elements, like posts and beams, into a continuous unit in which the size and shape of each member can be calculated exactly and entirely on the basis of the role it plays in the total action of the frame. As a consequence, the quantity of material in the member for a given load can usually be reduced. A welded joint could theoretically be made as strong as the original solid metal if complete fusion was obtained. This was viewed as an advantage over riveted connections. Rigid steel frames were used in buildings beginning in 1920 at the factory of the Electric Welding Company of America at Brooklyn. The concept of a rigid frame bridge was developed in reinforced concrete in Europe around the turn of the century, but rigid frame bridges were not built in this country until the early 1920s. Examples of steel rigid frame bridges are rare in New Jersey.

Boundary Description and Justification: The bridge is evaluated as individually distinguished. It is not part of a grade crossing elimination campaign or other major improvement campaign. The significant boundary is limited to the structure itself.

PHOTO: 156:3-4 (05/92) REVISED BY (DATE): QUAD: Roselle

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2100112 **CO** WARREN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED LONG BRIDGE ROAD (CR 613) OVER PEQUEST RIVER **FACILITY** LONG BRIDGE ROAD (CR 613)

TOWNSHIP ALLAMUCHY TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 39 ft **WIDTH** 26 ft

CONSTRUCTION DT 1938 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT H. W. VETTER, COUNTY ENGINEER **BUILDER** COUNTY FORCES

SETTING / CONTEXT The bridge is located in a rural wooded area with scattered houses and farms. It carries a two-lane county route over a stream.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one-span stringer bridge bears on concrete abutments with flared wingwalls. The encased stringers support a concrete deck that is flanked by well-detailed concrete balustrades. The posts have Moderne detailing. The span is one of over 65 extant pre-World War II stringer bridges in Warren County, and it is not technologically or historically distinguished.

INFOR MATION

PHOTO: 184:16-18 (08/92) REVISED BY (DATE): QUAD: Tranquility

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2100113 **CO** WARREN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED LONG BRIDGE ROAD (CR 613) OVER PEQUEST RIVER **FACILITY** LONG BRIDGE ROAD (CR 613)

TOWNSHIP ALLAMUCHY TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 39 ft **WIDTH** 26.2 ft

CONSTRUCTION DT 1939 **ALTERATION DT** **SOURCE** INSCRIPT, CO.RECORDS

DESIGNER/PATENT H. W. VETTER, COUNTY ENGINEER **BUILDER** COUNTY FORCES

SETTING / CONTEXT The bridge is located in a rural area with working farms and scattered houses. It carries a two-lane county route over a stream.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one-span stringer bridge bears on concrete abutments with flared wingwalls. The encased stringers support a concrete deck that is enclosed by well-detailed concrete balustrades. The posts have Moderne stepped detailing. The span is a representative example of a common bridge type, and is one of over 65 pre-World War II stringer bridges in Warren County. It is not technologically or historically distinguished.

INFOR MATION

PHOTO: 184:14-15 (08/92) REVISED BY (DATE): QUAD: Tranquility

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2100302 **CO** WARREN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PROSPECT STREET OVER PEQUEST RIVER **FACILITY** PROSPECT STREET

TOWNSHIP BELVIDERE TOWN

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 155 ft **WIDTH** 25 ft

CONSTRUCTION DT 1912 **ALTERATION DT** 1971 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** HENNESY CONTRACTOR

SETTING / CONTEXT The bridge is located within the Belvidere Historic District. The town is historic due to its layout and development from 1825 through 1900. Several buildings near the bridge fall within the period of significance of the district. The bridge was built after the main development of the town, and it replaces a bow string truss bridge. It carries a two-lane street and a sidewalk over a river.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Listed. Belvidere Historic District. 10/03/1980. Noncontributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The reinforced concrete deck arch bridge has a shallow rise. In 1971 the bridge was rehabilitated with the application of mortar on each face of the bridge and on the intrados. New fencing is set in a low concrete parapet. The 155'long bridge is a large example of its type, but it has the appearance of a 1970s span, and is thus no longer technologically or historically distinguished. It was also constructed outside the period of significance of the historic district.

INFOR MATION

PHOTO: 29:9A-11A (07/92) REVISED BY (DATE): QUAD: Belvidere

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2100303 **CO** WARREN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED SPRING STREET OVER POPHANDUSING CREEK **FACILITY** SPRING STREET

TOWNSHIP BELVIDERE TOWN

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 42 ft **WIDTH** 14.8 ft

CONSTRUCTION DT 1900 **ALTERATION DT** 1986 **SOURCE** INSCRIPTION

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The one-lane bridge crosses a small stream. It is located on the southwest limit of residential development in Belvidere. The housing stock consists of primarily altered late-20th century single-family residences.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The steel stringer bridge rests on old rubble-stone abutments with wingwalls. In 1986 new concrete caps were placed on the abutments, and a concrete toe wall was placed along the north abutment. The steel grid deck is bounded by beam guiderails, with outriggers supporting the posts. The bridge has been severely altered, and is not technologically or historically distinguished.

INFOR MATION

PHOTO: 29:14A-15A (07/92) REVISED BY (DATE): QUAD: Belvidere

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2100304 **CO** WARREN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MANSFIELD STREET OVER POPHANDUSING CREEK **FACILITY** MANSFIELD STREET

TOWNSHIP BELVIDERE TOWN

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 29 ft **WIDTH** 24 ft

CONSTRUCTION DT 1920 **ALTERATION DT** 1987 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT H. W. VETTER, COUNTY ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a two-lane road over a minor stream on the southern edge of the residential area in Belvidere. Altered late-19th century dwellings are adjacent to the north side of the bridge. The area to the south is agricultural.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The stringer bridge sits on rubble stone abutments with a concrete toe wall at the northwest corner. The stringers support a glued laminated deck with railings that were placed in 1987. Pipe railings are set in the wingwalls at three corners of the bridge. The structure has been significantly altered, and is not a technologically or historically distinguished bridge because it is a common type.

INFOR MATION

PHOTO: 29:16A-17A (07/92) REVISED BY (DATE): QUAD: Belvidere

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2100416 **CO** WARREN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED JACKSONBURG ROAD SOUTH OVER JACKSONBURG CREEK **FACILITY** JACKSONBURG ROAD SOUTH

TOWNSHIP BLAIRSTOWN TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 39 ft **WIDTH** 16 ft

CONSTRUCTION DT 1920 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT WARREN COUNTY ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in a settlement of several 19th century residences and businesses. A lumber yard uses some barns for its facilities. The buildings have been altered, so there is no historic district potential. The one-lane bridge carries a two-lane rural road over a minor stream. The bridge is scheduled for replacement in 1992.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one-span encased stringer bridge bears on ashlar abutments. The bottom flanges of the otherwise encased stringers are exposed. The railing is composed of concrete posts and two metal pipe rails. The bridge is an unaltered representative example of a common bridge type, and it is not technologically or historically distinguished.

INFOR MATION

PHOTO: 166:20-21 (07/92) REVISED BY (DATE): QUAD: Blairstown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2100417 **CO** WARREN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED JACKSONBURG ROAD NORTH OVER JACKSONBURG BROOK **FACILITY** JACKSONBURG ROAD

TOWNSHIP BLAIRSTOWN TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 32 ft **WIDTH** 16 ft

CONSTRUCTION DT 1920 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT WARREN COUNTY ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located adjacent to a well-preserved 19th century mill with its wheel and head race in place. 19th and 20th century residences surround the bridge. The one-lane bridge carries a two-lane road as it curves to cross a minor creek. The bridge is scheduled for replacement in 1992.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one-span stringer bridge rests on ashlar abutments. The stringers are encased in concrete, with the exception of the bottom flanges. The railings are composed of concrete posts with two metal pipe rails. The bridge is not technologically or historically distinguished, but it is a representative example of a common type in Warren County.

INFOR MATION

PHOTO: 166:18-19 (07/92) REVISED BY (DATE): QUAD: Blairstown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2100451 **CO** WARREN **OWNER** COUNTY **MILEPOINT** 5.7

NAME & FEATURE INTERSECTED VAIL ROAD (CR 655) OVER PAULINS KILL **FACILITY** VAIL ROAD (CR 655)

TOWNSHIP BLAIRSTOWN TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 132 ft **WIDTH** 30 ft

CONSTRUCTION DT 1933 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT HENRY VETTER, COUNTY ENGINEER **BUILDER** JOSEPH W. ROGERS

SETTING / CONTEXT The bridge is located in a wooded area with sparse development. It carries a two-lane county route with narrow shoulders over a wide stream.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The three-span stringer bridge is supported by a concrete substructure. The abutments and cutwater piers are scored. The stringers are encased in concrete, with the fascia encasement paneled. The concrete balustrade is flanked at the approaches by beam guiderails. The bridge is a representative example of a common bridge type. It is not technologically or historically distinguished.

INFOR MATION

PHOTO: 166:13-14 (07/92) REVISED BY (DATE): QUAD: Portland

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2100453 **CO** WARREN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MILLBROOK ROAD (CR 602) OVER BLAIRS CREEK **FACILITY** MILLBROOK ROAD (CR 602)

TOWNSHIP BLAIRSTOWN TOWNSHIP

TYPE DECK ARCH **DESIGN** BARREL **MATERIAL** Steel

 # SPANS 2 **LENGTH** 43 ft **WIDTH** 30 ft

CONSTRUCTION DT 1940 **ALTERATION DT** **SOURCE** PLAQUE/COUNTY RECRDS

DESIGNER/PATENT H. W. VETTER, COUNTY ENGINEER **BUILDER** COUNTY FORCES

SETTING / CONTEXT The bridge is located just north or above the village of Blairstown. Altered 19th-century residences are near the bridge, but the area does not have historic district potential. The bridge carries a two-lane county route over a stream.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span deck arch bridge is composed of arches with corrugated steel liners and rubble-coursed spandrel walls. Plans show that it was built in 1940. The stone face is buttressed at the piers, with a concrete footing at the springing line of the arches. The ringstones are gauged. The roadway has a vertical crest curve over the structure. The custom bridge was designed to blend with the historic character of the community, but it is not historically or technologically distinguished.

INFOR MATION

PHOTO: 166:26-28 (07/92) REVISED BY (DATE): QUAD: Blairstown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2100501 **CO** WARREN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BIEDLEMAN ROAD OVER POHATCONG CREEK **FACILITY** BIEDLEMAN ROAD

TOWNSHIP FRANKLIN TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 44 ft **WIDTH** 14 ft

CONSTRUCTION DT 1917 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT H. W. VETTER, COUNTY ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in a sparsely developed, wooded area, with an altered ca. 1850 house on an adjacent property. The span carries a winding one-lane road over a creek.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one-span stringer bridge sits on concrete abutments with stone wingwalls on the west side and concrete on the east. The encased stringers have exposed bottom flanges. The railings are composed of concrete posts and metal pipe rails, a common county-designed railing for the early-20th century. The bridge is a representative example of a common bridge type, and is not a technologically or historically distinguished structure.

INFOR MATION

PHOTO: 173:34A-36A (07/92) REVISED BY (DATE): QUAD: Bloomsbury

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2100530 **CO** WARREN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WILLOW GROVE ROAD OVER POHATCONG CREEK **FACILITY** WILLOW GROVE ROAD

TOWNSHIP FRANKLIN TOWNSHIP

TYPE STRINGER **DESIGN** JACK ARCH (CONCRETE) **MATERIAL** Steel

 # SPANS 2 **LENGTH** 63 ft **WIDTH** 18.1 ft

CONSTRUCTION DT 1914 **ALTERATION DT** 1982, 1984 **SOURCE** PLANS

DESIGNER/PATENT F. W. SALMON, COUNTY ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in a wooded area with scattered 20th-century houses. The one-lane bridge carries the winding road over a stream.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span stringer bridge is supported by concrete abutments and a cutwater pier. Concrete jack arches remain in the outer bays in both spans, but in the center bays the jack arches were removed when portions of the deck were replaced in 1982 and 1984. The railing has concrete posts and metal pipe rails except for one quadrant where beam guiderail has replaced it. The bridge is an altered example of a common county bridge type, and is not technologically or historically distinguished.

INFOR MATION

PHOTO: 173:25A-27A (07/92) REVISED BY (DATE): QUAD: Bloomsbury

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2100546 **CO** WARREN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED LIMEKILN ROAD OVER MUSCONETCONG RIVER **FACILITY** LIMEKILN ROAD

TOWNSHIP FRANKLIN TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 68 ft **WIDTH** 18 ft

CONSTRUCTION DT 1915ca **ALTERATION DT** 1960ca **SOURCE** STYLE/COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in a rural area of woods and active farms, with scattered 20th century housing. The one-lane bridge carries a narrow, winding road over the Musconetcong River. The waterway is the boundary between Warren and Hunterdon Counties.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span encased stringer bridge bears on earlier rubble-coursed stone abutments and a cutwater pier. The substructure has concrete toe walls. The encased stringers support a concrete deck and railings of steel posts and channel rails with a beam guiderail added across the span. The structure is a representative example of a common bridge type, one of over 65 remaining stringer bridges in the county. It is not technologically or historically distinguished.

INFOR MATION

PHOTO: 173:23A-24A (07/92) REVISED BY (DATE): QUAD: Bloomsbury

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2100580 **CO** WARREN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MAPLE AVENUE OVER TRIBUTARY TO MUSCONETCONG RIVER **FACILITY** MAPLE AVENUE

TOWNSHIP FRANKLIN TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 24 ft **WIDTH** 23 ft

CONSTRUCTION DT 1923 **ALTERATION DT** 1984 **SOURCE** PLANS/COUNTY RECORDS

DESIGNER/PATENT H. W. VETTER. COUNTY ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in a wooded setting adjacent to active farms. It carries a two-lane road over a small stream. The span is adjacent to the intersection of two narrow roads.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one-span stringer bridge bears on concrete abutments with wingwalls. The original stringers are encased with exposed bottom flanges. The bridge was widened on the upstream side with exposed rolled stringers in 1984. The deck is lined with one railing of concrete posts and metal pipe rails and with one beam guiderail on the widened side. The bridge is an altered example of a common pre-World War II bridge type, and it is not technologically or historically distinguished.

INFOR MATION

PHOTO: 174:28-29 (07/92) REVISED BY (DATE): QUAD: High Bridge

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2100582 **CO** WARREN **OWNER** COUNTY **MILEPOINT** 4.75

NAME & FEATURE INTERSECTED CR 632 OVER TRIBUTARY TO MUSCONETCONG RIVER **FACILITY** CR 632

TOWNSHIP FRANKLIN TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 26 ft **WIDTH** 33.4 ft

CONSTRUCTION DT 1911 **ALTERATION DT** **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** S. H. SHIELDS

SETTING / CONTEXT The bridge carries a 2-lane road and shoulders over a small stream in the village center of Asbury, a crossroads community with altered 19th and 20th century buildings. The area does not have historic district potential.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed one-span slab bridge sits on concrete abutments. The concrete slab deck is reinforced with shallow steel I-sections encased in the concrete. Simple pipe railings are set in the curbs at each edge of the bridge. Two storm sewer pipes outlet at the downstream face of the abutments. The bridge is a representative example of a common bridge type, and is not technologically or historically distinguished.

INFOR MATION

PHOTO: 174:22-23 (07/92) REVISED BY (DATE): QUAD: Bloomsbury

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2100587 **CO** WARREN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED EDISON ROAD (CR 633) OVER POHATCONG CREEK **FACILITY** EDISON ROAD (CR 633)

TOWNSHIP FRANKLIN TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 63 ft **WIDTH** 26 ft

CONSTRUCTION DT 1926 **ALTERATION DT** **SOURCE** PLANS/COUNTY RECORDS

DESIGNER/PATENT H. W. VETTER, COUNTY ENGINEER **BUILDER** BECK BROS. & BECK

SETTING / CONTEXT The bridge is located in a rural area, adjacent to pastures. It carries a two-lane road over a wide creek. The road links the center of New Village and the Edison Cement Plant (ca.1900). According to county records, the Edison Cement Company furnished the broken stone that was used for the coarse aggregate. No evidence was found that Edison provided the cement. This bridge replaced a half-hip Pratt pony truss with a stringer approach span.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span encased stringer bridge sits on a masonry substructure that was widened with concrete in 1926. The stringers, with exposed bottom flanges, are from 1926. They support a concrete deck with a concrete post and metal pipe railing. The bridge is a well-preserved and representative example of a common type, but it is not a technologically or historically distinguished structure. County records revealed no historical association of the concrete in the span with Edison's nearby plant.

INFOR MATION

PHOTO: 173:28A-31A (07/92) REVISED BY (DATE): QUAD: Bloomsbury

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2100606 **CO** WARREN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED JOHNSONBURG-ALLAMUCHY ROAD (CR 612) OVER BEAR CREEK **FACILITY** JOHNSONBURG-ALLAMUCHY ROAD (CR 612)

TOWNSHIP FRELINGHUYSEN TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 25 ft **WIDTH** 29.9 ft

CONSTRUCTION DT 1928 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT H. W. VETTER, COUNTY ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in a rural wooded area with scattered 19th and 20th century residences. It carries a two-lane county route over a minor stream.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span stringer bridge is set on concrete abutments with wingwalls. The stringers are encased except for the bottom flanges. The deck is enclosed by concrete post and metal pipe railings that were a standard county design. The span is one of over 65 extant pre-World War II stringer bridges in Warren County, and it is not technologically or historically distinguished.

INFOR MATION

PHOTO: 184:19-20 (08/92) REVISED BY (DATE): QUAD: Tranquility

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2100707 **CO** WARREN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED STEWARTSVILLE ROAD (CR 637) OVER MERRILLS CREEK **FACILITY** STEWARTSVILLE ROAD (CR 637)

TOWNSHIP GREENWICH TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 28 ft **WIDTH** 30 ft

CONSTRUCTION DT 1911 **ALTERATION DT** 1939, 1991 **SOURCE** CO. RECORDS/INSCRIPT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located at the edge of the mid- to late-19th century village of Stewartsville that is composed of mostly altered 19th and 20th century houses. A farming area adjoins the village on the east side of the creek which is crossed by the two-lane bridge. The structure carries a two-lane county road at a bend in the road.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one-span stringer bridge sits on stone and concrete abutments. The original structure consisted of rubble-stone abutments with encased stringers, and remains as the eastern part of the bridge. In 1939 and again in 1991 the western side of the bridge was widened with stringers on concrete abutment extensions. The eastern railing is original, but the western guide rail and concrete curb are from 1991. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 169:43,185:12-13 (07/92) REVISED BY (DATE): QUAD: Bloomsbury

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2100718 **CO** WARREN **OWNER** COUNTY **MILEPOINT** 0.0
NAME & FEATURE INTERSECTED CHURCH STREET OVER MUSCONETCONG RIVER **FACILITY** CHURCH STREET
TOWNSHIP GREENWICH TOWNSHIP
TYPE THRU TRUSS **DESIGN** PRATT **MATERIAL** Steel
 # SPANS 1 **LENGTH** 105 ft **WIDTH** 17.2 ft

CONSTRUCTION DT 1892 **ALTERATION DT** 1936, 1993 **SOURCE** PLAQUE/COUNTY RECRDS
DESIGNER/PATENT W.R. LITTLE **BUILDER** TOLEDO BRIDGE COMPANY

SETTING / CONTEXT The bridge is located in a potential historic district in the town of Bloomsbury. It carries a main street over the Musconetcong River, the boundary between Warren and Hunterdon Counties. The bridge has two lanes for traffic and two sidewalks. Both sides of the river have 19th century residences and commercial structures that contribute to the district, as does the bridge.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No
CONSULT STATUS Individually Eligible. North Bloomsbury Historic District, Eligible. Contributing.
CONSULT DOCUMENTS SHPO Opinion 3/3/93 12/09/99.

SUMMARY The pin-connected Pratt thru-truss bridge sits on stone abutments, the southern one with a concrete toe wall. The verticals and top chords are built-up members, while the diagonals and the bottom chords are eyebars. 1936 alterations include weld-connected bars strengthening some of the members. In 1994 the bridge was widened. It is one of four thru truss bridges in the county. The bridge is individually eligible for listing in the National Register of Historic Places under Criterion C. In addition, the bridge is eligible under Criteria A and C as a contributing element of the North Bloomsbury Historic District

INFOR MATION

Bibliography:
Darnell, Victor. Directory of American Bridge Building Companies, 1840-1900. Washington, DC: 1984.
Industrial Directory of New Jersey. 1906-1930.
Sanborn Insurance Maps; Bloomsbury. 1909-1923.
Wacker, Peter. The Musconetcong Valley of New Jersey. 1968.

Physical Description: The skewed 6-panel pin-connected Pratt thru truss bridge is supported on an ashlar substructure. Although it was strengthened in 1936 with additional members welded to the original trusses, the span retains much of its original fabric and configuration, including cantilevered sidewalks with metal lattice-pattern railings. The inclined end posts and top chord are built-up members of channel with cover plate and laced stiffening. The verticals are toe-out channels with lacing on each face, and the diagonals and bottom chord are eye bars, some of which have stamped eyes and some of which have looped forged eyes. Each braced portal brace with lattice infill is topped by a bridge plaque. The floor beams are rolled. A low lattice railing separates the roadway from the sidewalks. Strengthening is limited to the outside panels, which have additional vertical hangers, diagonals, and a sub diagonals. Such modifications to pin-connected thru truss bridges from the late-19th century are not uncommon.

Historical and Technological Significance: The pin-connected Pratt thru truss bridge was built in 1892, and it is significant on its own merits as oldest and one of the most complete "high" truss bridges in the county (Criterion C). Although the span has been modified, as early as 1936 when it was strengthened by the addition of welded members, most of the original fabric, including railings at both the sidewalks and the truss lines, remains in place, and the span still functions as a pin-connected bridge.

The bridge is also a contributing resource in the North Bloomsbury Historic District. The district is comprised of a late eighteenth/early nineteenth century crossroads village that developed along the New Brunswick turnpike in Hunterdon County. The district includes 14 residences with their associated outbuildings, one small industrial complex, and a bridges, as well as farm fields, pastureland, wood lots, and bottomland of the Musconetcong River. Although this area traditionally supported an agricultural way of life [which continues to the present], historically, a mid-eighteenth century forge was located in the immediate area and the river supported gristmills, distilleries and an early iron industry.

The North Bloomsbury Historic District is significant because it represents a small crossroads community that was developed by and is associated with the locally prominent Smith family, who were successful members of the local agricultural community. It is also significant for its well preserved examples of stylish Georgian and Federal period architecture, which represent some of Warren County's finest early nineteenth century architecture. The period of significance for the district is 1780 to 1900.

Four pin-connected thru truss bridges survive in Warren County (2102307, 2102015, 2160153, 2100718). Three were built by the county, and one was erected by the Lehigh Valley Railroad to carry a local road over its right-of-way. Because of the scarcity of the once-common bridge type in Warren County, all four of the thru trusses bridges were evaluated as significant because they are rare local examples of a structure type that played an important role in the historical development of the county.

The Toledo Bridge Company of Toledo, Ohio fabricated the Church Street bridge. Robert W. Smith of Tippicanoe City, Ohio founded the company in 1867, and in 1869 moved it to Toledo under the name of the Smith Bridge Company specializing in Smith's patented wood and iron bridges. In 1890 Smith sold the company and the new owners changed the name to the Toledo Bridge Company. In 1894 the company had an annual capacity of 6 thousand tons, a respectable but not large figure for the time. In 1901, the company was purchased by the American Bridge Company as part of its multi-company merger.

Boundary Description and Justification: The bridge is individually eligible and it is located within a historic district. The district is bounded by the Musconetcong River on the south, and by an historic tree line along agricultural fields to the north. Eastern and western boundaries are somewhat irregular in order to include specific properties.

PHOTO: 167:23-30 (07/92) REVISED BY (DATE): QUAD: Bloomsbury

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2100725 **CO** WARREN **OWNER** COUNTY **MILEPOINT** 29.4

NAME & FEATURE INTERSECTED CR 519 OVER LOPATCONG CREEK **FACILITY** CR 519

TOWNSHIP GREENWICH TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 40 ft **WIDTH** 30.4 ft

CONSTRUCTION DT 1927 **ALTERATION DT** **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** AL GEIST

SETTING / CONTEXT The bridge is located in a rural area with scattered mixed-date residences. The two-lane structure carries a county route over a stream. The stream runs where the Morris Canal had run during its existence. The Canal company furnished the steel and paid part of the cost of this bridge as its construction was part of their program of canal abandonment in 1926-27.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one-span encased stringer bridge bears on concrete abutments that are flanked by wingwalls. Concrete balustrades of standard design cross the bridge, with beam guiderails attached through the rectangular-shaped piercing. The bridge is a representative example of a common pre-World War II bridge type. It is technologically and historically undistinguished.

INFOR MATION

PHOTO: 170:23-24 (07/92) REVISED BY (DATE): QUAD: Easton

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2100806 **CO** WARREN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED SCHOOLEY'S MOUNTAIN ROAD (CR 517) OVER MUSCONETCONG RIVER **FACILITY** SCHOOLEY'S MT ROAD (CR 517)

TOWNSHIP HACKETTSTOWN TOWN

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 76 ft **WIDTH** 24.5 ft

CONSTRUCTION DT 1919 **ALTERATION DT** **SOURCE** PLANS/COUNTY RECORDS

DESIGNER/PATENT H. W. VETTER, COUNTY ENGINEER **BUILDER** DOVER BOILER WORKS

SETTING / CONTEXT The bridge is located in an area of late-20th century commercial development. The bridge carries a two-lane county route over the Musconetcong River, which is the boundary between Warren and Morris Counties. The joint-county bridge was designed by the Warren County Engineer H.W. Vetter, and sent for approval to W. Hopkins, Morris County Engineer. Dover Boiler Works built bridges throughout the northern part of the state, this being a late example of their work.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span stringer bridge is supported by stone abutments and a concrete cutwater pier. Concrete wingwalls flank the abutments and form approach parapets. The stringers are completely encased and they support a concrete deck. The railings are composed of concrete posts with pipe metal rails. The bridge is scheduled for replacement in 1993. It is a representative example of a common bridge type built by a prolific local contractor, and is not technologically or historically distinguished.

INFOR MATION

PHOTO: 179:28A-32A (08/92) REVISED BY (DATE): QUAD: Hackettstown

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2100901 **CO** WARREN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED HESS ROAD OVER PAULINS KILL **FACILITY** HESS ROAD

TOWNSHIP HARDWICK TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 2 **LENGTH** 63 ft **WIDTH** 13 ft

CONSTRUCTION DT 1920 **ALTERATION DT** 1988 **SOURCE** PLANS/COUNTY RECORDS

DESIGNER/PATENT H. W. VETTER, COUNTY ENGINEER **BUILDER** BALL (CONTRACTOR)

SETTING / CONTEXT The bridge is located in an area of active farms and woods. The one-lane structure carries a two-lane country road over the stream. Two approach spans cross a tributary and the floodplain of the stream.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span stringer bridge is supported by a rubble stone substructure. The pier has been altered with the addition of a concrete cap at the ends of the pier. The bridge was widened in 1988 with the addition of stringers. Two short spans form the approaches to the bridge over the floodplain of the Paulins Kill. They are the same width as the bridge, with a beam guiderail continuous over all the structures. The bridge is not technologically or historically distinguished.

INFOR MATION

PHOTO: 167:1-4 (07/92) REVISED BY (DATE): QUAD: Flatbrookville

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2100902 **CO** WARREN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED SPRING VALLEY ROAD (CR 659) OVER PAULINS KILL **FACILITY** SPRING VALLEY ROAD (CR 659)

TOWNSHIP HARDWICK TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 55 ft **WIDTH** 25 ft

CONSTRUCTION DT 1932 **ALTERATION DT** **SOURCE** INSCRIPT/CNTY RECRDS

DESIGNER/PATENT H. W. VETTER, COUNTY ENGINEER **BUILDER** COUNTY FORCES

SETTING / CONTEXT The bridge is located in a wooded area with a ca. 1820 stone mill that has been converted to a dwelling at the southeast corner. A stone race runs under the road at the south approach. The bridge carries a two-lane county route over a stream. At the south approach the road curves to cross the waterway.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one-span stringer bridge is supported by rubble stone abutments with concrete toe walls, caps and wingwalls. The encased stringers support a concrete deck and curb, with the railing composed of concrete posts and metal pipe rails. A small concrete post and pipe railing marks one approach. The bridge is a representative example of a common bridge type, and it is not technologically or historically distinguished.

INFOR MATION

PHOTO: 167:5,7;185:29-31 (07/92) REVISED BY (DATE): QUAD: Blairstown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2100935 **CO** WARREN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED SPRING VALLEY ROAD (CR 659) OVER BLAIR CREEK **FACILITY** SPRING VALLEY ROAD (CR 659)

TOWNSHIP HARDWICK TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 32 ft **WIDTH** 26 ft

CONSTRUCTION DT 1941 **ALTERATION DT** **SOURCE** INSCRIPTION/PLANS

DESIGNER/PATENT H. W. VETTER, COUNTY ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in a wooded rural area with late-20th century houses. The bridge carries a two-lane road over a stream. Just upstream from the bridge, a low concrete dam holds back the brook.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one-span stringer bridge sits on scored concrete abutments with wingwalls. The slightly skewed stringers are encased in concrete, with a plain fascia below a typical county-designed concrete balustrade. The bridge is a representative example of a common bridge type, and is not technologically or historically distinguished.

INFOR MATION

PHOTO: 167:42-43,185:32-34 (07/92) REVISED BY (DATE): QUAD: Flatbrookville

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2101001 **CO** WARREN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED ROXBURG STATION ROAD (CR 622) OVER BUCKHORN CREEK **FACILITY** ROXBURG STATION ROAD (CR 622)

TOWNSHIP HARMONY TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 30 ft **WIDTH** 26 ft

CONSTRUCTION DT 1939 **ALTERATION DT** **SOURCE** INSCRIPT/CNTY RECRDS

DESIGNER/PATENT H. W. VETTER, COUNTY ENGINEER **BUILDER** COUNTY FORCES

SETTING / CONTEXT The bridge is located on a two-lane county road in an active agricultural area. The span crosses a small creek.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span stringer bridge is supported on concrete abutments. The skewed stringers are fully encased, and support a concrete deck. The concrete balustrade has Moderne detailing on the end posts. The bridge is one of over 65 pre-World War II stringer bridges in Warren County, a representative example of a common type and design. It is not technologically or historically distinguished.

INFOR MATION

PHOTO: 171:30-32 (07/92) REVISED BY (DATE): QUAD: Belvidere

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2101031 **CO** WARREN **OWNER** COUNTY **MILEPOINT** 31.87

NAME & FEATURE INTERSECTED CR 519 OVER LOPATCONG CREEK **FACILITY** CR 519

TOWNSHIP HARMONY TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 31 ft **WIDTH** 30 ft

CONSTRUCTION DT 1927 **ALTERATION DT** **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** AL GEIST

SETTING / CONTEXT The bridge carries a two-lane county road over a minor stream in a wooded setting adjacent to a golf course.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed one-span stringer bridge sits on concrete abutments with wingwalls. The encased stringers support a concrete deck that is framed by standard design concrete balustrades. Approach beam guiderails are attached to the end posts of the balustrades, but they do not cross the structure. It is a representative example of a common pre-World War II bridge type, and is not technologically or historically distinguished.

INFOR MATION

PHOTO: 171:35-36 (07/92) REVISED BY (DATE): QUAD: Easton

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2101035 **CO** WARREN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED HARMONY-MONTANA ROAD (CR 647) OVER LOPATCONG CREEK **FACILITY** HARMONY MONTANA ROAD (CR 647)

TOWNSHIP HARMONY TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 29 ft **WIDTH** 30.3 ft

CONSTRUCTION DT 1933 **ALTERATION DT** **SOURCE** INSCRIPT/CNTY RECRDS

DESIGNER/PATENT H. W. VETTER, COUNTY ENGINEER **BUILDER** COUNTY FORCES

SETTING / CONTEXT The bridge is located adjacent to an active farm with livestock and corn fields. It carries a two-lane county route over a small stream.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The small one-span stringer bridge sits on concrete abutments that are flanked by wingwalls. The encased stringers support a concrete deck and balustrades that have paneled posts. Beam guiderails are fastened through the rectangular openings of the balustrade. The bridge is a representative example of a common pre-World War II type, and is one of over 65 remaining stringer spans in the county. It is not technologically or historically distinguished.

INFOR MATION

PHOTO: 171:33-34 (07/92) REVISED BY (DATE): QUAD: Easton

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 210103A **CO** WARREN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED HUTCHINSON ROAD (CR 622) OVER BUCKHORN CREEK **FACILITY** HUTCHINSON ROAD (CR 622)

TOWNSHIP HARMONY TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 30 ft **WIDTH** 28.5 ft

CONSTRUCTION DT 1934 **ALTERATION DT** **SOURCE** INSCRIPT/CNTY RECRDS

DESIGNER/PATENT H. W. VETTER, COUNTY ENGINEER **BUILDER** COUNTY FORCES

SETTING / CONTEXT The bridge is located in a wooded area with scattered early-19th century houses. It carries a two-lane county route over a small stream.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one-span encased stringer bridge bears on concrete abutments. The concrete balustrades have paneled end posts. The span is a representative example of a common type, and it is one of over 65 extant pre-World War II stringer bridges in Warren County. It is not a technologically or historically distinguished structure.

INFOR MATION

PHOTO: 171:27-28 (07/92) REVISED BY (DATE): QUAD: Bangor

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2101107 **CO** WARREN **OWNER** COUNTY **MILEPOINT** 47.03

NAME & FEATURE INTERSECTED CR 519 OVER HONEY RUN **FACILITY** CR 519

TOWNSHIP HOPE TOWNSHIP

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 29 ft **WIDTH** 29.8 ft

CONSTRUCTION DT 1917 **ALTERATION DT** 1990ca **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in a rural area with 19th and 20th century residences. It carries a two-lane county route over a stream.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one-span elliptical reinforced concrete arch bridge has small flared wingwalls at each corner. The downstream face of the bridge was coated with a protective treatment when the concrete curb was replaced on that side (ca.1990). Beam guiderails are set on the curbs, with the top rail and posts of the original metal pipe railing in place on the upstream side. The span is a representative example of a common bridge type, and is not technologically or historically distinguished.

INFOR MATION

PHOTO: 183:17-18 (08/92) REVISED BY (DATE): QUAD: Blairstown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2101108 **CO** WARREN **OWNER** COUNTY **MILEPOINT** 45.26

NAME & FEATURE INTERSECTED CR 519 OVER BEAVER BROOK **FACILITY** CR 519

TOWNSHIP HOPE TOWNSHIP

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 44 ft **WIDTH** 29 ft

CONSTRUCTION DT 1917 **ALTERATION DT** **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNWON

SETTING / CONTEXT The bridge is located in an active agricultural area midst meadows and woods. It carries a two-lane county route over a stream.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one-span reinforced concrete arch bridge is bounded by concrete wingwalls that are flush with the face of the bridge. The plain spandrel walls are topped by a concrete post and metal pipe railing with beam guiderails replacing the lower rail. Concrete parapets are above the wingwalls. The span is a representative example of a common bridge type, and it is not a technologically or historically distinguished structure.

INFOR MATION

PHOTO: 183:24-26 (08/92) REVISED BY (DATE): QUAD: Washington

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2101110 **CO** WARREN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 610 OVER TRIBUTARY TO BEAVER BROOK **FACILITY** SWAYZES MILL ROAD (CR 610)

TOWNSHIP HOPE TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 36 ft **WIDTH** 26 ft

CONSTRUCTION DT 1939 **ALTERATION DT** **SOURCE** INSCRIPT/CNTY RECRDS

DESIGNER/PATENT H. W. VETTER, COUNTY ENGINEER **BUILDER** COUNTY FORCES

SETTING / CONTEXT The bridge is located in a rural area of woods and working farms. It carries a two-lane road over a minor stream.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one-span stringer bridge is set on concrete abutments with flared wingwalls. The stringers are fully encased, supporting the concrete deck. The well-detailed concrete balustrades have Moderne-style stepped posts. The structure is a representative example of a common type, being one of over 65 extant pre-World War II stringer bridges in Warren County. It is not a technologically or historically distinguished bridge.

INFOR MATION

PHOTO: 183:21-23 (08/92) REVISED BY (DATE): QUAD: Blairstown

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2101134 **CO** WARREN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MILLBROOK ROAD OVER BEAVER BROOK **FACILITY** MILLBROOK ROAD

TOWNSHIP HOPE TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 27 ft **WIDTH** 18 ft

CONSTRUCTION DT 1929 **ALTERATION DT** **SOURCE** PLANS/COUNTY RECORDS

DESIGNER/PATENT H. W. VETTER, COUNTY ENGINEER **BUILDER** M. A. CARTY

SETTING / CONTEXT The bridge is located in the Hope Historic District. The town was built by the Moravians in the 18th century around a mill. The village includes several stone structures including the mill and a brewery. The bridge was built long after the period of significance of the historic district. It carries a two-lane street in the center of the village over a stream which powered the mill.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Listed. Hope Historic District. 07/20/1973. Noncontributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one-span stringer bridge is set on concrete abutments. Stone walls line the channel, forming the wingwalls. A low concrete dam is at the upstream face of the bridge. The stringers are encased except for the bottom flanges. The railings have concrete posts with metal pipe rails. Concrete toe walls were added to the abutments. The span is a representative example of a common type, being one of 65 extant pre-WWII stringer bridges in the county. It is not historically distinguished.

INFOR MATION

PHOTO: 183:11-12 (08/92) REVISED BY (DATE): QUAD: Blairstown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2101141 **CO** WARREN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED JENNY JUMP ROAD OVER TROUT BROOK **FACILITY** JENNY JUMP ROAD

TOWNSHIP HOPE TOWNSHIP

TYPE STONE ARCH **DESIGN** BARREL **MATERIAL** Stone

 # SPANS **LENGTH** 32 ft **WIDTH** 12.9 ft

CONSTRUCTION DT 1875ca **ALTERATION DT** 1972ca **SOURCE** STYLE

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in a wooded area that is sparsely developed. The one-lane structure carries a winding road over a minor stream.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 03/12/01

SUMMARY The 3-span, 32'-long stone arch bridge of rubble-coursed fieldstone has small, low-rise arches. The stone parapets are topped with replacement concrete capstones. Ca. 1972 the bridge was repointed. This is one of 9 stone arch and 6 multi span stone arch bridges in the county. It is individually eligible for listing in the National Register of Historic Places under Criterion C as a representative example of stone multi arch technology. The essential character defining features remain: the arches, the voussoirs, the rubble-coursed fieldstone spandrel walls and parapets. It is located in a sparsely developed wooded area and therefore maintains integrity of setting and feeling.

INFOR MATION

PHOTO: 183:13-16 (08/92) REVISED BY (DATE): QUAD: Blairstown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2101143 **CO** WARREN **OWNER** COUNTY **MILEPOINT** 45.5

NAME & FEATURE INTERSECTED CR 611 OVER TROUT BROOK **FACILITY** CR 611

TOWNSHIP HOPE TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 27 ft **WIDTH** 23.3 ft

CONSTRUCTION DT 1929 **ALTERATION DT** **SOURCE** PLANS/COUNTY RECORDS

DESIGNER/PATENT H. W. VETTER, COUNTY ENGINEER **BUILDER** M. A. CARTY

SETTING / CONTEXT The bridge carries a 2-lane county road over a minor stream in an area dominated by post-World War II residences south of the village of Hope.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one-span stringer bridge is set on concrete abutments with flared wingwalls. The encased stringers have exposed bottom flanges, and support a concrete deck. The railing is composed of concrete posts and metal pipe rails. The bridge is a representative example of a common type, and is one of over 65 pre-World War II stringer bridges in Warren County. It is not technologically or historically distinguished.

INFOR MATION

PHOTO: 183:9-10 (08/92) REVISED BY (DATE): QUAD: Blairstown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2101152 **CO** WARREN **OWNER** NJDOT **MILEPOINT** 2.07

NAME & FEATURE INTERSECTED US 22 WB OVER NJ 57 EB **FACILITY** US 22 WESTBOUND

TOWNSHIP LOPATCONG TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 53 ft **WIDTH** 24 ft

CONSTRUCTION DT 1939 **ALTERATION DT** **SOURCE** INSCRIPTION/PLANS

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located in a residential area of post-World War II construction. It carries two lanes of one-directional traffic and two sidewalks over another two-lane one-way road at the grade-crossing elimination intersection of two highways near Phillipsburg.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one-span stringer bridge bears on concrete abutments. Stepped Moderne pilasters are at the corners of the abutments and continue into stepped posts of the balustrades. The skewed encased stringer bridge is a representative example of State Highway Department designs from the decade before World War II, when grade crossings were being eliminated. It is not a technologically or historically distinguished bridge.

INFOR MATION

PHOTO: 171:1-2 (07/92) REVISED BY (DATE): QUAD: Easton

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2101153 **CO** WARREN **OWNER** NJDOT **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MORRIS STREET SOUTHBOUND OVER US 22 EASTBOUND **FACILITY** MORRIS STREET SOUTHBOUND

TOWNSHIP PHILLIPSBURG TOWN

TYPE T BEAM **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 58 ft **WIDTH** 24 ft

CONSTRUCTION DT 1945 **ALTERATION DT** **SOURCE** PLANS/INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located in an area of altered ca.1900 residences. It carries one lane, a shoulder and two sidewalks over three lanes of one-directional highway traffic at the intersection of the two roads.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one-span concrete T-beam bridge is supported on concrete abutments that are finished with Moderne detailing. The stepped pilasters at the span limits continue as the stepped posts in the concrete balustrade. The top of the concrete T-beams form the deck. A representative example of what by 1945 was a common bridge type, the span is not technologically or historically distinguished.

INFOR MATION

PHOTO: 172:31-32 (07/92) REVISED BY (DATE): QUAD: Easton

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2101154 **CO** WARREN **OWNER** NJDOT **MILEPOINT** 2.14

NAME & FEATURE INTERSECTED US 22 EB OVER WASHINGTON SECONDARY RR (CONRAIL) **FACILITY** US 22 EASTBOUND

TOWNSHIP LOPATCONG TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 129 ft **WIDTH** 24 ft

CONSTRUCTION DT 1939 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located in a wooded area at the edge of a post-World War II residential and commercial area. It carries two-lanes of one-way highway traffic and one sidewalk over one track. The right-of-way was developed by the DL&W RR as its line servicing the area from Washington to Phillipsburg.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The three-span stringer bridge is supported by concrete piers and stub abutments. The piers have four and five columns as the skew of the bridge changes at each bent. The encased stringers support a concrete deck that is enclosed by concrete balustrades with Moderne stepped posts. The structure is a representative example of a common pre-World War II bridge type in New Jersey. It is not a historically or technologically distinguished bridge.

INFOR MATION

PHOTO: 171:40-41,43-44 (07/92) REVISED BY (DATE): QUAD: Easton

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2101155 **CO** WARREN **OWNER** NJDOT **MILEPOINT** 2.14

NAME & FEATURE INTERSECTED US 22 WB OVER WASHINGTON SECONDARY RR (CONRAIL) **FACILITY** US 22 WESTBOUND

TOWNSHIP LOPATCONG TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 108 ft **WIDTH** 24 ft

CONSTRUCTION DT 1939 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located in a wooded area at the edge of a post-World War II residential and commercial area. It carries two-lanes of one-way highway traffic and a sidewalk over one track. The railroad right-of-way was developed by the DL&W RR as a spur from Washington to Phillipsburg.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The three-span stringer bridge is supported on concrete bents and stub abutments. Both bents have three columns, set on plinths and with a pier cap below the encased stringers. The concrete balustrade, typical for State-designed bridges, has Moderne stepped posts. The span is representative of a common bridge type, being one of over 65 pre-World War II stringer bridges in Warren County. It is neither technologically nor historically distinguished.

INFOR MATION

PHOTO: 171:38-39,42 (07/92) REVISED BY (DATE): QUAD: Easton

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2101202 **CO** WARREN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CEMETERY ROAD OVER PEQUEST RIVER **FACILITY** CEMETERY ROAD

TOWNSHIP INDEPENDENCE TOWNSHIP

TYPE STRINGER **DESIGN** JACK ARCH (CONCRETE) **MATERIAL** Steel

 # SPANS 2 **LENGTH** 53 ft **WIDTH** 17.9 ft

CONSTRUCTION DT 1914 **ALTERATION DT** **SOURCE** PLANS/COUNTY RECORDS

DESIGNER/PATENT F. W. SALMON, COUNTY ENGINEER **BUILDER** ABER (CONTRACTOR)

SETTING / CONTEXT The bridge is located in a wooded and agricultural area. It carries a two-lane road over a minor river. 25 yards south of the bridge is a culvert built in 1933 which spans a tributary of the river. The structures are related only by location, not by appearance or physical ties.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span stringer bridge is supported on concrete abutments and a pier. The substructure has toe walls added for scour protection around the base of all components. The stringers are spanned by concrete jack arches, with deteriorating corrugated metal liners. The bridge railings have concrete posts and metal pipe rails. Gabion wingwalls are located along the south bank. The bridge is the only unaltered example of a common county bridge type built 1911 to 1914, of which at least 7 remain.

INFOR MATION

Bibliography:
Warren County Engineer. Bridge Files.

Physical Description: The two-span stringer bridge sits on concrete abutments and a pier, all of which have toe walls. The original steel stringers are spanned by concrete jack arches that have portions of the deteriorating corrugated metal liners remaining in place. Metal pipe rails are supported by pipe posts as well as concrete posts. The bridge is located in an undeveloped area, and carries a winding road over a minor river that crosses Warren County, out letting into the Delaware River at Belvidere.

Historical and Technological Significance: The Cemetery Road bridge is significant as a well-preserved example of a steel stringer and concrete jack arch bridge, a type that is becoming increasingly rare in the county and state (Criterion C). Steel stringers were a common bridge type at the turn of the 20th century and were frequently combined with brick jack arches as a means of supporting flooring systems. In the first decade of the 20th century, concrete jack arches replaced brick jack arches as a transitional step in the movement toward concrete slab decks, which eventually became popular because of their economy and strength. In Warren County, County Engineer F. W. Salmon designed numerous stringer and concrete jack arch bridges in the years leading up to WWI. At least seven bridges from 1911 to 1914 are known to survive (2101306, 2102251, 2102237, 2102204, 2100530, 2101356, 2101202), but the Cemetery Road bridge is the only one that has not been altered by the addition of stringers to one or both faces, or by changes in railing treatment. The subdivided pipe and concrete post railings are a distinctive detail of Warren County bridges from this period.

Boundary Description and Justification: Because it is the span itself that is evaluated as significant, the boundary is limited to the superstructure and substructure of the bridge itself. While the surrounding rural and undeveloped acreage provides an appropriate setting for the bridge, it does not contribute to its significance.

PHOTO: 184:5-7 (08/92) REVISED BY (DATE): QUAD: Washington

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2101306 **CO** WARREN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED DELAWARE ROAD (CR 605) OVER TRIBUTARY TO DELAWARE RIVER **FACILITY** DELAWARE ROAD (CR 605)

TOWNSHIP KNOWLTON TOWNSHIP

TYPE STRINGER **DESIGN** JACK ARCH (CONCRETE) **MATERIAL** Steel

 # SPANS 1 **LENGTH** 35 ft **WIDTH** 24.2 ft

CONSTRUCTION DT 1913 **ALTERATION DT** 1983 **SOURCE** PLANS/COUNTY RECORDS

DESIGNER/PATENT F. W. SALMON, COUNTY ENGINEER **BUILDER** HOFFMAN & COMPANY

SETTING / CONTEXT The bridge is located in an area of scattered 19th-century homes. The structure carries a two-lane road over a stream.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 1913 stringer bridge with concrete jack arches is supported on rubble stone abutments. In 1983 the bridge was widened with the addition of steel stringers on concrete abutment extensions. The railings are composed of concrete posts with metal pipe rails. The bridge is 1 of at least 7 surviving early 1910s steel stringer bridges with concrete jack arches in the county. The altered example is not historically or technologically distinguished and better preserved examples survive (2101202).

INFOR MATION

PHOTO: 164:7-9 (07/92) REVISED BY (DATE): QUAD: Portland

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2101311 **CO** WARREN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BRUGLER ROAD OVER PAULINS KILL **FACILITY** BRUGLER ROAD

TOWNSHIP KNOWLTON TOWNSHIP

TYPE STONE ARCH **DESIGN** BARREL **MATERIAL** Stone

 # SPANS 6 **LENGTH** 183 ft **WIDTH** 16 ft

CONSTRUCTION DT 1860ca **ALTERATION DT** 1915, 1990 **SOURCE** STYLE/ONJH

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in a rural area with woods and working farms. A two-lane winding country road turns sharply to cross the one-lane bridge over a river.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Individually Listed. Listed. Warrington Stone Bridge. 12/16/1977.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The six-span stone arch bridge is reportedly the largest stone arch roadway bridge in New Jersey. The overall length of the bridge is 183'-3", and it is 16' wide. The spans vary from about 17' to over 23'in length. It is a significant example of masonry arch technology because of its length, number of spans, and condition. The bridge was built by unidentified local craftsmen according to the National Register nomination.

INFOR MATION

PHOTO: 165:37-39 (07/92) REVISED BY (DATE): QUAD: Portland

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2101312 **CO** WARREN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED STATION ROAD OVER PAULINS KILL **FACILITY** STATION ROAD

TOWNSHIP KNOWLTON TOWNSHIP

TYPE PONY TRUSS **DESIGN** PRATT **MATERIAL** Steel

 # SPANS 1 **LENGTH** 85 ft **WIDTH** 14.6 ft

CONSTRUCTION DT 1896 **ALTERATION DT** 1925, 1935, 1990 **SOURCE** PLAQUE/COUNTY RECRDS

DESIGNER/PATENT UNKNOWN **BUILDER** HAVANA BRIDGE WORKS, NY

SETTING / CONTEXT The bridge is located in a wooded, sparsely developed area, near the junction of a state route and a local road. The bridge carries the one-lane local road over a river. Another pony truss bridge is located 100' to the south. The Havana Bridge Works was in business from 1896 and was an outgrowth of W. H. Shepard's Sons Bridge Company and the predecessor of Rochester Bridge and Construction Company. Havana Bridge Works was located in Montour Falls, New York, which was once Havana, NY.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The well-preserved pin-connected Pratt pony truss sits on one field stone abutment and one concrete abutment. The slightly skewed bridge is composed of built-up rolled section members, batten plates and lacing bars. Eyebars form the bottom chords and the diagonals. The plaque of Havana Bridge Works and uncommon open-face finials are fixed to the top chord. The span ranks as one of the oldest and most complete pony trusses in the county. It is also significant due to its documented fabricator.

INFOR MATION

Bibliography:
Darnell, Victor. Directory of American Bridge-Building Companies 1840-1900. 1984.

Physical Description: The 6-panel pin-connected Pratt pony truss bridge stands in a remarkable state of preservation, complete with its mid-top chord bridge plaques. The top chord and inclined end posts are composed of toe-out angles with top cover plated and batten stiffeners. The verticals are angle section set back-to-back with a lattice web. The diagonals, counters, and bottom chords are eye bars. The verticals are attached to the upper chord by an L-shaped strap through which the pin passes. The detail is not unusual or a patented feature. The most distinctive detail is the open-face ball finial set at each of the top chord corners. They have not been identified on any other metal truss bridge in the state. The floor beams are rolled I section and are fitted with lateral bracing. Any original railings have been replaced by modern but compatible wood railings.

Alterations to the bridge include in 1925 replacing the original west ashlar abutment with a concrete abutment and raising the west end of the truss by 18 inches; in 1935 strengthening and repairing the bridge with welded members including subdiagonals attached at the lower panel points by welded plates, outriggers, and repairs to the lower portions of the inclined end posts; and, in 1990 installing a glue-laminated wood deck. The alterations do not compromise the truss's integrity of design.

Historical and Technological Significance: The Pratt pin-connected pony truss bridge erected in 1896 by the Havana Bridge Works is a locally significant example of its type (Criterion C). It ranks as the best preserved metal truss bridge in the county, and in addition to representing the important structure type, the span chronicles the history of a small regional bridge fabricating firm whose history is not unlike other 19th-century fabricators who saw prosperity in manufacturing metal bridges and who distributed their products through a network of agents who worked with county freeholders. The Havana Bridge Company was established as W.H. Shepard's Sons Bridge Company in Havana, later Montour Falls, New York in 1891. It was reorganized and restyled the Havana Bridge Works in 1896, according to Victor Darnell, and it was the predecessor to the Rochester Bridge and Construction Company. The 1898 bridge plaque identifies Havana Bridge Works as being located in Elmira, New York, not in Montour Falls.

Boundary Description and Justification: Because the bridge is individually significant, it is the span alone (substructure including wingwalls and superstructure) that is evaluated as significant.

PHOTO: 166:42-44,1-5 (07/92) REVISED BY (DATE): QUAD: Portland

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2101313 **CO** WARREN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED STATION ROAD OVER BRANCH OF PAULINS KILL **FACILITY** STATION ROAD

TOWNSHIP KNOWLTON TOWNSHIP

TYPE PONY TRUSS **DESIGN** WARREN **MATERIAL** Steel

 # SPANS 1 **LENGTH** 63 ft **WIDTH** 15.8 ft

CONSTRUCTION DT 1902 **ALTERATION DT** 1934, 1990 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** CANTON BRIDGE COMPANY

SETTING / CONTEXT The bridge is located in a wooded area that is sparsely developed. It carries a one-lane road over an intermittent stream that is a branch of Paulins Kill. Another pony truss bridge (2101313) is located 100' to the north, carrying the same one-lane road over Paulins Kill.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The rivet-connected Warren pony truss bridge is supported on one ashlar abutment with a concrete cap and one concrete abutment. Many of the original riveted members have been strengthened with the addition of welded plates, but not the top chord. The bottom chord has been strengthened with an additional angle section. Outriggers have been welded to the chords and at the midpoint of the verticals. The bridge is a relatively well-represented type, and it has been significantly altered.

INFOR MATION

PHOTO: 166:7-10 (07/92) REVISED BY (DATE): QUAD: Portland

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2101351 **CO** WARREN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED STONY BROOK ROAD OVER STONY BROOK (BILLINGS BRIDGE) **FACILITY** STONY BROOK ROAD (BILLINGS BRIDGE)

TOWNSHIP KNOWLTON TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 4 **LENGTH** 75 ft **WIDTH** 11.7 ft

CONSTRUCTION DT 1920 **ALTERATION DT** 1967 **SOURCE** NJDOT/COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in a sparsely developed wooded area that has 20th century houses set back from winding roads. It carries a one-lane road over a minor stream.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The four-span stringer bridge is supported by concrete abutments and piers, and has rubble stone wingwalls. The exposed stringers are simply supported, and they support a timber plank deck. A metal railing is welded to the fascia stringers. An invert slab was placed in the stream bed in 1967 after a flood. The piers were also repaired and the deck replaced at that time. The bridge is a common type, and it is not technologically or historically distinguished.

INFOR MATION

PHOTO: 165:28-30 (07/92) REVISED BY (DATE): QUAD: Portland

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2101356 **CO** WARREN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED HAINESBURG RIVER ROAD OVER STONY BROOK **FACILITY** HAINESBURG RIVER ROAD

TOWNSHIP KNOWLTON TOWNSHIP

TYPE STRINGER **DESIGN** JACK ARCH (CONCRETE) **MATERIAL** Steel

 # SPANS 2 **LENGTH** 68 ft **WIDTH** 14 ft

CONSTRUCTION DT 1914 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT F. W. SALMON, COUNTY ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in a wooded area that is sparsely developed with late-20th century houses. The one-lane bridge carries a winding road over a creek.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span stringer bridge is supported on a concrete substructure with rubble stone wingwalls. The interior stringers have concrete jack arches between them, with some of the corrugated metal forms remaining in place. There are no tie rods visible. The span is enclosed by beam guiderails along both faces. The bridge, one of at least 7 remaining in the county built prior to 1915, is not a technologically or historically distinguished structure.

INFOR MATION

PHOTO: 165:26-27 (07/92) REVISED BY (DATE): QUAD: Portland

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2101413 **CO** WARREN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED LAKESIDE DRIVE WEST OVER MOUNTAIN LAKE BROOK **FACILITY** LAKESIDE DRIVE WEST

TOWNSHIP LIBERTY TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 33 ft **WIDTH** 26.8 ft

CONSTRUCTION DT 1941 **ALTERATION DT** **SOURCE** INSCRIPT/CNTY RECRDS

DESIGNER/PATENT H. W. VETTER, COUNTY ENGINEER **BUILDER** COUNTY FORCES

SETTING / CONTEXT The bridge is located in a rural, wooded area with a 1920s residence nearby. It carries a two-lane road with narrow shoulders over a stream. Adjacent to the bridge is the intersection of the road with another two-lane road.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed one-span encased stringer bridge is set on concrete abutments. The concrete balustrade is a standard-design for ca. 1940 county bridges. It has Moderne-styled stepped posts. The span is a representative example of a common pre-World War II bridge type. It is not technologically or historically distinguished.

INFOR MATION

PHOTO: 183:19, 186:10-11 (08/92) REVISED BY (DATE): QUAD: Washington

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2101417 **CO** WARREN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PEQUEST ROAD OVER PEQUEST RIVER **FACILITY** PEQUEST ROAD

TOWNSHIP LIBERTY TOWNSHIP

TYPE PONY TRUSS **DESIGN** PRATT **MATERIAL** Steel

 # SPANS 1 **LENGTH** 88 ft **WIDTH** 17.3 ft

CONSTRUCTION DT 1902 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge is located at the edge of Townsbury, a small village with altered 19th century residences along the main street. The one-lane structure carries a winding road over a minor river. An abandoned railroad right-of-way once had a grade crossing at the south end of the bridge. The signal posts remain in place along the roadway. The bridge is scheduled for replacement in 1992.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The five-panel skewed Pratt pony-truss bridge sits on concrete abutments. The pin-connected truss has been altered with the addition of welded bars strengthening the diagonals and the bottom chord. The angle and lattice verticals have been repaired with new sections and bolts instead of rivets. The built-up top chord has an added cover plate. Outriggers have been welded to the rolled floorbeams. The undocumented bridge has been extensively altered, and is not historically noteworthy.

INFOR MATION

PHOTO: 178:17-23 (08/92) REVISED BY (DATE): QUAD: Washington

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2101506 **CO** WARREN **OWNER** COUNTY **MILEPOINT** 30.0

NAME & FEATURE INTERSECTED CR 519 OVER LOPATCONG CREEK **FACILITY** CR 519

TOWNSHIP LOPATCONG TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 39 ft **WIDTH** 30.2 ft

CONSTRUCTION DT 1928 **ALTERATION DT** **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** AL GEIST

SETTING / CONTEXT The bridge is located in a rural area of working farms. The intersection of a federal and a county route is approximately 100' south of the bridge, with an early-20th century restaurant on one corner. The bridge carries the two-lane county route over a small stream.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span stringer bridge rests on concrete abutments with wingwalls. The encased stringers support a concrete deck that is flanked by concrete balustrades. Approach guiderails are bolted to the end posts. The span is a representative example of a common bridge type, being one of over 65 extant pre-World War II stringer bridges in Warren County. It is not technologically or historically distinguished.

INFOR MATION

PHOTO: 170:21-22 (07/92) REVISED BY (DATE): QUAD: Easton

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2101606 **CO** WARREN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED STEPHENSBURG ROAD OVER MUSCONETCONG RIVER **FACILITY** STEPHENSBURG ROAD

TOWNSHIP MANSFIELD TOWNSHIP

TYPE STONE ARCH **DESIGN** ELLIPTICAL **MATERIAL** Stone

 # SPANS 3 **LENGTH** 58 ft **WIDTH** 26.1 ft

CONSTRUCTION DT 1875ca **ALTERATION DT** 1939 **SOURCE** STYLE/INSCRIPTION

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in a wooded area that has scattered modular homes. It carries a two-lane road over the Musconetcong River, which is the boundary between Warren and Morris Counties. A 1768 mill is located along the east bank of the river upstream from the bridge. The village of Stephensburg is in Morris County to the south of the bridge.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The three-span stone arch bridge was widened in 1939 with corrugated metal plate liners. Both spandrel walls are constructed with rubble-coursed stone, with ringstones. The parapets are capped with stones held with staples, though most are missing. The arch intrados have a thin gunite coating in spots. The bridge repointing does not conform to generally accepted preservation standards. The structure is not historically distinguished, and is one of 9 extant stone arch bridges in Warren County.

INFOR MATION

PHOTO: 179:40A-43A (08/92) REVISED BY (DATE): QUAD: Hackettstown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2101607 **CO** WARREN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED STEPHENSBURG ROAD OVER MUSCONETCONG RIVER **FACILITY** STEPHENSBURG ROAD

TOWNSHIP MANSFIELD TOWNSHIP

TYPE STONE ARCH **DESIGN** ELLIPTICAL **MATERIAL** Stone

 # SPANS 3 **LENGTH** 81 ft **WIDTH** 15 ft

CONSTRUCTION DT 1860 **ALTERATION DT** 1984 **SOURCE** PLAQUE

DESIGNER/PATENT **BUILDER** J. A.SKINNER & J.C.MILLER

SETTING / CONTEXT The bridge is located on the well-preserved Miller Farmstead. The ca.1830 property includes the original house and barn, along with other outbuildings. Cattle pastures surround the bridge, which carries a two-lane road over the Musconetcong River. The waterway divides Warren and Hunterdon Counties at this point. The bridge is listed as a contributing structure to the multiple-county farmstead.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Individually Eligible. Listed. Miller Farmstead. 09/11/1989. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The three-span stone arch bridge remains, for the most part, as it was constructed. The spandrel walls have been repointed. The parapets were capped with mortar in 1984. The cutwater piers are reinforced with iron tie-rods attached at each face and supporting the spring lines of the arches. The 1860 marble builder's plaque remains at the center of the downstream parapet. The bridge enjoys integrity of setting and design, and is individually eligible and a contributing resource to the National Register-listed historic district.

INFOR MATION

PHOTO: 179:44A,1A-2A (08/92) REVISED BY (DATE): QUAD: Washington

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2101625 **CO** WARREN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED TUNNEL HILL ROAD (CR 650) OVER POHATCONG CREEK **FACILITY** TUNNEL HILL ROAD (CR 650)

TOWNSHIP MANSFIELD TOWNSHIP

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 50 ft **WIDTH** 31 ft

CONSTRUCTION DT 1916 **ALTERATION DT** **SOURCE** PLANS/COUNTY RECORDS

DESIGNER/PATENT F. W. SALMON, COUNTY ENGINEER **BUILDER** SALMON BROS.

SETTING / CONTEXT The bridge is located in a wooded area that has scattered 20th century residences. It carries a two-lane county route with shoulders across a stream.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one-span reinforced concrete deck arch bridge is framed by concrete wingwalls. The spandrel panels have a brush hammer finish. Pipe railings are present at both faces of the bridge, which is an unaltered but undistinguished example of its type. The bridge is a representative example of a common early-20th century bridge type, and is one of over 15 reinforced concrete deck arches extant in Warren County.

INFOR MATION

PHOTO: 178:24-25 (08/92) REVISED BY (DATE): QUAD: Washington

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2101638 **CO** WARREN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED JACKSON VALLEY ROAD OVER POHATCONG CREEK **FACILITY** JACKSON VALLEY ROAD

TOWNSHIP MANSFIELD TOWNSHIP

TYPE STONE ARCH **DESIGN** BARREL **MATERIAL** Stone

 # SPANS 2 **LENGTH** 30 ft **WIDTH** 16.5 ft

CONSTRUCTION DT 1900 **ALTERATION DT** 1984 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in a wooded setting surrounded by well-maintained 19th and 20th century houses scattered along the road. A 1828 property with a house reworked in the Colonial Revival mode and well-preserved barn are on the north side of the bridge. The one-lane bridge carries a quiet, winding road over a small stream.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span rubble-coursed stone arch bridge with ringstones was rehabilitated in 1984 when the spandrel walls were rebuilt/repointed and concrete caps were added atop the parapets. The intrados of the arches remain uncooked and void of mortar. The 1900 bridge is the smallest of 9 stone arch bridges in Warren County, and it has been rehabilitated extensively. It is not historically or technologically distinctive.

INFOR MATION

PHOTO: 178:38-40 (08/92) REVISED BY (DATE): QUAD: Washington

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2101708 **CO** WARREN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PEQUEST ROAD OVER FURNACE BROOK **FACILITY** PEQUEST ROAD

TOWNSHIP OXFORD TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 27 ft **WIDTH** 26.1 ft

CONSTRUCTION DT 1920 **ALTERATION DT** 1945ca **SOURCE** PLANS/COUNTY RECORDS

DESIGNER/PATENT H. W. VETTER, COUNTY ENGINEER **BUILDER** J. C.SEARLES/COUNTY FORCES

SETTING / CONTEXT The bridge is located in a rural area with corn fields, a ca.1800 rubble-coursed stone farm house and barn complex, and a municipal water treatment facility. The structure carries a two-lane road over a minor stream.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one-span stringer bridge is seated on concrete abutments that were altered ca. 1945 when the bridge was almost doubled in width with steel stringers. The original stringers are encased except for the bottom flanges. The railings have concrete posts with metal pipe rails. The bridge is an altered example of a common pre-World War II type in the state, and is not technologically or historically distinguished.

INFOR MATION

PHOTO: 177:40-41 (08/92) REVISED BY (DATE): QUAD: Washington

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2101719 **CO** WARREN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WASHINGTON AVENUE (CR 631) OVER FURNACE BROOK **FACILITY** WASHINGTON AVENUE (CR 631)

TOWNSHIP OXFORD TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 30 ft **WIDTH** 28 ft

CONSTRUCTION DT 1910ca **ALTERATION DT** Demolished **SOURCE** STYLE/COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in the Oxford Industrial Historic District on a 19th century residential street with altered houses. The Oxford Furnace is one block to the north of the bridge. The span carries a two-lane street with sidewalks over a creek that runs through the historic town. The period of significance of the district is 1741-1930. County records indicate that the bridge was built prior to 1914.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Bridge was Not Individually Eligible. Listed. Oxford Industrial Historic District 08/27/1992. Contributed.

CONSULT DOCUMENTS SHPO Letter 06/30/95 03/12/01.

SUMMARY The one-span stringer bridge bears on ashlar abutments. The stringers are exposed steel, with the top flanges embedded in the concrete deck. The railings on the bridge faces and at the curb are well-preserved original metal lattice work with finials on the end posts. The bridge is significant due to its location within the historic district in Oxford, and it contributes to its character. By itself, the bridge is not technologically distinguished.

INFOR MATION

Bibliography:
Oxford Historic District Nomination. 1976.
Warren County Engineer. Bridge Files.

Physical Description: The single-span steel stringer rests on ashlar abutments. The top flanges of the stringers are imbedded in the concrete deck. The railings on the bridge faces and at the sidewalk curb are well-preserved original metal lattice work with finials on cast iron end posts.

Historical and Technological Significance: The c.1910 steel stringer bridge is within the boundaries of the Oxford Industrial Historic District and fits within the historic themes of the district's areas of significance that include industry, community development, and transportation (Criterion A and C). The bridge is not individually eligible but is a contributing resource within the district's period of significance (1741-1930). Oxford began in 1741 as an iron furnace and grew into a technologically and historically significant factory town in the mid-19th century in part as a result of the construction of the Warren Railroad. In the late-19th century the town declined as the iron industry moved further west, and operations ceased in the 1920s. The district is significant because its architecture and landscape reflect the rise and decline of a regionally important industry. The bridge carries the town's historic primary north-south thorofare over Furnace Brook, and until the arrival of the railroad this route carried the products of the iron furnace to market.

County records indicate the present Washington Avenue bridge was in place in 1914. No original plans were located, but the railings and concrete deck, which appear to be original, stylistically date the bridge to c.1910. Furnace Brook passes through the center of town and the bridge is one of two crossings (the other is 2111154, NJ 31/Mill Street over Furnace Brook) that allowed for development on both sides of the stream. The surrounding structures are 19th-century residences. The simply-supported steel stringer bridge was a common early-20th century bridge type that was used widely in Warren County.

Boundary Description and Justification: The bridge is within the boundaries of the Oxford Industrial Historic District as delineated in the USGS Quad Maps accompanying the National Register nomination. The bridge was not rated in the original historic district nomination. The boundaries of the district include both sides of the stream surrounding the bridge.

PHOTO: 177:33-34,185:22 (08/92 JPH (5/96)) REVISED BY (DATE): QUAD: Washington

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2101903 **CO** WARREN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED SOUTH MAIN STREET OVER LOPATCONG CREEK **FACILITY** SOUTH MAIN STREET

TOWNSHIP PHILLIPSBURG TOWN

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 49 ft **WIDTH** 49.2 ft

CONSTRUCTION DT 1927 **ALTERATION DT** 1934, 1968 **SOURCE** PLAQUE/COUNTY RECRDS

DESIGNER/PATENT CORNELIUS C. VERMEULE,CONS.ENG **BUILDER** F. H. CLEMENT & COMPANY

SETTING / CONTEXT The bridge is located adjacent to a T intersection. The bridge carries a busy two-lane road over a stream that was the r-o-w of the Morris Canal. The construction of the bridge in 1927 was funded by the Morris Canal and Banking Company, as part of the canal abandonment program. The area once used water from the creek to power industrial buildings.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Listed. Morris Canal. 10/01/1974. Noncontributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed one-span encased stringer bridge sits on concrete abutments with wingwalls. County forces added a sidewalk on the upstream face in 1934. The bridge was widened again in 1968 by the addition of prestressed box beams and widened abutments. A new railing encloses the bridge on the widened face, opposite a paneled concrete parapet on the original face. The altered bridge is an example of two common bridge types, and is not technologically or historically distinguished.

INFOR MATION

PHOTO: 172:15-17 (07/92) REVISED BY (DATE): QUAD: Easton

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2101905 **CO** WARREN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED LOCK STREET OVER LOPATCONG CREEK **FACILITY** LOCK STREET

TOWNSHIP PHILLIPSBURG TOWN

TYPE PONY TRUSS **DESIGN** PRATT HALF HIP **MATERIAL** Steel

 # SPANS 1 **LENGTH** 74 ft **WIDTH** 15.8 ft

CONSTRUCTION DT 1900ca **ALTERATION DT** 1937 **SOURCE** STYLE/COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries one lane of a quiet country road over a minor stream that is the boundary of the town of Phillipsburg. One end of the bridge also appears to be adjacent to the NR-listed Morris Canal R-O-W. The area surrounding the bridge does not appear to have historic district potential because of several modern, intrusive dwellings, but architecturally significant 18th- and 19th-century houses are within sight of the span.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The half-hip Pratt pony truss bridge sits on an ashlar substructure with concrete toe walls at the south abutment. The span has been significantly altered. In 1937 welded plates and bars were added to nearly every member. These modifications and the loss of original railings alter how the bridge functions and severely compromise its technologically or historically significance. It is an altered example of a common bridge type. The ca.1900 date is based on construction details.

INFOR MATION

PHOTO: 171:5-8,172:8- (07/92) REVISED BY (DATE): QUAD: Easton

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2102001 **CO** WARREN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED RAVINE ROAD OVER POHATCONG CREEK **FACILITY** RAVINE ROAD

TOWNSHIP POHATCONG TOWNSHIP

TYPE PONY TRUSS **DESIGN** PRATT **MATERIAL** Steel

 # SPANS 1 **LENGTH** 54 ft **WIDTH** 12.3 ft

CONSTRUCTION DT 1938 **ALTERATION DT** **SOURCE** PLAQUE/COUNTY RECRDS

DESIGNER/PATENT UNKNOWN **BUILDER** WELDING ENGNRS INC, PHILA

SETTING / CONTEXT The bridge is located in a wooded area with scattered residences. The one-lane bridge carries a winding road over a stream.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 03/12/01

SUMMARY The one-span welded pony truss bridge is set on stone abutments, one of them with a later concrete buttress. The truss is composed of rolled I-sections welded together with gusset plates. The floorbeams are built-up with flange angles riveted to the web plates. Rolled stringers support a timber deck. The bridge replaces a pin-connected Pratt pony truss. It is one of three welded pony trusses crossing the same creek in Pohatcong Township. Although the bridge conveys the concept of the truss design, it no longer retains integrity of materials or design and is not individually eligible for listing in the National Register of Historic Places, nor does it currently contribute to an identified historic district.

INFOR MATION

PHOTO: 169:29-33 (07/92) REVISED BY (DATE): QUAD: Easton

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2102002 **CO** WARREN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED STILL VALLEY ROAD OVER POHATCONG CREEK **FACILITY** STILL VALLEY ROAD

TOWNSHIP POHATCONG TOWNSHIP

TYPE PONY TRUSS **DESIGN** PRATT HALF HIP **MATERIAL** Steel

 # SPANS 1 **LENGTH** 56 ft **WIDTH** 15.8 ft

CONSTRUCTION DT 1900ca **ALTERATION DT** 1936 **SOURCE** STYLE/COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in a well-preserved mill complex dating to the early-19th century and including a mill with its machinery and the miller's dwelling. The bridge contributes to the historic character of the National Register-listed complex. The one-lane bridge carries a narrow road over a stream.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Listed. Hixson/Skinner Mill Complex. 12/02/1982. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one-span pony truss is set on concrete abutments with stone wingwalls along the south abutment. The truss is built-up of channel sections, lacing, batten and cover plates and eyebars, with some additional welded bars to the diagonals and bottom chord from 1936. At the ends of the top chord, decorative plates cover the end of the rectangular section. Despite the alterations, the bridge is sited well enough between the mill and the miller's house to be a contributing element to the district.

INFOR MATION

PHOTO: 169:34-39 (07/92) REVISED BY (DATE): QUAD: Easton

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2102008 **CO** WARREN **OWNER** COUNTY **MILEPOINT** 25.2

NAME & FEATURE INTERSECTED CR 519 OVER POHATCONG CREEK **FACILITY** CR 519

TOWNSHIP POHATCONG TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 97 ft **WIDTH** 30 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** COUNTY RECORDS

DESIGNER/PATENT H. W. VETTER, COUNTY ENGINEER **BUILDER** NJ ASPHALT & PAVING CO.

SETTING / CONTEXT The bridge is located in a residential area of single family dwellings from the 19th and 20th centuries. Some small-scale commercial structures are also nearby. The structure carries a two-lane county route with narrow shoulders over a creek.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span stringer bridge is supported by a concrete substructure. The abutments are flanked by concrete wingwalls, and the cutwater pier extends a few feet beyond each face of the bridge. The concrete balustrade is of standard design. The bridge is a representative example of a common pre-World War II type, and it is not technologically or historically distinguished.

INFOR MATION

PHOTO: 170:25-26 (07/92) REVISED BY (DATE): QUAD: Easton

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2102010 **CO** WARREN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WINTERS ROAD OVER POHATCONG CREEK **FACILITY** WINTERS ROAD

TOWNSHIP POHATCONG TOWNSHIP

TYPE PONY TRUSS **DESIGN** WARREN **MATERIAL** Steel

 # SPANS 1 **LENGTH** 57 ft **WIDTH** 13.9 ft

CONSTRUCTION DT 1938 **ALTERATION DT** Demolished **SOURCE** PLAQUE/CO. RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** WELDING ENGNRS INC. PHILA

SETTING / CONTEXT The bridge is located in a wooded area of sparse 19th and 20th century residences. The one-lane structure carries a winding road over a creek.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Bridge was Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 03/12/01

SUMMARY This historic bridge has been demolished. The welded Warren pony truss bridge which was at this location sat on earlier ashlar abutments. The members were rolled I-sections with the exception of the bottom chord, which had toe-out angles with batten plates, and the first vertical, which was a channel section. The floorbeams were large I-sections, supporting rolled stringers and outriggers for the truss. The structure was one of three similar welded bridges over this creek.

INFOR MATION

PHOTO: 170:27-29 (07/92) REVISED BY (DATE): QUAD: Easton

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2102011 **CO** WARREN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CREEK ROAD OVER POHATCONG CREEK **FACILITY** CREEK ROAD

TOWNSHIP POHATCONG TOWNSHIP

TYPE PONY TRUSS **DESIGN** WARREN **MATERIAL** Steel

 # SPANS 1 **LENGTH** 61 ft **WIDTH** 20 ft

CONSTRUCTION DT 1936 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER** WELDING ENGNRS INC. PHILA

SETTING / CONTEXT The bridge is located in an area of scattered residential structures from the 19th century. The two-lane bridge carries a winding road over a stream near the intersection of two roads. The bridge was constructed by Welding Engineers Inc., of Philadelphia, who built three similar bridges over this creek. This is the earliest and largest of the three bridges. It replaced a 1882 pin-connected pony truss bridge that was built by Dean and Westbrook.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Not Individually Eligible. Potential rural historic district, May contribute.

CONSULT DOCUMENTS SHPO Letter 03/12/01

SUMMARY The welded Warren pony truss bridge sits on stone abutments. The south abutment has concrete toe walls and wingwalls. Most of the members are rolled I-sections, but the bottom chord is built of two toe-out angles with batten plates and the end verticals are channels. The floorbeams and stringers are rolled sections as are the outriggers and railings. The bridge is one of at least 10 pre-1946 welded truss bridges in the state, and one of 3 over the same creek. The bridge is not technologically distinguished and is therefore not individually eligible for listing in the National Register of Historic Places. The bridge may be a contributing element of an historic district.

INFOR MATION

PHOTO: 170:30-33 (07/92) REVISED BY (DATE): QUAD: Easton

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2102015 **CO** WARREN **OWNER** COUNTY **MILEPOINT** 0.0
NAME & FEATURE INTERSECTED RIVER ROAD OVER POHATCONG CREEK **FACILITY** RIVER ROAD
TOWNSHIP POHATCONG TOWNSHIP
TYPE THRU TRUSS **DESIGN** PRATT **MATERIAL** Steel
 # SPANS 1 **LENGTH** 118 ft **WIDTH** 17 ft
CONSTRUCTION DT 1901 **ALTERATION DT** 1936, 1995 **SOURCE** COUNTY RECORDS
DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in a rural area, adjacent to working farms. The one-lane bridge carries a winding local road over a creek. The Belvidere-Delaware RR has a bridge crossing the creek just downstream.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes
CONSULT STATUS Individually Eligible.
CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The pin-connected Pratt thru-truss bridge is supported on ashlar abutments with stone wingwalls. The south abutment has a toe wall. The members are composed of toe-out channels with lacing and cover plates, and eyebars, a few with welded bars from 1936. A sub-diagonal was welded in the end panels, built of channel sections and batten plates, and welded railings were added. The bridge is a significant, well-preserved example of its type. It is one of 4 noteworthy thru truss spans in the county.

INFOR MATION

Bibliography:
Warren County Engineer: Bridge File.

Physical Description: The 118'-long 6-panel half-hip Pratt thru truss bridge with pinned field connections is supported on ashlar abutments with concrete toe walls. While the end panels have been strengthened with welded additional members (hangers, diagonals, chords, and subdiagonals) and corner bracing has been welded to the upper lateral braces at the verticals, the trusses are otherwise relatively complete. The inclined end posts and top chord are built up box members composed of channels and cover plate while the verticals are toe-out laced channels. The diagonals and counters are bar stock with both looped and stamped eyes. The bridge exhibits no unusual or patented construction details, but it is a complete example of a traditionally composed pin-connected span with integrity of setting.

Historical and Technological Significance: The pin-connected Pratt half hip thru truss bridge is a late and altered example of its design, but it is one of only two (2100718 is the other example) that remain in the county, and it is thus significant as a rare survivor of a once-common type (Criterion C). County records indicate that it was erected in 1901, but the fabricator is not known. Alterations are limited primarily to the end panels where additional members were welded to the original hangers and diagonals to strengthen the span. A subdiagonal was also added. This work was done in 1936.

A total of four (2 Pratts, 2 double-intersection Warrens), thru truss bridges survive in Warren County (2102307, 2102015, 2160153, 2100718). Three were built by the county, and one was erected by the Lehigh Valley Railroad to carry a local road over its right-of-way. Because of the scarcity of these once common bridge types in Warren County, all four of the thru truss bridges were evaluated as significant because they are rare local examples of a structure type that played an important role in the historical development of the county. The Pratt truss became the most popular of the many truss designs that were experimented with in the 1870s. It was favored because of its overall simplicity, economy of material, ease of fabrication, and strength. The Pratt truss played a significant role in the general acceptance of metal truss bridges for highway use in the last quarter of the 19th century, and by 1900, it was the most common pin-connected bridge type in the nation in both the high and low truss designs.

Boundary Description and Justification: Because it is the span itself that is evaluated as significant, the boundary is limited to the superstructure and substructure of the bridge itself. While the surrounding rural and undeveloped acreage provides an appropriate setting for the bridge, it does not contribute to its significance.

PHOTO: 170:34-39 (07/92) REVISED BY (DATE): QUAD: Riegelsville

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2102032 **CO** WARREN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CYPHERS ROAD OVER MUSCONETCONG RIVER **FACILITY** CYPHERS ROAD

TOWNSHIP POHATCONG TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 87 ft **WIDTH** 16 ft

CONSTRUCTION DT 1931 **ALTERATION DT** **SOURCE** PLANS/COUNTY RECORDS

DESIGNER/PATENT H. W. VETTER, COUNTY ENGINEER **BUILDER** J. F. HIGH

SETTING / CONTEXT The bridge carries a two-lane road over the Musconetcong River. It is located adjacent to a paper mill that is one of many along the Musconetcong. It was originally the Hughesville plant of the Riegel Paper Company. The plant was constructed as a water-powered mill, though it no longer functions that way. The river is the boundary between Warren and Hunterdon Counties. The bridge replaced a double-intersection riveted Warren pony truss structure that was built in 1876.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span encased stringer bridge rests on ashlar abutments that have concrete caps and a concrete cutwater pier. Stone wingwalls flank the abutments. The fascia encasement is plain below the railing of concrete posts and metal pipe rails. The structure is a representative example of a common bridge type, and it is not technologically or historically distinguished.

INFOR MATION

PHOTO: 170:41-42 (07/92) REVISED BY (DATE): QUAD: Riegelsville

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2102039 **CO** WARREN **OWNER** COUNTY **MILEPOINT** 6.2

NAME & FEATURE INTERSECTED CR 627 OVER CANAL TO MUSCONETCONG RIVER **FACILITY** CR 627

TOWNSHIP POHATCONG TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 48 ft **WIDTH** 30 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** FREMAN & ZELLERS

SETTING / CONTEXT The bridge is located in a wooded area. It carries a two-lane county route over a power canal right-of-way that flows southwest into the Musconetcong River.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one-span stringer bridge is supported by concrete abutments with wingwalls. The skewed stringers are encased in concrete, with a plain fascia stringer below a standard design concrete balustrade. The bridge is a representative example of a common pre-World War II bridge type. It is one of over 65 stringer bridges in Warren County, and is not technologically or historically distinguished.

INFOR MATION

PHOTO: 185:5-7 (07/92) REVISED BY (DATE): QUAD: Riegelsville

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2102040 **CO** WARREN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 627 OVER MUSCONETCONG RIVER **FACILITY** CR 627

TOWNSHIP POHATCONG TOWNSHIP

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 87 ft **WIDTH** 31.1 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** PLAQUES

DESIGNER/PATENT VETTER(WARREN) & DAVIS(HNTRDN) **BUILDER** HENRY SICAFOOS

SETTING / CONTEXT The bridge is located at the edge of a residential area with 19th and 20th century single family dwellings. It carries a two-lane county route over the Musconetcong River, the boundary between Warren and Hunterdon Counties.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one-span reinforced concrete deck arch bridge has concrete wingwalls at both approaches. Concrete balustrades are located only over the span, with paneled concrete parapets above the approach wingwalls. The bridge is a well-preserved example of its type, and is one of over 15 pre-World War II reinforced concrete deck arches in Warren County. It is not technologically or historically distinguished.

INFOR MATION

PHOTO: 171:18-20 (07/92) REVISED BY (DATE): QUAD: Riegelsville

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2102046 **CO** WARREN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 519 OVER MUSCONETCONG RIVER **FACILITY** CR 519

TOWNSHIP POHATCONG TOWNSHIP

TYPE BOX BEAM **DESIGN** **MATERIAL** Prestressed Concrete

 # SPANS 2 **LENGTH** 117 ft **WIDTH** 35 ft

CONSTRUCTION DT 1920 **ALTERATION DT** 1976 **SOURCE** COUNTY RECRDS/PLAQUE

DESIGNER/PATENT W.E. ROBERTS, HUN CO. ENG. **BUILDER** M.A.CARTY/UNDERGRND UTIL.

SETTING / CONTEXT The bridge is located adjacent to a service drive to the Riegel Paper mill, established in the mid-1800s as a water-powered mill. The bridge carries a two-lane county route over the Musconetcong River, the boundary between Warren and Hunterdon Counties. The 1920 bridge was designed by the Hunterdon County Engineer and approved by the Warren County Engineer.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span prestressed box beam superstructure was built in 1976, and it incorporates a concrete substructure that dates to 1920. The concrete abutments and cutwater pier were coated with a protective application. The bridge is not technologically distinguished, and the superstructure is not old enough to be evaluated as a historically significant structure.

INFOR MATION

PHOTO: 170:40 (07/92) REVISED BY (DATE): QUAD: Easton

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2102101 **CO** WARREN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED SOUTH WANDLING AVENUE OVER SHABBECONG CREEK **FACILITY** SOUTH WANDLING AVENUE

TOWNSHIP WASHINGTON BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 28 ft **WIDTH** 24.5 ft

CONSTRUCTION DT 1918 **ALTERATION DT** 1983 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT H. W. VETTER, COUNTY ENGINEER **BUILDER** J. C. SEARLES

SETTING / CONTEXT The bridge is located on a residential street with post-World War II homes. The two-lane structure crosses a small creek that is lined with trees.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one-span stringer bridge rests on concrete abutments with wingwalls. The northeast wingwall was reconstructed in 1983 to redirect the stream under the bridge. The encased stringers have exposed bottom flanges. The deck is enclosed by railings composed of concrete posts and metal pipe rails. The bridge is a representative example of a common bridge type, and is one of over 65 extant pre-World War II stringer spans in Warren County. It is not technologically or historically distinguished.

INFOR MATION

PHOTO: 177:17-18 (08/92) REVISED BY (DATE): QUAD: Washington

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2102154 **CO** WARREN **OWNER** NJDOT **MILEPOINT** 2.85

NAME & FEATURE INTERSECTED US 22 OVER LOPATCONG CREEK **FACILITY** US 22

TOWNSHIP LOPATCONG TOWNSHIP

TYPE RIGID FRAME **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 3 **LENGTH** 41 ft **WIDTH** 91.6 ft

CONSTRUCTION DT 1938 **ALTERATION DT** 1954 **SOURCE** PLANS

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located in an agricultural farming area with some late-20th century commercial structures along the highway. It carries a busy four-lane divided highway with a grassy median over a creek. The bridge is noticeable along the highway only by the structure identification marker.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The reinforced concrete rigid frame bridge is continuous over the three spans. The 1938 structure was widened in 1954 with a similar three-span continuous frame which extended the width by 55'. The altered bridge is not technologically innovative nor is it historically distinguished.

INFOR MATION

PHOTO: 171:37 (07/92) REVISED BY (DATE): QUAD: Easton

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2102204 **CO** WARREN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MINE HILL ROAD OVER POHATCONG CREEK **FACILITY** MINE HILL ROAD

TOWNSHIP WASHINGTON TOWNSHIP

TYPE STRINGER **DESIGN** JACK ARCH (CONCRETE) **MATERIAL** Steel

 # SPANS 1 **LENGTH** 26 ft **WIDTH** 17.5 ft

CONSTRUCTION DT 1914 **ALTERATION DT** 1932 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** S. H. SHIELDS

SETTING / CONTEXT The bridge is located in an area of modern residential subdivision development with a few 19th century dwellings interspersed. It carries a two-lane road over a minor stream.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span stringer bridge sits on a rubble-coursed stone abutment and a concrete abutment, both of which have stone wingwalls. The stringers are spanned by concrete jack arches. Vertical tie rods from the crown of the arches connect to channel sections welded to the bottom flanges of the stringers for added lateral stability. The bridge was widened in 1932, and the new stringers do not have jack arches. The altered bridge is not technologically or historically distinguished.

INFOR MATION

PHOTO: 178:34-37 (08/92) REVISED BY (DATE): QUAD: Washington

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2102215 **CO** WARREN **OWNER** COUNTY **MILEPOINT** 0.1

NAME & FEATURE INTERSECTED CR 623 OVER POHATCONG CREEK **FACILITY** CR 623

TOWNSHIP WASHINGTON TOWNSHIP

TYPE STONE ARCH **DESIGN** BARREL **MATERIAL** Stone

 # SPANS 2 **LENGTH** 31 ft **WIDTH** 47.2 ft

CONSTRUCTION DT 1875ca **ALTERATION DT** 1934, 1955 **SOURCE** STYLE/COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN/COUNTY FORCES

SETTING / CONTEXT The bridge is located in a late-20th century industrial area. It carries a two-lane county route with sidewalks and shoulders over a creek.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The undocumented two-span stone arch bridge was widened in 1934 with multiple plate arches, and again in 1955 with a two-span continuous concrete slab on concrete abutments and a pier. The masonry has been repointed with wide joints in the spandrel walls and the fascia ringstones. The low stone parapet has stapled capstones, while the opposite railing has concrete posts with metal pipe railings. The extensively altered structure is not technologically or historically distinguished.

INFOR MATION

PHOTO: 177:19-24 (08/92) REVISED BY (DATE): QUAD: Washington

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2102223 **CO** WARREN **OWNER** COUNTY **MILEPOINT** 1.05

NAME & FEATURE INTERSECTED CR 632 OVER TRIBUTARY TO MUSCONETCONG RIVER **FACILITY** CR 632

TOWNSHIP WASHINGTON TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 2 **LENGTH** 42 ft **WIDTH** 25.4 ft

CONSTRUCTION DT 1942 **ALTERATION DT** **SOURCE** INSCRIPT/CNTY RECRDS

DESIGNER/PATENT H. W. VETTER, COUNTY ENGINEER **BUILDER** COUNTY FORCES

SETTING / CONTEXT The bridge is located at the intersection of a county route with a local road. Around the intersection are 19th century houses and corn fields, as well as a wooded area. The bridge carries the two-lane county road over a stream.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed two-span slab bridge is simply-supported over concrete abutments and a pier. The railing is a nicely-detailed Moderne-style concrete balustrade with stepped posts and circular-headed piercing. The bridge is a representative example of a common type and design, and it is not technologically or historically distinguished.

INFOR MATION

PHOTO: 174:30-31 (07/92) REVISED BY (DATE): QUAD: High Bridge

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2102224 **CO** WARREN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED NEW HAMPTON ROAD OVER MUSCONETCONG RIVER **FACILITY** NEW HAMPTON ROAD

TOWNSHIP WASHINGTON TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 4 **LENGTH** 90 ft **WIDTH** 13.7 ft

CONSTRUCTION DT 1910 **ALTERATION DT** 1960ca **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in a wooded, undeveloped setting. The one-lane structure carries a quiet, rural road over the river that forms the boundary between Warren and Hunterdon Counties.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The four-span stringer bridge sits on stone piers and abutments to which concrete buttressing has been added. The exposed stringers support a steel grid deck. The ca.1960 welded post-and-rail railings are bolted to the fascia stringers. The bridge has been significantly altered since its original construction. It is one of over 65 extant pre-World War II stringer bridges in the county, and is not a technologically or historically distinguished structure.

INFOR MATION

PHOTO: 174:32-33 (07/92) REVISED BY (DATE): QUAD: High Bridge

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NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
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NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2102225 **CO** WARREN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED SHODDY MILL ROAD OVER MUSCONETCONG RIVER **FACILITY** SHODDY MILL ROAD

TOWNSHIP WASHINGTON TOWNSHIP

TYPE PONY TRUSS **DESIGN** PRATT **MATERIAL** Wrought or Cast Iron

 # SPANS 1 **LENGTH** 85 ft **WIDTH** 16.2 ft

CONSTRUCTION DT 1868 **ALTERATION DT** 1992 **SOURCE** INSCRIPTION

DESIGNER/PATENT F. LOWTHROP **BUILDER** WM. COWIN, LAMBERTVILLE

SETTING / CONTEXT The bridge is located in a wooded setting on the northwest edge of the village of New Hampton. It is adjacent to poorly maintained 19th century buildings. Ruins of a mill are on the property adjacent to the bridge. The bridge carries one lane of a rural road over the Musconetcong River, the boundary between Warren and Hunterdon Counties.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Individually Listed. Listed. New Hampton Pony Pratt Truss Bridge. 07/26/1977.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The cast and wrought iron Pratt pony truss bridge is one of the most technologically significant spans in the state. The 8-panel truss represents the transition from wood to metal truss spans, and it is the design of noted engineer F. Lowthorp and foundryman W. Cowin of Lambertville. It is the earliest of 3 similar spans in the area. In 1991 the north end post suffered severe impact damage, but it was sensitively repaired, preserving the integrity of the structure. The bridge is well-preserved.

INFOR MATION

PHOTO: 174:34-36 (07/92) REVISED BY (DATE): QUAD: High Bridge

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NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2102227 **CO** WARREN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 628 OVER POHATCONG CREEK **FACILITY** CR 628

TOWNSHIP WASHINGTON TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 30 ft **WIDTH** 15.8 ft

CONSTRUCTION DT 1926 **ALTERATION DT** **SOURCE** PLANS/COUNTY RECORDS

DESIGNER/PATENT H. W. VETTER, COUNTY ENGINEER **BUILDER** BECK BROS. & BECK

SETTING / CONTEXT The bridge is located in a rural area with late-19th century houses and active farms. The one-lane bridge carries a two-lane county route over a stream.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span stringer bridge is supported by stone abutments that have concrete toe walls. The encased stringers have exposed bottom flanges. The bridge railing is a typical county design of concrete posts with metal pipe rails. The bridge is a representative example of a common pre-World War II type, being one of over 65 remaining stringer spans in Warren County. It is not technologically or historically distinguished.

INFOR MATION

PHOTO: 177:25-27 (08/92) REVISED BY (DATE): QUAD: Washington

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2102231 **CO** WARREN **OWNER** COUNTY **MILEPOINT** 1.1

NAME & FEATURE INTERSECTED CR 623 OVER BRASS CASTLE CREEK **FACILITY** CR 623

TOWNSHIP WASHINGTON TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 29 ft **WIDTH** 29.2 ft

CONSTRUCTION DT 1939 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT H. W. VETTER, COUNTY ENGINEER **BUILDER** COUNTY FORCES

SETTING / CONTEXT The bridge is located in a wooded area that has inactive stone industrial buildings along the stream. The structure carries a two-lane county route over a stream that runs through a stone-retaining-wall lined channel.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed encased stringer bridge sits on stone abutments with concrete bridge seats. The abutments are part of the retaining walls that line the channel. The stringers support a concrete deck that is enclosed by concrete balustrades with stepped Moderne posts. Beam guiderails are attached through the piercings of the balustrade. The bridge is a representative example of a common pre-World War II type, and it is not technologically or historically distinguished.

INFOR MATION

PHOTO: 177:31-32 (08/92) REVISED BY (DATE): QUAD: Belvidere

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2102237 **CO** WARREN **OWNER** COUNTY **MILEPOINT** 6.3

NAME & FEATURE INTERSECTED CR 632 OVER TRIBUTARY TO MUSCONETCONG RIVER **FACILITY** CR 632 (ASBURY-ANDERSON ROAD)

TOWNSHIP WASHINGTON TOWNSHIP

TYPE STRINGER **DESIGN** JACK ARCH (CONCRETE) **MATERIAL** Steel

 # SPANS 1 **LENGTH** 28 ft **WIDTH** 29.4 ft

CONSTRUCTION DT 1911 **ALTERATION DT** 1985ca **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** S. H. SHIELDS

SETTING / CONTEXT The bridge is located in an area of farms with modern houses scattered along the roads. It carries a two-lane county route over a small stream. A local road intersects the county route adjacent to the bridge.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one-span stringer bridge is supported on concrete abutments with flared wingwalls. The stringers are spanned by concrete jack arches with rusting corrugated metal forms. The bridge has been widened on the downstream face by 5' with the addition of two prestressed box beams. That side has a railing of concrete posts with metal pipe rails, but the other side has only a beam guiderail set in the concrete curb. The bridge is not a technologically or historically distinguished structure.

INFOR MATION

PHOTO: 174:25-27 (07/92) REVISED BY (DATE): QUAD: High Bridge

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2102251 **CO** WARREN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MEADOW BREEZE LANE OVER BRASS CASTLE CREEK **FACILITY** MEADOW BREEZE LANE

TOWNSHIP WASHINGTON TOWNSHIP

TYPE STRINGER **DESIGN** JACK ARCH (CONCRETE) **MATERIAL** Steel

 # SPANS 1 **LENGTH** 26 ft **WIDTH** 25.7 ft

CONSTRUCTION DT 1914ca **ALTERATION DT** 1974 **SOURCE** STYLE/COUNTY RECORDS

DESIGNER/PATENT F. W. SALMON, COUNTY ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in a rural location with fields and a recreational area. An early-20th century house is located on an adjacent property. The bridge carries a two-lane road over a small creek. The bridge is stylistically dated to ca. 1914, when County Engineer F. W. Salmon designed several bridges of this type.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one-span stringer bridge bears on concrete abutments that have been extended. The bridge was widened with the addition of 5' slabs to each side of the original stringers, which have concrete jack arches between them. The railings have concrete posts and metal pipe rails, as is common on county bridges from the 1910s. The altered bridge is one of at least 7 concrete jack arch spans built by the county between 1910-14, and it is not technologically or historically distinguished structure.

INFOR MATION

PHOTO: 177:28,30;185:14-15 (08/92) REVISED BY (DATE): QUAD: Belvidere

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2102302 **CO** WARREN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED SAREPTA ROAD OVER BEAVER BROOK **FACILITY** SAREPTA ROAD

TOWNSHIP WHITE TOWNSHIP

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 43 ft **WIDTH** 24.3 ft

CONSTRUCTION DT 1913 **ALTERATION DT** **SOURCE** PLAQUE/COUNTY RECRDS

DESIGNER/PATENT F. W. SALMON, COUNTY ENGINEER **BUILDER** M.IRVING DEMAREST, CONTR.

SETTING / CONTEXT The bridge is located in a wooded area, near the intersection of Sarepta Road with busy US 46. The bridge carries the two-lane local road over a stream.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The well-proportioned reinforced concrete deck arch bridge is bounded by concrete wingwalls on the south bank and rubble-course stone wingwalls on the north side. The railings are concrete posts with metal pipe rails. Over the wingwalls are panelled concrete parapets. The roadway rises in a crest curve over the arch bridge. The span ranks among the earliest and most handsome of the 15 deck arch bridges in the county and is a well-preserved, representative example of the important bridge type.

INFOR MATION

Bibliography:
Musti, M. Warren County New Jersey 1931. 1931.
Warren County Engineer. Bridge Files.

Physical Description: The well-proportioned 43'-long reinforced concrete elliptical deck arch bridge has plain spandrel walls. The roadway rises in a crest curve over the arch, and the clear span is marked by a metal and concrete railing composed of plain concrete posts and pipe rails. The bottom level of the pipe railing is subdivided. The approaches are marked by paneled parapets. Those at the T-intersection are curved which adds to the graceful appearance of the well-preserved bridge.

Historical and Technological Significance: The well proportioned and well preserved elliptical-shape deck arch bridge built in 1913 ranks as the most distinguished example of the bridge type that was commonly used by the county engineer in the 1910s (Criterion C). Designed by county engineer F. W. Salmon, the Sarepta Road arch, the earliest non-railroad related reinforced concrete deck arch bridge remaining in the county, reflects the trend of early-20th century county engineers to increasingly turn to reinforced concrete as the strong and economical replacement of earlier stone and metal truss bridges that were proving too light for 20th-century load requirements. The Sarepta Road bridge, one of eight built in the 1910s that remain in service today, is also locally significant in that it embodies details that are typical of 1910s and 1920s Warren County bridge. The railing, with concrete posts and nicely detailed pipe rails, is a type frequently seen on county-designed bridges as is the paneled concrete parapet used to mark the approaches. It is a fine summation of the county principle of "an achievement in design that has been the beauty of structure without sacrifice of strength or increase of cost" (Musti, p. 38).

Boundary Description and Justification: Because it is the technical and historical importance of the bridge that is significant, the boundary is limited to the structure itself. This includes the sub and superstructure as well as the wingwalls and approach parapets.

PHOTO: 164:41-43 (07/92) REVISED BY (DATE): QUAD: Belvidere

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2102303 **CO** WARREN **OWNER** COUNTY **MILEPOINT** 41.92

NAME & FEATURE INTERSECTED SOUTH BRIDGEVILLE ROAD (CR 519) OVER PEQUEST RIVER **FACILITY** SOUTH BRIDGEVILLE ROAD (CR 519)

TOWNSHIP WHITE TOWNSHIP

TYPE STONE ARCH **DESIGN** BARREL **MATERIAL** Stone

 # SPANS 9 **LENGTH** 152 ft **WIDTH** 25.1 ft

CONSTRUCTION DT 1836ca **ALTERATION DT** 1934 **SOURCE** STYLE/COUNTY RECORDS

DESIGNER/PATENT UNKNOWN / H.W. VETTER, CO ENG **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in a ca.1900 residential area that does not have historic district potential. The structure carries a two-lane county route over a river.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The center three arches of the nine-span bridge have metal plate lining while the other six have been coated with gunite. The bridge was widened on the west face in 1934 with metal plate and reinforced concrete arch additions. The western spandrel wall was reconstructed of stone, but laid randomly, not carefully coursed as the original eastern spandrel walls are. The bridge is an extensively altered example of stone arch technology.

INFOR MATION

Bibliography:
Leferts, H. Leedom, Jr., and David R. Piefer. Northwest New Jersey: An Inventory and History of Historic Engineering and Industry. 1979.
Mustin, M. Warren County, New Jersey, 1931. Camden, NJ: 1931.

Physical Description: The 9-span stone arch bridge is set in a residential area and has been widened to accommodate modern traffic concerns. The intrados of the widened portions of the structure are lined with metal plates at the 3 central spans, and are constructed of concrete at the 3 spans on each end. The original arches have been coated with gunite on the intrados. The eastern spandrel wall is neatly constructed of coursed rubble, but the western spandrel was randomly rebuilt. The ringstones are neatly gauged at both faces of the structure. The parapets with replacement concrete coping stones are low in comparison with the leveled roadway, approximately one foot high at the ends of the structure.

Historical and Technological Significance: The South Bridgeville Road bridge (1836) has been significantly altered and no longer retains its original design. In 1934 the bridge was widened with concrete and metal arch additions to meet modern traffic concerns. The west stone spandrel wall and parapets with concrete coping were rebuilt in a method not conforming to modern preservation standards. Although the bridge is the oldest and longest-span stone arch surviving in the county, better preserved examples exist to illustrate the type of stone arch bridge technology that was used in the county throughout the 19th century. The Historic Bridge Survey evaluated at least nine surviving stone arch bridges in Warren County including the historically and technologically significant Brugler Road over Paulins Kill (2101311, c.1860, Knowlton Township) and Stephensburg Road over Musconetcong River (2101607, 1860, Mansfield Township). The latter is rated a contributing structure to the National Register listed Miller Farmstead.

PHOTO: 164:35-37 (07/92) REVISED BY (DATE): QUAD: Belvidere

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2102307 **CO** WARREN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BUTTZVILLE ROAD OVER PEQUEST RIVER **FACILITY** BUTTZVILLE ROAD

TOWNSHIP WHITE TOWNSHIP

TYPE THRU TRUSS **DESIGN** DOUBLE INTERSECTION WARREN **MATERIAL** Steel

 # SPANS 1 **LENGTH** 108 ft **WIDTH** 17.6 ft

CONSTRUCTION DT 1902 **ALTERATION DT** 1934 **SOURCE** PLAQUE/COUNTY RECRDS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in an area of altered late-19th century structures used for residential and commercial purposes. The one-lane bridge carries a two-lane street of local traffic over a river. NJ 46 is located 500' north of the bridge.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The double-intersection Warren thru-truss bridge is supported by gunite-coated abutments with wingwalls. The riveted truss is built of angles and batten plates for diagonals and the bottom chord, with channels and cover plates for the top chord and posts. In 1934, some diagonals were strengthened with welded channels. There are also bolted repairs. Despite the modifications, the span retains much of its original fabric, including handsome railings and is a rare example of an uncommon truss type.

INFOR MATION

Bibliography:
Leferts, H. Leedom, Jr., and David R. Piefer. Northwest New Jersey: An Inventory and History of Historic Engineering and Industry. 1979.
Mustin, M. Warren County, New Jersey, 1931. Camden, NJ: 1931.

Physical Description: The 9-span stone arch bridge is set in a residential area and has been widened to accommodate modern traffic concerns. The intrados of the widened portions of the structure are lined with metal plates at the 3 central spans, and are constructed of concrete at the 3 spans on each end. The original arches have been coated with gunite on the intrados. The eastern spandrel wall is neatly constructed of coursed rubble, but the western spandrel was randomly rebuilt. The ringstones are neatly gauged at both faces of the structure. The parapets with replacement concrete coping stones are low in comparison with the leveled roadway, approximately one foot high at the ends of the structure.

Historical and Technological Significance: The South Bridgeville Road bridge (1836) has been significantly altered and no longer retains its original design. In 1934 the bridge was widened with concrete and metal arch additions to meet modern traffic concerns. The west stone spandrel wall and parapets with concrete coping were rebuilt in a method not conforming to modern preservation standards. Although the bridge is the oldest and longest-span stone arch surviving in the county, better preserved examples exist to illustrate the type of stone arch bridge technology that was used in the county throughout the 19th century. The Historic Bridge Survey evaluated at least nine surviving stone arch bridges in Warren County including the historically and technologically significant Brugler Road over Paulins Kill (2101311, c.1860, Knowlton Township) and Stephensburg Road over Musconetcong River (2101607, 1860, Mansfield Township). The latter is rated a contributing structure to the National Register listed Miller Farmstead.

PHOTO: 29:34-,164:22- (07/92) REVISED BY (DATE): QUAD: Belvidere

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US
November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2102309 **CO** WARREN **OWNER** COUNTY **MILEPOINT** 37.73

NAME & FEATURE INTERSECTED CR 519 (BELVIDERE-PHILLIPSBRG) OVER BUCKHORN CREEK **FACILITY** CR 519 (BELVIDERE-PHILLIPSBURG ROAD)

TOWNSHIP WHITE TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 26 ft **WIDTH** 30 ft

CONSTRUCTION DT 1928 **ALTERATION DT** **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** GOLDEN CONTRACTING COMPNY

SETTING / CONTEXT The bridge is located in a rural area of active farming. The structure carries a two-lane county road over a stream.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single span stringer bridge is seated on low-rise concrete abutments. The encased stringers support a concrete deck that is flanked by concrete balustrades. Beam guiderails are attached to the balustrades. The bridge is a representative example of a common type, and it is not technologically or historically distinguished.

INFOR MATION

PHOTO: 29:23A-24A (07/92) REVISED BY (DATE): QUAD: Belvidere

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2102313 **CO** WARREN **OWNER** COUNTY **MILEPOINT** 40.25

NAME & FEATURE INTERSECTED CR 519 (SOUTH BRIDGEVILLE RD) OVER POPHANDUSING CREEK **FACILITY** CR 519 (SOUTH BRIDGEVILLE ROAD)

TOWNSHIP WHITE TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 32 ft **WIDTH** 32 ft

CONSTRUCTION DT 1929 **ALTERATION DT** 1985ca **SOURCE** PLANS/COUNTY RECORDS

DESIGNER/PATENT H. W. VETTER, COUNTY ENGINEER **BUILDER** CLAUDE CRARRUP

SETTING / CONTEXT The bridge is located in rural area, with working agricultural and livestock farms. The structure carries a two-lane county route over a creek. The intersection of two county roads is a few hundred feet away.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single span stringer bridge is supported on stone and concrete abutments. The original stringers are encased in concrete and are on stone abutments. The bridge was widened ca.1985 with exposed stringers on concrete abutment extensions. The bridge railing has concrete posts and two metal pipe rails on the original side and a beam guiderail at the other. The bridge is a representative example of a common bridge type. It is not a technologically or historically distinguished structure.

INFOR MATION

PHOTO: 29:25A-26A (07/92) REVISED BY (DATE): QUAD: Belvidere

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2102335 **CO** WARREN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED HOPE-CROSSING ROAD OVER BEAVER BROOK **FACILITY** HOPE-CROSSING ROAD

TOWNSHIP WHITE TOWNSHIP

TYPE PONY TRUSS **DESIGN** WARREN **MATERIAL** Steel

 # SPANS 1 **LENGTH** 56 ft **WIDTH** 15.1 ft

CONSTRUCTION DT 1902 **ALTERATION DT** 1937 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** WYNKOOP & BRALY CO., NY

SETTING / CONTEXT The bridge is located in a wooded setting, with scattered 20th century houses. The one-lane bridge crosses a minor stream.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The rivet-connected Warren pony-truss bridge is supported on concrete abutments. Some of the built-up diagonal members have been strengthened with welded cover plates, as have the rolled floorbeams. The bottom chord has been replaced with angle sections and welded batten plates, bolted to the gusset plates at the panel points. A lattice railing is welded to the truss. The bridge is an altered example of a type that is common in the region, and is not technologically distinguished.

INFOR MATION

PHOTO: 164:3-6 (07/92) REVISED BY (DATE): QUAD: Belvidere

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2102336 **CO** WARREN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED SAREPTA ROAD OVER BEAVER BROOK **FACILITY** SAREPTA ROAD

TOWNSHIP WHITE TOWNSHIP

TYPE STONE ARCH **DESIGN** BARREL **MATERIAL** Stone

 # SPANS 3 **LENGTH** 66 ft **WIDTH** 12.9 ft

CONSTRUCTION DT 1875ca **ALTERATION DT** 1955, 1988 **SOURCE** CO. RECORDS/INSCRIPT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in an area of modern single family dwellings. It carries one lane over a stream.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The three-span stone arch bridge has been extensively altered. Ca. 1955 the piers were encased in concrete, forming cutwater piers at the upstream face. In 1988 the stone spandrel walls were insensitively repointed, and metal pipe weep holes were installed through the stone parapets at deck level. A concrete cap was added to the top of the parapets. The bridge is one of nine stone arch bridges in the county, but it is not well-preserved.

INFOR MATION

PHOTO: 164:44,1-2 (07/92) REVISED BY (DATE): QUAD: Belvidere

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2102354 **CO** WARREN **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED QUARRY ROAD OVER POPHANDUSING CREEK **FACILITY** QUARRY ROAD

TOWNSHIP WHITE TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 37 ft **WIDTH** 16 ft

CONSTRUCTION DT 1922 **ALTERATION DT** **SOURCE** COUNTY RECORDS

DESIGNER/PATENT H. W. VETTER, COUNTY ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in a wooded area with early-20th century homes nearby. The one-lane structure carries a dead-end road over a stream. The 1922 bridge replaced a lattice girder bridge built by the Wrought Iron Bridge Company of Canton Ohio.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span stringer bridge is supported by rubble-stone abutments with wingwalls that are capped with concrete. The stringers are encased except for the bottom flanges, and carry a concrete deck. The railings are metal pipe rails with concrete posts. The bridge is a representative example of a common bridge type, and is not technologically or historically distinguished.

INFOR MATION

PHOTO: 29:31A-32A (07/92) REVISED BY (DATE): QUAD: Belvidere

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2102365 **CO** WARREN **OWNER** COUNTY **MILEPOINT** 5.2

NAME & FEATURE INTERSECTED BRASS CASTLE ROAD (CR 623) OVER TRIBUTARY POPHANDUSING CREEK **FACILITY** BRASS CASTLE ROAD (CR 623)

TOWNSHIP WHITE TOWNSHIP

TYPE STONE ARCH **DESIGN** BARREL **MATERIAL** Stone

 # SPANS 1 **LENGTH** 27 ft **WIDTH** 32 ft

CONSTRUCTION DT 1875ca **ALTERATION DT** 1924, 1930 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNK./H.W.VETTER, COUNTY ENGNR **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a two-lane roadway over a stream. The surrounding structures are predominantly early-20th century residences, with a few outbuildings.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The short, skewed bridge is composed of a stone arch that spans less than 15' flanked by slab structures on concrete abutments built in 1924 and 1930. The skew of the bridge to the roadway centerline makes the span longer than 20'. The arch is visible only from the stream bed. The railings of the bridge are concrete posts with pipe metal rails. The bridge, including the undocumented arch section, is not a historically or technologically distinguished structure.

INFOR MATION

PHOTO: 29:27A-30A,186:9 (07/92) REVISED BY (DATE): QUAD: Belvidere

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2103152 **CO** WARREN **OWNER** NJDOT **MILEPOINT** 1.31

NAME & FEATURE INTERSECTED NJ 173 OVER POHATCONG CREEK **FACILITY** NJ 173

TOWNSHIP GREENWICH TOWNSHIP

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 90 ft **WIDTH** 34.8 ft

CONSTRUCTION DT 1914 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT F. W. SALMON, COUNTY ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in a wooded area with scattered residences. The structure carries a two-lane state highway with narrow shoulders over a creek.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one-span reinforced concrete deck arch bridge has concrete wingwalls. The joint line below the spandrel walls accents the arch. The spandrels are finished with a concrete curb, to which the posts of the beam guiderails are bolted on the outside face. Sandbags have been placed at the bases of the arch to protect the structure from scour. The structure is a common county bridge type, and it is not technologically or historically distinguished.

INFOR MATION

PHOTO: 169:40-42 (07/92) REVISED BY (DATE): QUAD: Bloomsbury

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2103153 **CO** WARREN **OWNER** NJDOT **MILEPOINT** 3.15

NAME & FEATURE INTERSECTED NJ 173 OVER MUSCONETCONG RIVER **FACILITY** NJ 173

TOWNSHIP GREENWICH TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 152 ft **WIDTH** 30 ft

CONSTRUCTION DT 1925 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located in a wooded area at the edge of a small cluster of mixed-20th century single family dwellings. The structure carries a two-lane state highway with narrow shoulders over the Musconetcong River, the boundary between Warren and Hunterdon Counties.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The three-span stringer bridge is supported on concrete abutments and cutwater piers. Each span of encased stringers is skewed to the others to accommodate the horizontal curve of the roadway. The concrete balustrade is of standard State Highway Department design. The bridge is a representative example of a common pre-World War II bridge type, and it is not technologically or historically distinguished.

INFOR MATION

PHOTO: 185:8-11 (07/92) REVISED BY (DATE): QUAD: Bloomsbury

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2105152 **CO** WARREN **OWNER** NJDOT **MILEPOINT** 1.5

NAME & FEATURE INTERSECTED NJ 57 OVER LOPATCONG CREEK **FACILITY** NJ 57

TOWNSHIP LOPATCONG TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 48 ft **WIDTH** 30 ft

CONSTRUCTION DT 1921 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries a two-lane state highway over a minor stream in a rural agricultural area with scattered development. Adjacent to the bridge is a mid-20th century restaurant/recreational area complex.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one-span stringer bridge bears on concrete abutments. The encased stringers support a concrete deck with standard-design concrete balustrades. A beam guiderail crosses the bridge inside the north balustrade, attached through the rectangular openings. The bridge is a representative example of the most common pre-World War II bridge type in New Jersey. It is not a technologically or historically distinguished structure.

INFOR MATION

PHOTO: 170:19-20 (07/92) REVISED BY (DATE): QUAD: Easton

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2105154 **CO** WARREN **OWNER** NJDOT **MILEPOINT** 2.6

NAME & FEATURE INTERSECTED NJ 57 OVER BRANCH OF POHATCONG CR (MERRILLS BROOK) **FACILITY** NJ 57

TOWNSHIP GREENWICH TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 37 ft **WIDTH** 29 ft

CONSTRUCTION DT 1921 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located in a rural area with active stock farms. It carries a two-lane state highway over a stream.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one-span stringer bridge sits on concrete abutments with wingwalls and is finished with typical state-designed concrete balustrades. Beam guiderails cross the bridge inside the balustrades. The bridge is a representative example of a common pre-World War II bridge type, being one of over 65 in the county. It is a technologically and historically undistinguished structure.

INFOR MATION

PHOTO: 170:17-18 (07/92) REVISED BY (DATE): QUAD: Bloomsbury

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2105159 **CO** WARREN **OWNER** NJDOT **MILEPOINT** 6.45

NAME & FEATURE INTERSECTED NJ 57 OVER BRANCH POHATCONG CREEK **FACILITY** NJ 57

TOWNSHIP FRANKLIN TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 36 ft **WIDTH** 30 ft

CONSTRUCTION DT 1922 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located in a rural area, adjacent to a ca.1800 homestead with a handsome stone building that may have been a mill. Some newer buildings are also nearby. The bridge carries a two-lane state route over a small stream.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one-span stringer bridge bears on concrete abutments with stone wingwalls on the downstream side. The encased stringers support a concrete deck that is framed by typical State Highway Department-design concrete balustrades. Beam guiderails cross in front of the balustrades. The bridge is a representative example of a common pre-World War II type, and it is not technologically or historically distinguished.

INFOR MATION

PHOTO: 173:32A-33A (07/92) REVISED BY (DATE): QUAD: Bloomsbury

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2105163 **CO** WARREN **OWNER** NJDOT **MILEPOINT** 8.81

NAME & FEATURE INTERSECTED NJ 57 OVER BRASS CASTLE CREEK **FACILITY** NJ 57

TOWNSHIP WASHINGTON TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 26 ft **WIDTH** 30 ft

CONSTRUCTION DT 1921 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located in a rural area with mixed-age residential structures from the 20th century. It carries a two-lane state route with narrow shoulders across a minor stream.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one-span stringer bridge is set on concrete abutments with wingwalls. The encased stringers support a concrete deck with concrete balustrades that are a typical State Highway Department design. Beam guiderails have been added along the inside faces of the balustrades. The structure is a representative example of the most common pre-World War II bridge type in the state. It is not technologically or historically distinguished.

INFOR MATION

PHOTO: 173:37A-38A (07/92) REVISED BY (DATE): QUAD: Bloomsbury

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2106150 **CO** WARREN **OWNER** RAILROAD **MILEPOINT** 66.84

NAME & FEATURE INTERSECTED OLD ROAD BRANCH RR (HAMPTON BRANCH) OVER NJ 57 **FACILITY** OLD ROAD BRANCH RAILROAD

TOWNSHIP WASHINGTON BOROUGH

TYPE ARCH **DESIGN** ELLIPTICAL **MATERIAL** Concrete

 # SPANS 1 **LENGTH** 59 ft **WIDTH** 75 ft

CONSTRUCTION DT 1907 **ALTERATION DT** **SOURCE** INSCRIPTION/PLANS

DESIGNER/PATENT DL&W RR OFFICE OF ENGINEER **BUILDER**

SETTING / CONTEXT The bridge is located in a residential area dating to the late-19th century. It crosses a two-lane state highway, carrying a two-track right-of-way at the narrowing of the line from several tracks down to one track. The line was developed as the Warren Railroad and was used as the main line of the Delaware Lackawanna & Western in New Jersey prior to the construction of the New Jersey Cutoff.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible. Delaware, Lackawanna & Western Railroad Old Main Line Historic District, Eligible. Contributing.

CONSULT DOCUMENTS SHPO Opinion 09/24/96, Letter 03/12/01.

SUMMARY The 1-span deck arch bridge has skewed wingwalls retaining fill that was used to elevate the line through the urban area. It has low curbs at the top of the spandrel walls to prevent ballast from leaving the deck. Built by the DL&W Railroad in 1907, this structure can be seen as a significant precursor of the DL&W New Jersey Cutoff, built 1907 - 1911. The DL&W was important in the adaptation and acceptance of the application of concrete technology to railroad usage. Railroad usage of concrete technology initially lagged behind roadway usage because engineers were uncertain about the material's properties -- specifically how it would react under the enormous stresses that occur where a massive dynamic load (train) crosses a structure. This bridge is individually eligible for listing in the National Register of Historic Places under Criterion C as an early example of the use of concrete arch technology by the railroad industry, and as a contributing element of the Old Main Delaware Lackawanna & Western Historic District under Criteria A and C.

INFOR MATION

PHOTO: 177:10-13 (08/92) REVISED BY (DATE): QUAD: Washington

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2106151 **CO** WARREN **OWNER** NJDOT **MILEPOINT** 11.11

NAME & FEATURE INTERSECTED NJ 57 OVER SHABBACONG CREEK **FACILITY** NJ 57

TOWNSHIP WASHINGTON BOROUGH

TYPE CULVERT, STRINGER **DESIGN** **MATERIAL** Concrete, Steel

 # SPANS 2 **LENGTH** 27 ft **WIDTH** 44 ft

CONSTRUCTION DT 1907 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in a late-19th century residential area with altered buildings. The bridge continues as a culvert below a 40' wide two-lane state route with a shoulder and a sidewalk and an intersecting two-lane residential street with one sidewalk. The structure carries the state road over a creek and under a railroad bridge.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span reinforced concrete culvert bridge curves below the roadway, and is joined by a one-span stringer bridge at its outlet. The inlet of the skewed culvert is marked by a concrete parapet along the sidewalk of NJ 57. The skewed stringer span outlet has a metal railing along the sidewalk. The exposed stringers sit on concrete abutments. The bridge is not technologically or historically distinguished.

INFOR MATION

PHOTO: 177:14,16;185:20-21 (08/92) REVISED BY (DATE): QUAD: Washington

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2106153 **CO** WARREN **OWNER** NJDOT **MILEPOINT** 12.15

NAME & FEATURE INTERSECTED NJ 57 OVER CONRAIL (DL&W RR WASHINGTON SECONDARY) **FACILITY** NJ 57

TOWNSHIP WASHINGTON TOWNSHIP

TYPE RIGID FRAME **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 34 ft **WIDTH** 173 ft

CONSTRUCTION DT 1934 **ALTERATION DT** **SOURCE** INSCRIPTION/PLANS

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge carries a 2-lane state highway with shoulders and sidewalks over a single active track of ConRail's Washington Secondary. The line was developed by the Morris and Essex Railroad around 1865, and was taken over by the Delaware Lackawanna & Western RR on January 1, 1869, providing them with access to Hoboken ports on the Hudson River. The bridge is located in Port Colden, on the Morris Canal right-of-way. The structure is not historically related to the canal or the village.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Not Individually Eligible. Delaware, Lackawanna & Western Railroad Old Main Line Historic District, Eligible. Contributing.

CONSULT DOCUMENTS SHPO Opinion 09/24/96, Letter 03/12/01.

SUMMARY The one-span reinforced concrete rigid frame bridge is flanked by scored concrete wingwalls. The skew of the structure necessitated sawtooth design cantilevered slabs at each end of the span. Standard design concrete balustrades are at each face of the structure. The bridge is a representative example of common pre-World War II technology, and it is not historically distinguished. The state highway dept. was building rigid frame bridges as early as 1932. The bridge is not individually eligible for listing in the National Register of Historic Places, but is a contributing element of the Old Main Delaware Lackawanna & Western Railroad Historic District under Criteria A and C, and is in or abutting but not contributing to the Morris Canal Historic District.

INFOR MATION

PHOTO: 178:28-29,31 (08/92) REVISED BY (DATE): QUAD: Washington

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2106156 **CO** WARREN **OWNER** NJDOT **MILEPOINT** 13.96

NAME & FEATURE INTERSECTED NJ 57 OVER BRANCH OF MUSCONETCONG RIVER **FACILITY** NJ 57

TOWNSHIP MANSFIELD TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 25 ft **WIDTH** 30 ft

CONSTRUCTION DT 1924 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located in a residential area where 20th century houses now predominate over a cluster of 19th century ones in the village of Anderson. The bridge carries NJ 57, a two-lane road with narrow shoulders over a stream that drains into the Musconetcong River.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one-span stringer bridge bears on concrete abutments with flared wingwalls. The stringers are encased completely in concrete. The balustrades are typical of State Highway Department designs, with a beam guiderail attached to it. The short span is a representative example of a common bridge type, and is one of over 65 extant pre-World War II stringer bridges in Warren County. It is not technologically or historically distinguished.

INFOR MATION

PHOTO: 178:32-33 (07/92) REVISED BY (DATE): QUAD: Washington

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2106158 **CO** WARREN **OWNER** NJDOT **MILEPOINT** 15.53

NAME & FEATURE INTERSECTED NJ 57 OVER BRANCH OF MUSCONETCONG RIVER **FACILITY** NJ 57

TOWNSHIP MANSFIELD TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 25 ft **WIDTH** 30 ft

CONSTRUCTION DT 1924 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located in an area of 19th and 20th century residences that line NJ 57. It carries the two-lane state route over a creek that drains into the Musconetcong River.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one-span stringer bridge is set on concrete abutments. The encased stringers support a concrete deck that is framed by concrete balustrades. The standard-design railings have beam guiderails across the bridge. The structure is a representative example of the most common pre-World War II bridge type in New Jersey. It is not technologically or historically distinguished.

INFOR MATION

PHOTO: 179:3A-4A (08/92) REVISED BY (DATE): QUAD: Washington

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2106164 **CO** WARREN **OWNER** NJDOT **MILEPOINT** 18.12

NAME & FEATURE INTERSECTED NJ 57 OVER HANCES BROOK **FACILITY** NJ 57

TOWNSHIP MANSFIELD TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 25 ft **WIDTH** 30 ft

CONSTRUCTION DT 1924 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located in a rural area, with fields and trees along a stream, and a few residences along NJ 57. The span carries the two-lane state route over a stream that outlets into the Musconetcong River.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The short one-span stringer bridge rests on concrete abutments. The encased stringers carry the concrete deck and the standard-design concrete balustrades. Beam guiderails have been bolted to the balustrades. The bridge is a representative example of a common bridge type, and is one of over 65 extant pre-World War II stringer bridges in Warren County. It is not technologically or historically distinguished.

INFOR MATION

PHOTO: 179:36A-37A (08/92) REVISED BY (DATE): QUAD: Hackettstown

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2106165 **CO** WARREN **OWNER** NJDOT **MILEPOINT** 20.44

NAME & FEATURE INTERSECTED NJ 57 OVER TROUT BROOK **FACILITY** NJ 57

TOWNSHIP MANSFIELD TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 24 ft **WIDTH** 30 ft

CONSTRUCTION DT 1924 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located in a wooded area with 19th and 20th century residences lining NJ 57. It carries the two-lane state route over a creek that outlets into the Musconetcong River.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The stringer bridge is supported on concrete abutments with wingwalls. The stringers are completely encased, with a plain fascia below standard State Highway Department-designed concrete balustrades. Beam guiderails are fastened to the inside face of the balustrades. The structure is a representative example of its type, and is one of over 65 extant pre-World War II stringer bridges in Warren County. It is not technologically or historically distinguished.

INFOR MATION

PHOTO: 179:33A-35A (08/92) REVISED BY (DATE): QUAD: Hackettstown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2107150 **CO** WARREN **OWNER** RAILROAD **MILEPOINT** 80.46

NAME & FEATURE INTERSECTED OLD ROAD BRANCH RR RIGHT-OF-WAY OVER US 46 **FACILITY** OLD ROAD BRANCH RR RIGHT-OF-WAY

TOWNSHIP KNOWLTON TOWNSHIP

TYPE SLAB **DESIGN** CONTINUOUS **MATERIAL** Reinforced Concrete

 # SPANS 4 **LENGTH** 106 ft **WIDTH** 29 ft

CONSTRUCTION DT 1932 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT DL&W RR OFFICE OF ENGINEER **BUILDER**

SETTING / CONTEXT The bridge carries an abandoned right-of-way wide enough for two tracks over a two-lane highway with shoulders. The surrounding area has sparse post-World War II commercial development. The right-of-way was developed by the Delaware Lackawanna & Western RR in the early 1850s as the Warren Railroad. It served as their connection from the Delaware River to the CNJ in Hampton, and after 1868 to the Morris & Essex Railroad in Washington.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The four-span concrete slab bridge bears on concrete piers and abutments. The pier bents have four columns and arched struts. The slab deck is covered with ballast, and is flanked by concrete parapets that have been detailed to look like the typical State-designed concrete balustrades of the 1930s and early 1940s. The bridge is not technologically or historically distinguished, as it is a type commonly used for railroad overpasses.

INFOR MATION

PHOTO: 164:10-11,13 (07/92) REVISED BY (DATE): QUAD: Portland

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2107154 **CO** WARREN **OWNER** NJDOT **MILEPOINT** 7.3

NAME & FEATURE INTERSECTED US 46 WB OVER BEAVER BROOK **FACILITY** US 46 WESTBOUND

TOWNSHIP WHITE TOWNSHIP

TYPE THRU GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 72 ft **WIDTH** 30 ft

CONSTRUCTION DT 1924 **ALTERATION DT** **SOURCE** INSCRIPTION/PLANS

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located in a wooded area, with some late-20th century commercial structures along the busy highway. The bridge carries two lanes of one-directional traffic over a stream. An adjacent, newer structure carries traffic in the opposite direction.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The thru-girder bridge sits on reinforced concrete abutments that were extended to support the more recent eastbound bridge. The encased girder forms the parapet, with beam guiderails crossing the bridge at the curblines. The floorbeams are also encased. The structure is a representative example of a common bridge type, and it is not technologically or historically distinguished.

INFOR MATION

PHOTO: 164:38-40 (07/92) REVISED BY (DATE): QUAD: Belvidere

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2107156 **CO** WARREN **OWNER** NJDOT **MILEPOINT** 0.72

NAME & FEATURE INTERSECTED US 46 OVER PAULINS KILL **FACILITY** US 46

TOWNSHIP KNOWLTON TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 174 ft **WIDTH** 91.2 ft

CONSTRUCTION DT 1933 **ALTERATION DT** 1952 **SOURCE** INSCRIPTION/PLANS

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located in a wooded area, undeveloped except for the highway interchange north of the river. The structure carries a four-lane highway with a mountable median, two shoulders and two sidewalks over Paulin's Kill, a wide, rocky waterway.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The three-span stringer bridge is supported by concrete abutments and piers. The western, original half has encased stringers, but the eastern half, which was placed in 1952, has exposed stringers. When the bridge was widened, the original concrete balustrade was replicated at the new face. The bridge is not technologically or historically distinguished, being a representative example of a common pre-World War II bridge type.

INFOR MATION

PHOTO: 165:8-9 (07/92) REVISED BY (DATE): QUAD: Portland

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2108151 **CO** WARREN **OWNER** NJDOT **MILEPOINT** 10.16

NAME & FEATURE INTERSECTED US 46 OVER BRANCH OF PEQUEST RIVER **FACILITY** US 46

TOWNSHIP WHITE TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 51 ft **WIDTH** 40 ft

CONSTRUCTION DT 1927 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located adjacent to an early-20th century structure now used as a restaurant. Other residential buildings are nearby. The bridge carries a two-lane highway over a stream discharging into the Pequest River about 50' downstream from the bridge.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one-span concrete slab bridge is supported by scored concrete abutments with wingwalls. The bridge has an encased stringer at each fascia supporting the standard design concrete balustrades. It is a representative example of a common bridge type. It is not a technologically or historically distinguished structure, being one of over 10 pre-World War II slab bridges in the county.

INFOR MATION

PHOTO: 164:31-32 (07/92) REVISED BY (DATE): QUAD: Washington

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2108155 **CO** WARREN **OWNER** NJDOT **MILEPOINT** 16.55

NAME & FEATURE INTERSECTED US 46 OVER HUDSON BRANCH (CONRAIL) **FACILITY** US 46

TOWNSHIP INDEPENDENCE TOWNSHIP

TYPE THRU GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 199 ft **WIDTH** 30 ft

CONSTRUCTION DT 1924 **ALTERATION DT** 1952 **SOURCE** INSCRIPTION/PLANS

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located adjacent to a well-rehabilitated ca.1885 Stick Style railroad station (SR,NR) that serviced Great Meadows. It carries a sidewalk and a 2-lane US highway that curves to cross a single inactive track of the Lehigh & Hudson RR. The line was developed in the 1880s as a connecting route for Lehigh Valley railroads of eastern Pennsylvania to the Hudson River. The line followed the Pequest valley through Warren County, and met with the Sussex Railroad in Sussex County.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 05/07/91

SUMMARY The three-span encased thru-girder bridge is supported by concrete stub abutments and pier columns which are set on plinths. The encased floorbeams directly support the concrete deck. The sidewalk was added in 1952, with connection brackets welded and bolted to the exposed top flange of a girder. The pedestrian barrier is corrugated metal fixed to angles, and the thru girders line the roadway. The bridge is a representative example of a common pre-WWII type and is not distinguished.

INFOR MATION

PHOTO: 184:44,1-4 (08/92) REVISED BY (DATE): QUAD: Blairstown

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2108157 **CO** WARREN **OWNER** NJDOT **MILEPOINT** 17.2

NAME & FEATURE INTERSECTED US 46 OVER PEQUEST RIVER **FACILITY** US 46

TOWNSHIP INDEPENDENCE TOWNSHIP

TYPE THRU GIRDER **DESIGN** PARTIALLY ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 112 ft **WIDTH** 30 ft

CONSTRUCTION DT 1923 **ALTERATION DT** 1962 **SOURCE** INSCRIPTION/PLANS

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located at the west edge of the village of Vienna, which is dominated by altered 19th century homes. The structure carries a two-lane US highway with narrow shoulders and a sidewalk over a river.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS DOE 10/03/90

SUMMARY The two-span thru-girder bridge is supported by scored and slightly skewed concrete abutments and piers. The floorbeams and the bottom flanges of the girders are encased in concrete. The girders extend just a few inches above the deck, and beam guiderails line the roadway between concrete end posts. The cantilevered sidewalk was added in 1962, and is connected to the stiffeners of the girder, and a chain link fence is the pedestrian barrier. The bridge is a common type, and is not distinguished.

INFOR MATION

PHOTO: 184:8,185:23-26 (08/92) REVISED BY (DATE): QUAD: Washington

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2108162 **CO** WARREN **OWNER** NJDOT **MILEPOINT** 21.8

NAME & FEATURE INTERSECTED US 46 OVER MUSCONETCONG RIVER **FACILITY** US 46

TOWNSHIP HACKETTSTOWN TOWN

TYPE THRU GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 127 ft **WIDTH** 30 ft

CONSTRUCTION DT 1924 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located in a commercial area of 19th and 20th century buildings in Hackettstown. It carries a busy two-lane US highway and one sidewalk over the Musconetcong River, the boundary between Warren and Morris Counties.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span concrete encased thru-girder bridge bears on scored concrete abutments and a cutwater pier. The floorbeams and sidewalk brackets are also encased, as are the longitudinal diaphragm at the center of the bridge and the sidewalk stringers. The original railing is metal, with concrete posts at the floorbeams. The structure is a representative example of a common pre-World War II bridge type, and it is not technologically or historically distinguished.

INFOR MATION

PHOTO: 179:25A-27A (08/92) REVISED BY (DATE): QUAD: Hackettstown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2110154 **CO** WARREN **OWNER** RAILROAD **MILEPOINT** 67.0

NAME & FEATURE INTERSECTED WASHINGTON SECONDARY RR OVER NJ 31 **FACILITY** WASHINGTON SECONDARY OF DL&W RR

TOWNSHIP WASHINGTON BOROUGH

TYPE SLAB **DESIGN** CONTINUOUS **MATERIAL** Reinforced Concrete

 # SPANS 4 **LENGTH** 95 ft **WIDTH** 29.5 ft

CONSTRUCTION DT 1931 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT DL&W RR OFFICE OF ENGINEER **BUILDER**

SETTING / CONTEXT The bridge is located in an urban area of post-World War II commercial development and a late-20th century bulk material handling plant. It carries one track in a two-track right-of-way over a four-lane state highway. The line was developed around 1865 by the Morris & Essex Railroad as an extension of their line from Hackettstown to Phillipsburg. It was later leased by the DL&W, who took full control on January 1, 1869.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The four-span concrete slab bridge is continuous over the two roadway spans, with short spans on each end. The slabs are supported by concrete abutments and three-column bents with arched struts. A concrete parapet with chamfered-top posts encloses the ballasted deck that is wide enough for two sets of tracks. The structure is one of over 10 pre-World War II slab bridges in Warren County, and it is not technologically or historically distinguished.

INFOR MATION

PHOTO: 176:39A-41A (08/92) REVISED BY (DATE): QUAD: Washington

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2110155 **CO** WARREN **OWNER** NJDOT **MILEPOINT** 42.82

NAME & FEATURE INTERSECTED NJ 31 OVER SHABBECONG CREEK **FACILITY** NJ 31

TOWNSHIP WASHINGTON BOROUGH

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 39 ft **WIDTH** 119 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** INSCRIPTION/PLANS

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located in a post-World War II commercial area along a busy four-lane state highway. The bridge carries the highway and two sidewalks over a creek.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed one-span slab bridge sits on concrete abutments. Flared concrete wingwalls are at all four corners of the structure. The plain fascias are marked only by the inscribed date, with posts carrying the double beam guiderail set in the concrete. The structure is one of over 10 extant pre-World War II slab bridges in Warren County. It is not technologically or historically distinguished.

INFOR MATION

PHOTO: 185:16-17 (08/92) REVISED BY (DATE): QUAD: Washington

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2111150 **CO** WARREN **OWNER** RAILROAD **MILEPOINT** 67.02

NAME & FEATURE INTERSECTED OLD ROAD BRANCH RR (HAMPTON BRANCH) OVER NJ 31 **FACILITY** OLD ROAD BRANCH RR (HAMPTON BRANCH)

TOWNSHIP WASHINGTON BOROUGH

TYPE SLAB **DESIGN** CONTINUOUS **MATERIAL** Reinforced Concrete

 # SPANS 4 **LENGTH** 148 ft **WIDTH** 28.9 ft

CONSTRUCTION DT 1931 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge is located in an area of 20th century commercial development. The bridge crosses the Washington's main thoroughfare, a four-lane state highway. It carries one inactive track in a right-of-way wide enough for two tracks. The line was developed in the 1850s by the Delaware Lackawanna & Western RR as the Warren Railroad, its connection from the Delaware River to the CNJ and after 1868 to the Morris & Essex.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The four-span slab bridge is set on three concrete pier bents and abutments. The bents have four columns each, with arched struts between them, and a cornice across the top. The slab is continuous over the two center spans, with the short end spans simply supported. Concrete parapets enclose the ballasted deck. The structure is not a technologically innovative structure, being one of over 10 pre-World War II slab bridges in Warren County. It is not historically distinguished.

INFOR MATION

PHOTO: 177:6-8 (08/92) REVISED BY (DATE): QUAD: Washington

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2111151 **CO** WARREN **OWNER** NJDOT **MILEPOINT** 44.51

NAME & FEATURE INTERSECTED NJ 31 OVER POHATCONG CREEK **FACILITY** NJ 31

TOWNSHIP OXFORD TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 32 ft **WIDTH** 40 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** INSCRIPTION/PLANS

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located in a wooded area with scattered residential and commercial structures along the highway. It carries a busy two-lane state route with shoulders over a minor stream.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one-span stringer bridge is seated on concrete abutments with flared wingwalls. The stringers are encased, with a plain fascia below the standard State-designed concrete balustrade with attached beam guiderails. The skewed structure is a representative example of the most common pre-World War II bridge type in New Jersey. It is not a technologically or historically distinguished bridge.

INFOR MATION

PHOTO: 178:26-27 (08/92) REVISED BY (DATE): QUAD: Washington

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2111154 **CO** WARREN **OWNER** NJDOT **MILEPOINT** 46.87

NAME & FEATURE INTERSECTED NJ 31 OVER FURNACE BROOK **FACILITY** NJ 31

TOWNSHIP OXFORD TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel, Concrete,

 # SPANS 1 **LENGTH** 30 ft **WIDTH** 82 ft

CONSTRUCTION DT 1920 **ALTERATION DT** 1953 **SOURCE** PLANS

DESIGNER/PATENT H. W. VETTER, COUNTY ENGINEER **BUILDER**

SETTING / CONTEXT The bridge is located at the intersection of a state highway and local roads. The large intersection is surrounded by 19th and 20th century commercial structures, and lies within the boundaries of the Oxford Historic District. The period of significance of the State Register district includes the years of 1741-1930, when the iron industry in the area was prospering. There was mining and furnace blasting dominating the town during those years.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Listed. Oxford Industrial Historic District 08/27/1992. Noncontributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single span bridge is a combination of several structures and has been altered such that although within the time period and boundaries of the Oxford Historic District it is not a contributing structure. The 1920 bridge was a steel stringer on concrete abutments built near a short-span stone arch bridge (c.1875) carrying an adjacent street. In 1953 a concrete slab was built between the two bridges to form a larger intersection of the two roads. The bridge is not historically distinguished.

INFOR MATION

Bibliography:
Bridge Files and Plans, No. 2111154. NJDOT. 1920, 1953.
"Oxford Industrial District." National Register Nomination. NJ SHPO. 1992.

Physical Description: The single-span bridge is a composite of stone arch, steel stringer, and reinforced-concrete slab construction. The oldest northern portion of the bridge is an approximately 19'-span stone arch (c.1875) that carries Mill Street into the intersection with NJ 31. The southern end is a skewed 30'-span encased steel stringer (1920) built from approximately 18' to 53' upstream from the stone arch. The middle section of the bridge is a reinforced concrete slab infill (1953) connecting the stone arch and steel stringer portions to form a larger intersection. A concrete post and pipe railing remains at the face of the steel stringer, and a stone parapet at the face of the arch.

The stone arch has been repeatedly repaired and repointed. Portions of the wing walls, spandrel walls, and parapets that were originally coursed have been replaced with uncoursed field stone.

Historical and Technological Significance: The bridge, which has been significantly altered and lacks integrity, is not individually eligible and does not contribute to the Oxford Industrial Historic District. The historic district's areas of significance include industry, community development, and rail transportation, and primarily focus on the local iron furnace and foundry and its various phases of growth and decline. The older portions of the bridge fall within the district's period of significance (1741-1930), but are not well-preserved. Highway transportation systems are not a major theme of the historic district, and the NJ 31 right-of-way carried by the bridge's steel stringer portion was not developed until 1920. The bridge is not directly related to the town's historic landscape as it grew up around the iron industry. The factories shut down in the 1920s, and the construction of the state highways is not an important story to the impact of the iron industry's decline on the community's development. The bridge is not a contributing resource to the historic district.

Another bridge in the historic district, Washington Avenue over Furnace Brook (2101719, c.1910, Oxford Township), is a well-preserved steel stringer with original lattice railings. It carries the town's historic main thoroughfare over Furnace Brook and is rated a contributing structure.

PHOTO: 177:36-39 (08/92) REVISED BY (DATE): QUAD: Washington

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2111155 **CO** WARREN **OWNER** NJDOT **MILEPOINT** 48.95

NAME & FEATURE INTERSECTED NJ 31 OVER PEQUEST RIVER AND ABANDONED RAILROAD **FACILITY** NJ 31

TOWNSHIP WHITE TOWNSHIP

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 2 **LENGTH** 116 ft **WIDTH** 30 ft

CONSTRUCTION DT 1922 **ALTERATION DT** **SOURCE** PLAQUE/PLANS

DESIGNER/PATENT H. W. VETTER, COUNTY ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in a wooded area with a few mid-20th century commercial structures. It carries a busy two-lane state route over a river and an abandoned railroad right-of-way from the Lehigh and Hudson River RR. The line was developed in the 1880s, connecting the Lehigh Valley in Pennsylvania with the Hudson River via the Sussex Railroad and existing railroads on the west side of the Delaware River. The route follows the Pequest River valley through Warren County.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span reinforced concrete deck arch bridge is a high-rise structure. The arches, piers and spandrel walls are scored below the concrete balustrade. The posts of the balustrade are paneled, with a plaque noting the dual funding by the State and the Lehigh and Hudson River Railroad, though it was designed by the county engineer. The bridge is one of over 15 extant pre-World War II reinforced concrete deck arches in Warren County, and is not technologically or historically distinguished.

INFOR MATION

PHOTO: 164:27-30 (07/92) REVISED BY (DATE): QUAD: Belvidere

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2114159 **CO** WARREN **OWNER** RAILROAD **MILEPOINT** 73.17

NAME & FEATURE INTERSECTED DL&W RR NJ CUT-OFF OVER I-80, DELAWARE RIVER **FACILITY** DL&W RR NEW JERSEY CUT-OFF (MP 73.17)

TOWNSHIP KNOWLTON TOWNSHIP

TYPE OPEN SPANDREL ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 9 **LENGTH** 1450 ft **WIDTH** 28 ft

CONSTRUCTION DT 1911 **ALTERATION DT** **SOURCE** RR RECORDS

DESIGNER/PATENT DL&W RR OFFICE OF ENGINEER **BUILDER** SMITH, MCCORMICK CO.

SETTING / CONTEXT The Delaware River Viaduct of the DL&W RR's New Jersey Cutoff crosses a five-lane interstate highway and the Delaware River. The right-of-way is abandoned. It is wide enough for two tracks at this point. Its construction was a major engineering accomplishment, and is a significant element in the development of transportation in northwestern New Jersey. Massive cuts, fills and viaducts were built to eliminate extreme grade changes and curves for trains travelling across New Jersey.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Individually Eligible. Agreed Potential Historic District. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 9-span reinforced concrete viaduct has 7 open-spandrel arch spans. The elliptical arches are supported on hollow piers. There are 8 spandrel arches in the 120' end spans and 10 arches per span over the river (150'per span). The deck is enclosed by a concrete post and metal pipe railing. The nearly complete viaduct is an individually technologically distinguished example of its bridge type, and it is also significant for its historical association with the important NJ Cut-Off of the DL&W RR.

INFOR MATION

BIBLIOGRAPHY:

Wheaton, F.L., "The New Cut-off Line of the Lackawanna Railroad", Engineering News, Vol.60, No.7, August 13, 1908.
Short summary of DL&W Cut-off, Engineering News, Vol.60, No.3, July 16, 1908. pg.72.
"Some Concrete Culverts and Small Bridges on the Slateford-Hopatcong Cut-off of the Delaware, Lackawanna & Western R.R.", Engineering News, Vol.62, No.14, September 30, 1909.
Condit, Carl W., American Building Art The Twentieth Century, 1961.
Taber, Thomas Townsend, The Delaware, Lackawanna & Western Railroad in the Nineteenth Century. 1977.
Taber, T.T. and Taber, T.T. III, The Delaware, Lackawanna & Western Railroad in the Twentieth Century, Vols. I and II. 1980.
Lefferts, H. Leedom Jr., and Piefer, David R., Northwest New Jersey: An Inventory and History of Historic Engineering and Industry. 1979.

Physical Description: The 9-span reinforced concrete viaduct has 7 open spandrel elliptical arch spans and 2 barrel arch spans at the west end. The 1450' long structure has 5 spans of 150' and 2 spans of 120'. The longer spans have ten spandrel arches per span, but the shorter spans have only eight. The fascias of the bridge are not finely detailed, though the piers have stylized pilasters. The railings are composed of concrete posts and 2-high metal pipe rails, with parapet-enclosed refuge bays at the piers. The ballasted deck no longer carries tracking, and the abandonment of the line has allowed vegetation to grow through the ballast. The concrete is deteriorating in some areas of the bridge due to the lack of maintenance.

Historical and Technological Significance: The New Jersey Cut-Off, built in 1908-1911, is historically and technologically distinguished in the areas of engineering and transportation (Criteria A, C). The cut-off is an important engineering accomplishment of the early 20th century. The Delaware, Lackawanna & Western RR (DL&W) designed and built the line to improve the efficiency of train travel across the mountainous terrain of northwestern New Jersey in Warren, Sussex, and Morris counties. The design and construction of a railroad that rises and falls just eleven feet over its length of 28.45 miles while crossing the mountains and valleys of northwestern New Jersey is remarkable even today. The decision to use reinforced concrete exclusively for all structures along the route was a pioneering action that attracted the attention of the engineering profession. The railroad's use of reinforced concrete did much to prove the material to be as strong and durable as the engineers of the early-20th century had anticipated. The DL&W also made full use of the moldable qualities of the material, designing not just functional structures, but also aesthetically pleasing ones that enhance the beauty of the railroad.

Sixteen structures are included in the NJDOT Historic Bridge Survey, but other structures, including viaducts, tunnels, and stations, were observed within Warren and Sussex counties. The structures not included in this survey appear to have integrity consistent with those bridges and tunnels that are included.

The New Jersey Cutoff is the culmination of over 55 years of efforts by the company to improve its route across New Jersey to New York City. The Delaware, Lackawanna and Western Railroad (DL&W), composed of a network of smaller railroads in Pennsylvania, New York and New Jersey, was formed in 1853 for the purpose of moving anthracite coal from the mining regions of northeastern Pennsylvania to market locations. It started from the merger of the Liggett's Gap RR and the Delaware & Cobbs Gap RR, which had been chartered and developed around 1850 by parties interested in carrying the coal to the Erie RR to the west and to the Delaware River to the east.

As the anthracite coal mining industry grew, so did the desire to increase the access to markets. In reaching to the east the DL&W needed a connection in New Jersey. They incorporated the Warren Railroad in the 1851 to carry trains from the Delaware River at Columbia (Warren County, NJ) to Central Railroad of New Jersey tracks in Hampton (Hunterdon County, NJ). From there the coal could be moved eastward to Elizabethport (near Newark, NJ). Commuters also traveled this route to get to New York City. In the late 1860s the DL&W became dissatisfied with the CNJ connections and sought their own access to the New York markets. In 1868 they leased the Morris & Essex RR, which was developed in the 1830s and 1840s in Morris, Essex and Hudson counties and the 1850s in Warren County. The M&E crossed New Jersey from Hoboken to Phillipsburg on the Delaware River.

Though the DL&W controlled several railroads (like the M&E, Warren, Valley, etc.), each was operated separately until 1899, when new DL&W president William Truesdale centralized control of the company. This move allowed for increased efficiency for the railroad as a

whole. In addition to the reorganization, Truesdale undertook an ambitious plan to modernize the routes (All background information gathered from Taber, 1977).

In seeking a more efficient, less circuitous route to replace the old 1851 Warren Railroad right-of-way, the DL&W considered three plans to build a completely new route (Taber and Taber, 1980:34-36). The plan chosen was a completely new line that would include massive cuts and fills to virtually eliminate grade changes. The existing line was nearly 40 miles long, had 57 curves comprising almost 13 miles of track, and a maximum grade of 60.2 feet per mile with a total rise and fall of 248 feet. The new layout, known as the New Jersey Cut-Off, limited the number and degree of curves and saved over 11 miles of track from the circuitous old line. This was the most expensive choice, costing $11,065,511.43 when completed (Taber and Taber, 1980:39), but the anticipated benefits for the railroad outweighed the cost.

Beginning in 1908 and under the direction of DL&W Chief Engineer George Ray, layout and design of the cut-off began. The line was to be 28.45 miles long, with a total rise and fall of just 11 feet and less than 5 miles of curved track. The new route would require 73 structures, including two massive viaducts, twelve overhead highway bridges and numerous crossings of roads and minor watercourses. Over 14 million cubic yards of both cut and fill were needed to create the relatively flat crossing of the hills and valleys of northwestern New Jersey (Taber and Taber, 1980:36).

Mr. Ray decided that reinforced concrete would be used for all structures along the route. This was the first time such a decision was made, causing the nickname of the "reinforced concrete railroad" to be used by the engineering profession when discussing the cut-off (Taber and Taber, 1980:36). Reinforced concrete was a state-of-the-art building material with yet unknown ultimate capabilities. It was thought to be as strong and durable as stone, and seemingly more permanent than wood or even steel.

Uncommon methods were used for the construction of the fills along the route. While the traditional method of building a wooden trestle to run dumping trains on was used for most fills, tracking was hung from suspended cables for the fills of greater magnitude. Dumping trains would carry fill onto the suspended tracks and dump the fill material from there. Most of the fill used on the cutoff was taken from the many cuts that were made, but even that was not enough. The DL&W bought 760 acres of farm land from which the contractors could dig additional fill. Five million pounds of dynamite was used to make the cuts. The Pequest Fill (Milepoint 55.85, Green Township, Sussex County) was the largest along the cut-off and in 1908 was claimed to be the "largest railway embankment ever made" (Engineering News, 1908:72). It was over 3 miles long and was up to 140 feet high. Over 6.5 million cubic yards of fill were necessary to reach the proper grade on this fill (Taber and Taber, 1980:36).

The DL&W chose to use similar structures for similar uses along the line. Where highway bridges were needed to cross their tracks, they designed reinforced concrete deck arch bridges, a bridge type that was capable of relatively long spans while providing dynamic and graceful forms. At least eleven deck arches were built in New Jersey, (1900G12, 1900G13, 1900K07, 1900C17, 2153166, 2153165, 2153164, 2153163, 2153162, 2153161, 2153160), all of them single span structures with one of two types of balustrades. Though design adjustments had to be made for roadway alignment and foundation conditions, the deck arch bridges are very similar structures.

Reinforced concrete arch tunnels were constructed where the cut-off crossed over roads or small waterways. These structures often supported high fill embankments as the cut-off crossed a valley. Over 35 of these structures were built along the line, and several of them are included in the Historic Bridge Survey (Wasigan and Simpson roads in Warren County, 2117152). Slab-roofed tunnels and box culverts were also built to carry the right-of-way over roads and streams.

The largest structures along the line were the two multi-span viaducts; the Delaware River Viaduct (2114159) and the Paulins Kill Viaduct (Milepoint 70.63, Knowlton Twp.). Both are open spandrel arch bridges that span valleys and larger water courses. The 9-span Delaware River Viaduct crosses the river as well as the highways that parallel it on both sides. It is 1,450 feet long and carries trains 65 feet above the river. The nine span structure has seven open spandrel arches and two deck arch approach spans on the Pennsylvania end. The 7-span Paulins Kill Viaduct in Hainesburg (Warren County) is 1100 feet long, but it is more graceful and magnificent as it rises 115 feet above the valley floor. It passes over the Paulins Kill River, the New York, Susquehanna and Western Railroad and the valley they run through. It was the most impressive structure on the DL&W main line prior to the building of the Tunkhannock Viaduct in Nicholson, Pennsylvania, completed in 1915.

Around the turn of the century, reinforced concrete arches were generally limited to relatively short and often single span bridges. The dead load carried by the arches was reduced with the introduction of open spandrel arches. The lighter structures were capable of longer spans and more aesthetically pleasing large bridges. The Walnut Lane bridge (1906-8) over Wissahickon Creek in Philadelphia was a forerunner of the type, though it used virtually no steel reinforcement in the two ribs (Condit, 1961:198). The use of reinforcement made the possibilities even greater. Under Ray's direction, the length and number of spans increased to create massive structures that dominated the landscape.

The New Jersey Cut-Off was divided into sections for bidding. Seven contractors were each awarded one section of the line, including contractors from as far away as Billings, Montana and Roanoke, Virginia. Each contract included all clearing, grading and masonry construction (Wheaton, 1908).

In addition to its engineering significance, the railroad right-of-way ranks historically as one of the most significant in the state, owing to the impact moving coal across the state had on the development of transportation systems within New Jersey. The Lehigh Valley Railroad played a significant role in the development of transportation and transportation-driven development in the northern half of the state, and the cut-off stands as one of the most ambitious remnants of the coal era in the state.

In summation, the viaducts, tunnels, overpasses, cuts, and fills on the New Jersey Cut-Off (1908-1911) form part of a unified design that was, and still is, one of the most remarkable engineering achievements of the early 20th century in the region. Furthermore, the New Jersey Cut-Off is one of the most visible remnants of the DL&W, and is illustrative of the history of one of the largest movers of coal that contributed to the transportation-driven economic growth of the northern half of the state. The New Jersey Cut-Off is a significant part of the western New Jersey historic landscape and transportation systems.

Boundary Description and Justification: The significance of the structure is based, in part, on its historic association and physical

connection with a right-of-way that is both historically and technologically important. In New Jersey, the potential historic corridor appears to be limited to the railroad right-of-way. The potential historic corridor is approximately 28 miles long stretching from the Delaware River to the eastern junction at Hopatcong, Morris County. The New Jersey Cut-Off's western junction is in Slateford, Pennsylvania on the west bank of the Delaware River. The entire route and all its related structures were not surveyed as part of this project, but those portions of the route that were surveyed or observed as part of the 1991-1993 Historic Bridge Survey have integrity of setting and original design and appear to representative of the overall state of preservation and completeness of the route in Sussex and Warren counties.

The viaduct is also individually eligible, in and of itself, including superstructure, substructure, and right-of-way over the water feature and highways.

PHOTO: 165:10-18,20-25 (07/92) REVISED BY (DATE): QUAD: Portland

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2117152 **CO** WARREN **OWNER** RAILROAD **MILEPOINT** 71.1

NAME & FEATURE INTERSECTED DL&W RR NJ CUT-OFF OVER NJ 94 **FACILITY** DL&W RR NEW JERSEY CUT-OFF (MP 71.10)

TOWNSHIP KNOWLTON TOWNSHIP

TYPE ARCH **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 44 ft **WIDTH** 227 ft

CONSTRUCTION DT 1909 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT DL&W RR OFFICE OF ENGINEER **BUILDER**

SETTING / CONTEXT The bridge is located in a wooded area with working farms and scattered 20th century residences. The structure carries the overgrown right-of-way of the New Jersey Cutoff over a two-lane state route with shoulders. The RR was carried on a high fill at this point between the Delaware River and Paulins Kill Viaducts. The construction of the cut-off was a major engineering accomplishment of its day, which was constructed with major cuts and fills and avoided creating any highway railroad grade crossings along its 28.45 mile length.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Delaware, Lackawanna & Western Railroad New Jersey Cutoff Historic District, Eligible. Contributing.

CONSULT DOCUMENTS SHPO Opinion 3/22/94, Letter 03/12/01.

SUMMARY The arch tunnel is of the standard design used by the DL&W RR on the 1908-1911 New Jersey Cut-Off. The reinforced concrete arch is flanked by sloping, skewed wingwalls that retain the fill used to build the right-of-way. The slope descends to just a few feet above the crown of the arch. The NJ Cut-Off is a technologically significant engineering achievement noted for its use of reinforced concrete for bridges and structures and for completely grade separating the railroad and highway crossings. The tunnel arch contributes to the significance of the r-o-w. The structure is not individually eligible for listing in the National Register of Historic Places, but is a contributing element of the Delaware, Lackawanna & Western Railroad New Jersey Cutoff Historic District under Criteria A and C.

INFOR MATION

BIBLIOGRAPHY:

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Condit, Carl W., American Building Art The Twentieth Century, 1961.Taber, Thomas Townsend, The Delaware, Lackawanna & Western Railroad in the Nineteenth Century. 1977.
Taber, T.T. and Taber, T.T. III, The Delaware, Lackawanna & Western Railroad in the Twentieth Century, Vols. I and II. 1980.
Lefferts, H. Leedom Jr., and Piefer, David R., Northwest New Jersey: An Inventory and History of Historic Engineering and Industry. 1979.

Physical Description: The reinforced concrete arch tunnel carries the railroad on a high fill over a two-lane highway. The barrel-arch is flanked by sloping, skewed wingwalls that retain the fill used to create the grade for the New Jersey Cut-Off. The skewed structure spans 44 feet (on skew) and is 227 feet wide. The fill slopes to just a few feet above the crown of the arch at each face. There is no railing at the top of the structure. Several utility lines run under the bridge, supported by brackets attached to its faces and intrados.

Historical and Technological Significance: The New Jersey Cut-Off, of which this arched tunnel is a part, was built in 1908-1911 and is historically and technologically distinguished in the areas of engineering and transportation (Criteria A, C). The cut-off is an important engineering accomplishment of the early 20th century. The Delaware, Lackawanna & Western RR (DL&W) designed and built the line to improve the efficiency of train travel across the mountainous terrain of northwestern New Jersey in Warren, Sussex, and Morris counties. The design and construction of a railroad that rises and falls just eleven feet over its length of 28.45 miles while crossing the mountains and valleys of northwestern New Jersey is remarkable even today. The decision to use reinforced concrete exclusively for all structures along the route was a pioneering action that attracted the attention of the engineering profession. The railroad's use of reinforced concrete did much to prove the material to be as strong and durable as the engineers of the early-20th century had anticipated. The DL&W also made full use of the moldable qualities of the material, designing not just functional structures, but also aesthetically pleasing ones that enhance the beauty of the railroad.

Sixteen structures are included in the NJDOT Historic Bridge Survey, but other structures, including viaducts, tunnels, and stations, were observed within Warren and Sussex counties. The structures not included in this survey appear to have integrity consistent with those bridges and tunnels that are included.

The New Jersey Cutoff is the culmination of over 55 years of efforts by the company to improve its route across New Jersey to New York City. The Delaware, Lackawanna and Western Railroad (DL&W), composed of a network of smaller railroads in Pennsylvania, New York and New Jersey, was formed in 1853 for the purpose of moving anthracite coal from the mining regions of northeastern Pennsylvania to market locations. It started from the merger of the Liggett's Gap RR and the Delaware & Cobbs Gap RR, which had been chartered and developed around 1850 by parties interested in carrying the coal to the Erie RR to the west and to the Delaware River to the east.

As the anthracite coal mining industry grew, so did the desire to increase the access to markets. In reaching to the east the DL&W needed a connection in New Jersey. They incorporated the Warren Railroad in the 1851 to carry trains from the Delaware River at Columbia (Warren County, NJ) to Central Railroad of New Jersey tracks in Hampton (Hunterdon County, NJ). From there the coal could be moved eastward to Elizabethport (near Newark, NJ). Commuters also traveled this route to get to New York City. In the late 1860s the DL&W became dissatisfied with the CNJ connections and sought their own access to the New York markets. In 1868 they leased the Morris & Essex RR, which was developed in the 1830s and 1840s in Morris, Essex and Hudson counties and the 1850s in Warren County. The M&E crossed New Jersey from Hoboken to Phillipsburg on the Delaware River.

Though the DL&W controlled several railroads (like the M&E, Warren, Valley, etc.), each was operated separately until 1899, when new

DL&W president William Truesdale centralized control of the company. This move allowed for increased efficiency for the railroad as a whole. In addition to the reorganization, Truesdale undertook an ambitious plan to modernize the routes (All background information gathered from Taber, 1977).

In seeking a more efficient, less circuitous route to replace the old 1851 Warren Railroad right-of-way, the DL&W considered three plans to build a completely new route (Taber and Taber, 1980:34-36). The plan chosen was a completely new line that would include massive cuts and fills to virtually eliminate grade changes. The existing line was nearly 40 miles long, had 57 curves comprising almost 13 miles of track, and a maximum grade of 60.2 feet per mile with a total rise and fall of 248 feet. The new layout, known as the New Jersey Cut-Off, limited the number and degree of curves and saved over 11 miles of track from the circuitous old line. This was the most expensive choice, costing $11,065,511.43 when completed (Taber and Taber, 1980:39), but the anticipated benefits for the railroad outweighed the cost.

Beginning in 1908 and under the direction of DL&W Chief Engineer George Ray, layout and design of the cut-off began. The line was to be 28.45 miles long, with a total rise and fall of just 11 feet and less than 5 miles of curved track. The new route would require 73 structures, including two massive viaducts, twelve overhead highway bridges and numerous crossings of roads and minor watercourses. Over 14 million cubic yards of both cut and fill were needed to create the relatively flat crossing of the hills and valleys of northwestern New Jersey (Taber and Taber, 1980:36).

Mr. Ray decided that reinforced concrete would be used for all structures along the route. This was the first time such a decision was made, causing the nickname of the "reinforced concrete railroad" to be used by the engineering profession when discussing the cut-off (Taber and Taber, 1980:36). Reinforced concrete was a state-of-the-art building material with yet unknown ultimate capabilities. It was thought to be as strong and durable as stone, and seemingly more permanent than wood or even steel.

Uncommon methods were used for the construction of the fills along the route. While the traditional method of building a wooden trestle to run dumping trains on was used for most fills, tracking was hung from suspended cables for the fills of greater magnitude. Dumping trains would carry fill onto the suspended tracks and dump the fill material from there. Most of the fill used on the cutoff was taken from the many cuts that were made, but even that was not enough. The DL&W bought 760 acres of farm land from which the contractors could dig additional fill. Five million pounds of dynamite was used to make the cuts. The Pequest Fill (Milepoint 55.85, Green Township, Sussex County) was the largest along the cut-off and in 1908 was claimed to be the "largest railway embankment ever made" (Engineering News, 1908:72). It was over 3 miles long and was up to 140 feet high. Over 6.5 million cubic yards of fill were necessary to reach the proper grade on this fill (Taber and Taber, 1980:36).

The DL&W chose to use similar structures for similar uses along the line. Where highway bridges were needed to cross their tracks, they designed reinforced concrete deck arch bridges, a bridge type that was capable of relatively long spans while providing dynamic and graceful forms. At least eleven deck arches were built in New Jersey, (1900G12, 1900G13, 1900K07, 1900C17, 2153166, 2153165, 2153164, 2153163, 2153162, 2153161, 2153160), all of them single span structures with one of two types of balustrades. Though design adjustments had to be made for roadway alignment and foundation conditions, the deck arch bridges are very similar structures.

Reinforced concrete arch tunnels were constructed where the cut-off crossed over roads or small waterways. These structures often supported high fill embankments as the cut-off crossed a valley. Over 35 of these structures were built along the line, according to secondary sources, and several of them are included in the Historic Bridge Survey (Wasigan and Simpson roads in Warren County, 2117152). Slab-roofed tunnels and box culverts were also built to carry the right-of-way over roads and streams.

The largest structures along the line were the two multi-span viaducts; the Delaware River Viaduct (2114159) and the Paulins Kill Viaduct (Milepoint 70.63, Knowlton Twp.). Both are open spandrel arch bridges that span valleys and larger water courses. The 9-span Delaware River Viaduct crosses the river as well as the highways that parallel it on both sides. It is 1,450 feet long and carries trains 65 feet above the river. The nine span structure has seven open spandrel arches and two deck arch approach spans on the Pennsylvania end. The 7-span Paulins Kill Viaduct in Hainesburg (Warren County) is 1100 feet long, but it is more graceful and magnificent as it rises 115 feet above the valley floor. It passes over the Paulins Kill River, the New York, Susquehanna and Western Railroad and the valley they run through. It was the most impressive structure on the DL&W main line prior to the building of the Tunkhannock Viaduct in Nicholson, Pennsylvania, completed in 1915.

Around the turn of the century, reinforced concrete arches were generally limited to relatively short and often single span bridges. The dead load carried by the arches was reduced with the introduction of open spandrel arches. The lighter structures were capable of longer spans and more aesthetically pleasing large bridges. The Walnut Lane bridge (1906-8) over Wissahickon Creek in Philadelphia was a forerunner of the type, though it used virtually no steel reinforcement in the two ribs (Condit, 1961:198). The use of reinforcement made the possibilities even greater. Under Ray's direction, the length and number of spans increased to create massive structures that dominated the landscape.

The New Jersey Cut-Off was divided into sections for bidding. Seven contractors were each awarded one section of the line, including contractors from as far away as Billings, Montana and Roanoke, Virginia. Each contract included all clearing, grading and masonry construction (Wheaton, 1908).

In addition to its engineering significance, the railroad right-of-way ranks historically as one of the most significant in the state, owing to the impact moving coal across the state had on the development of transportation systems within New Jersey. The Lehigh Valley Railroad played a significant role in the development of transportation and transportation-driven development in the northern half of the state, and the cut-off stands as one of the most ambitious remnants of the coal era in the state.

In summation, the viaducts, tunnels, overpasses, cuts, and fills on the New Jersey Cut-Off (1908-1911) form part of a unified design that was, and still is, one of the most remarkable engineering achievements of the early 20th century in the region. Furthermore, the New Jersey Cut-Off is one of the most visible remnants of the DL&W, and is illustrative of the history of one of the largest movers of coal that contributed to the transportation-driven economic growth of the northern half of the state. The New Jersey Cut-Off is a significant part of the western New Jersey historic landscape and transportation systems.
Boundary Description and Justification: The significance of the structure is based, in part, on its historic association and physical

connection with a right-of-way that is both historically and technologically important. In New Jersey, the potential historic corridor appears to be limited to the railroad right-of-way. The potential historic corridor is approximately 28 miles long stretching from the Delaware River to the eastern junction at Hopatcong, Morris County. The New Jersey Cut-Off's western junction is in Slateford, Pennsylvania on the west bank of the Delaware River. The entire route and all its related structures were not surveyed as part of this project, but those portions of the route that were surveyed or observed as part of the 1991-1993 Historic Bridge Survey have integrity of setting and original design and appear to representative of the overall state of preservation and completeness of the route in Sussex and Warren counties.

PHOTO: 186:8 (07/92) REVISED BY (DATE): QUAD: Portland

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2117154 **CO** WARREN **OWNER** NJDOT **MILEPOINT** 3.1

NAME & FEATURE INTERSECTED NJ 94 OVER YARD'S CREEK **FACILITY** NJ 94

TOWNSHIP KNOWLTON TOWNSHIP

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 28 ft **WIDTH** 29 ft

CONSTRUCTION DT 1913 **ALTERATION DT** **SOURCE** COUNTY RECORDS

DESIGNER/PATENT F. W. SALMON, COUNTY ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located a the edge of the late-19th century village of Hainesburg that consists of altered vernacular houses and has no historic district potential. The structure carries a two-lane state route over a creek.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one-span elliptical arch bridge is constructed of reinforced concrete. The structure is very plain, its presence discernable from the roadway only by the beam guiderail that crosses it. The bridge is not technologically or historically distinguished, being one of over 15 pre-World War II reinforced concrete deck arches in the county.

INFOR MATION

PHOTO: 166:11-12 (07/92) REVISED BY (DATE): QUAD: Portland

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2117157 **CO** WARREN **OWNER** NJDOT **MILEPOINT** 7.99

NAME & FEATURE INTERSECTED NJ 94 OVER JACKSONBURG CREEK **FACILITY** NJ 94

TOWNSHIP BLAIRSTOWN TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 2 **LENGTH** 45 ft **WIDTH** 40.1 ft

CONSTRUCTION DT 1931 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located in a wooded setting, with a late-19th century home that has been converted to commercial use nearby. The bridge is located next to the intersection of a state route and a local road. It carries the two-lane state route with shoulders over a stream.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span reinforced concrete slab bridge is simply supported on concrete abutments and pier. The balustrade along both faces of the bridge is a State Highway Department standard design with inscribed end posts. Beam guiderails have been added to the inside face. The bridge is not technologically or historically distinguished, being one of over 10 remaining pre-World War II slab bridges in Warren County.

INFOR MATION

PHOTO: 166:15-17 (07/92) REVISED BY (DATE): QUAD: Blairstown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2117159 **CO** WARREN **OWNER** NJDOT **MILEPOINT** 9.09

NAME & FEATURE INTERSECTED NJ 94 OVER BLAIR CREEK **FACILITY** NJ 94

TOWNSHIP BLAIRSTOWN TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 60 ft **WIDTH** 40 ft

CONSTRUCTION DT 1929 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located on the modern, commercial edge of Blairstown, a 19th century village with added 20th century commercial buildings. It carries a two-lane state route with shoulders over a creek. The state route was built as a bypass to the historic center of Blairstown.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span stringer bridge is supported on concrete abutments and a cutwater pier. The encased stringers support a concrete deck that is flanked by standard State-designed concrete balustrades. Beam guiderails also cross the bridge in front of the balustrades. The bridge is one of over 65 remaining pre-World War II stringer bridges in Warren County. It is not a technologically or historically distinguished structure.

INFOR MATION

PHOTO: 166:24-25 (07/92) REVISED BY (DATE): QUAD: Blairstown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2117160 **CO** WARREN **OWNER** NJDOT **MILEPOINT** 9.18

NAME & FEATURE INTERSECTED NJ 94 OVER PAULINS KILL **FACILITY** NJ 94

TOWNSHIP BLAIRSTOWN TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 161 ft **WIDTH** 40.1 ft

CONSTRUCTION DT 1931 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located in a wooded area on the west side of Blairstown, a 19th century village with later commercial infill. It carries a busy two-lane state route with shoulders over a river. The intersection of the state route with a county route is adjacent to the structure. NJ 94 was built as a bypass of the historic center of Blairstown.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The three-span encased stringer bridge is supported on a concrete substructure. The abutments and cutwater piers are horizontally scored. The fascia encasement is panelled below the standard State Highway Department designed concrete balustrades. Beam guiderail has been attached to the inside faces of the balustrades. The bridge is not technologically or historically distinguished, being one of over 65 remaining pre-World War II stringer bridges in Warren County.

INFOR MATION

PHOTO: 166:22-23 (07/92) REVISED BY (DATE): QUAD: Blairstown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2117161 **CO** WARREN **OWNER** NJDOT **MILEPOINT** 9.31

NAME & FEATURE INTERSECTED NJ 94 OVER NEW YORK SUSQUEHANNA & WESTERN RR **FACILITY** NJ 94

TOWNSHIP BLAIRSTOWN TOWNSHIP

TYPE THRU GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 95 ft **WIDTH** 39.7 ft

CONSTRUCTION DT 1931 **ALTERATION DT** **SOURCE** INSCRIPTION/PLANS

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located just east of the village of Blairstown, in a wooded area. It carries a two-lane, two-shoulder state route over an abandoned RR right-of-way that is used for access to a small municipal park. The line was initially chartered in 1832 as the New Jersey Midland Railway Company primarily to transport the coal products of eastern Pennsylvania. The line was reorganized in 1880 and was called the New York Susquehanna & Western RR. The line was abandoned in 1958.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one-span thru-girder bridge bears on scored concrete abutments with sloped wingwalls. The encased floorbeams are framed perpendicular to the girders, which are also encased. The bridge is constructed on a large skew. Beam guiderails cross the bridge inside the girder webs. The bridge is representative example of a common pre-World War II type, and it is not technologically or historically distinguished.

INFOR MATION

PHOTO: 167:16-18 (07/92) REVISED BY (DATE): QUAD: Blairstown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2119150 **CO** WARREN **OWNER** NJDOT **MILEPOINT** 0.4

NAME & FEATURE INTERSECTED NJ 163 OVER US 46 **FACILITY** NJ 163

TOWNSHIP KNOWLTON TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 4 **LENGTH** 97 ft **WIDTH** 30 ft

CONSTRUCTION DT 1932 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The bridge is located in a wooded area with some early- to mid-20th century commercial structures nearby. It is adjacent to structure 2107150, an abandoned RR right-of-way over the same federal highway. The bridge carries an abandoned road over the two-lane highway.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 11/24/92

SUMMARY The skewed four-span bridge is composed of two stringer spans over the roadway and two slab end spans. The encased stringers are supported on eight-column reinforced concrete bents. The abutments are also concrete. The balustrade is a standard State-designed type, with Moderne-styled cornices above the piers at both faces. The bridge is a representative example of a common pre-World War II bridge type, and is not technologically or historically distinguished.

INFOR MATION

PHOTO: 164:12,14 (07/92) REVISED BY (DATE): QUAD: Portland

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2140150 **CO** WARREN **OWNER** RAILROAD **MILEPOINT** 75.52

NAME & FEATURE INTERSECTED LEHIGH VALLEY MAIN LINE RR OVER US 22 ALT (SOUTH MAIN ST) **FACILITY** LEHIGH VALLEY MAIN LINE RAILROAD

TOWNSHIP PHILLIPSBURG TOWN

TYPE DECK GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 102 ft **WIDTH** 22.8 ft

CONSTRUCTION DT 1902 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT LEHIGH VALLEY RR ENGINEERS OFF **BUILDER**

SETTING / CONTEXT The bridge is located in an urban neighborhood of early-20th century dwellings in Phillipsburg. It carries one track in a two-track right-of-way over a two-lane city street with sidewalks. Phillipsburg was forever changed in the 1850s by the entrance of the railroads. In 1855 the Lehigh Valley RR, the third line in Phillipsburg, built a bridge across the Delaware River to Easton.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one-span deck-girder bridge is seated on high, coursed ashlar abutments with concrete wingwalls. Two pairs of steel girders support open decks. K-bracing is present between the girders that are paired together, but not between the pairs. The span is a well-preserved example of a common bridge type that is extremely well represented in northern New Jersey. It is neither technologically nor historically distinguished, and postdates the historically significant period of railway development.

INFOR MATION

PHOTO: 172:18-19 (07/92) REVISED BY (DATE): QUAD: Easton

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2140151 **CO** WARREN **OWNER** RAILROAD **MILEPOINT** 74.69

NAME & FEATURE INTERSECTED LEHIGH VALLEY MAIN LINE RR OVER US 22 ALT, LOPATCONG CREEK **FACILITY** LEHIGH VALLEY MAIN LINE RAILROAD

TOWNSHIP PHILLIPSBURG TOWN

TYPE DECK GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 5 **LENGTH** 392 ft **WIDTH** 31 ft

CONSTRUCTION DT 1913 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT LEHIGH VALLEY RR ENGINEERS OFF **BUILDER**

SETTING / CONTEXT The bridge is located at the southern edge of Phillipsburg. It carries one active track, though it is wide enough for two, and it crosses two two-lane roads and a creek that was part of the Morris Canal. Adjacent to the bridge is Green's Bridge, a five-span ashlar arch structure built in 1865 by the CNJ RR and considered eligible for the NR by NJT. The two bridge decks are approximately the same elevation, about 70' above the creek bed.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Listed. Morris Canal. 10/01/1974. Noncontributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 5-span deck-girder bridge replaced an earlier span carried on ashlar abutments and piers that form part of the substructure for the present superstructure on a slightly realigned r-o-w. The abutments were widened with concrete extensions and new concrete seats were added to the abutments. Pairs of girders are braced with bottom K-bracing and diaphragm bracing. Though a large structure, the 1913 bridge is an example of a common type, and is not technologically nor historically distinctive.

INFOR MATION

PHOTO: 172:18-25 (07/92) REVISED BY (DATE): QUAD: Easton

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2150160 **CO** WARREN **OWNER** UNKNOWN **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED GREENWICH STREET (CR 620) OVER LEHIGH & HUDSON RR **FACILITY** GREENWICH STREET (CR 620)

TOWNSHIP BELVIDERE TOWN

TYPE THRU GIRDER **DESIGN** PARTIALLY ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 56 ft **WIDTH** 30 ft

CONSTRUCTION DT 1928 **ALTERATION DT** **SOURCE** PLAQUE/PLANS

DESIGNER/PATENT LEHIGH & HUDSON RR ENGNRS OFF **BUILDER** AMERICAN BRIDGE COMPANY

SETTING / CONTEXT The bridge is located at the south edge of Belvidere, in a less densely populated area of late-19th and 20th century residences. It carries a two-lane county road over a two-track abandoned right-of-way with one inactive track remaining. The line was developed by the Lehigh and Hudson River RR in the 1880s, it connected railroads of the Lehigh Valley of Pennsylvania to the Sussex Railroad in New Jersey which ran to the Hudson River, following the Pequest River valley in Warren County.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The steel thru-girder bridge rests on scored concrete abutments that are set on rock outcrops. The bottom flanges of the girders are encased, as are the floorbeams supporting the concrete deck. Beam guiderails cross the bridge in front of the girders. The structure is a representative example of a common pre-World War II bridge type, and it is not technologically or historically distinguished.

INFOR MATION

PHOTO: 29:12A-13A (07/92) REVISED BY (DATE): QUAD: Belvidere

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2151161 **CO** WARREN **OWNER** RAILROAD **MILEPOINT** 0.0
NAME & FEATURE INTERSECTED PRIVATE ROAD OVER LEHIGH VALLEY RR **FACILITY** PRIVATE ROAD
TOWNSHIP GREENWICH TOWNSHIP
TYPE PONY TRUSS **DESIGN** WARREN **MATERIAL** Iron
 # SPANS 3 **LENGTH** 128 ft **WIDTH** 15.3 ft

CONSTRUCTION DT 1901 **ALTERATION DT** 1939 **SOURCE** PLANS
DESIGNER/PATENT LEHIGH VALLEY RR ENGINEERS OFF **BUILDER** AMERICAN BRIDGE COMPANY

SETTING / CONTEXT The bridge is located in an isolated wooded setting. It carries an unimproved road over a single active track. The line was developed in the 1870s by the Lehigh Valley RR. In 1855 they had crossed the Delaware River at Phillipsburg and then used the CNJ for transportation across New Jersey. In the 1870s it became important for them to have their own line so they built the Easton & Amboy RR to the ports at Perth Amboy. Since 1976 Conrail has owned and operated the line.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No
CONSULT STATUS Individually Eligible.
CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 3-span bridge has three span types: a stringer span, a pony truss middle span and a thru-girder span. The abutments are concrete, with built-up steel column-and-lateral-bracing bents. The riveted Warren truss span is built-up from channel and angle sections, plates and lacing. The timber deck is supported on timber stringers throughout the bridge, with rolled floorbeams on the truss and built-up girder span. The bridge is a well-preserved structure, and is a significant example of its type.

INFOR MATION

Bibliography:
NJDOT Plan File. Conrail 0501:70.72.
Snell, James. History of Sussex and Warren Counties, New Jersey. Philadelphia: Everts and Peck, 1881.

Physical Description: The 3-span bridge is composed of a pony truss, a stringer, and a thru girder span supported on ashlar abutments and built up bents set on stone plinths. The main span is a 55'-long 5-panel riveted Warren with verticals pony truss span. The knee braces or outriggers are original, as are the 3-high pipe railings on the inner face of the trusses. The top chord is a built-up box member while the verticals are composed of angle section with both battens and lacing stiffening. The stringers and deck are timber. The built-up thru girder span is topped with pipe railing as is the rolled steel stringer span. The flared steel bents are built-up members with lateral bracing.

Historical and Technological Significance: The 3-span private road railroad overpass bridge erected in 1901 is technologically significant as a well-preserved and documented example of a bridge type commonly used for grade crossing eliminations in central and northern New Jersey (Criterion C). Examples of the same pony truss bridge type over the same rail line are also found in Somerset County (1851160, Farm Road over Conrail (c.1900), Branchburg Township; 1851161, Black Point Road over Conrail (1910), Branchburg Township), but are not considered eligible due to alterations and poor condition. The private road span, identified as being fabricated in iron on the 1900 plans, was designed by the Office of the Engineer of the Easton & Amboy Division of the Lehigh Valley Railroad, an important anthracite hauler that developed its own line across New Jersey to Perth Amboy in the early 1870s. The 1900 bridge was fabricated by the newly formed American Bridge Company. The construction details of the bridge, which is composed of one riveted Warren pony truss span, one built-up plate girder thru girder span, and one steel stringer span supported on ashlar abutments and built-up bents, are typical of the turn-of-the-century period. The knee braces, or outriggers, are an original detail as are the pipe railings. With the exception of 1939 repairs made to the deteriorated sections of the rolled floor beams, the bridge is remarkably complete making it a noteworthy example of ca. 1900 bridge technology.

Boundary Description and Justification: Because the bridge is individually distinguished, the boundary is limited to the superstructure and substructure of the bridge itself.

PHOTO: 168:34-38 (07/92) REVISED BY (DATE): QUAD: Bloomsbury

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2152160 **CO** WARREN **OWNER** UNKNOWN **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED FOUL RIFT ROAD OVER LEHIGH & HUDSON RIVER RR **FACILITY** FOUL RIFT ROAD

TOWNSHIP WHITE TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Wood

 # SPANS 1 **LENGTH** 39 ft **WIDTH** 13 ft

CONSTRUCTION DT 1926 **ALTERATION DT** 1986 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT WARREN COUNTY ENGINEER **BUILDER**

SETTING / CONTEXT The bridge is located on a winding road lined with 1920s cottages along the Delaware River. The one-lane bridge carries the road over a one-track abandoned right-of-way. The line was developed by the Belvidere-Delaware Railroad in the early 1850s. This portion was finished by 1854, completing the line along the Delaware River from Trenton to Belvidere. The line was important in the transportation of materials down the river, where only boats were able to carry freight earlier.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY In 1986 the thru girder and floorbeams bridge formerly at the railroad crossing was replaced with a glue-laminated timber slab superstructure but the exterior thru girders were retained as railings. The abutments are rubble-course stone on rock outcrops, and have concrete seats supporting the deck. Bolted connections hold the girders near the slab for pedestrian protection. The superstructure is not old enough to be evaluated a historic structure.

INFOR MATION

PHOTO: 29:18A-22A (07/92) REVISED BY (DATE): QUAD: Belvidere

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2153160 **CO** WARREN **OWNER** UNKNOWN **MILEPOINT** 72.21

NAME & FEATURE INTERSECTED STARK ROAD OVER DL&W RR NEW JERSEY CUT-OFF **FACILITY** STARK ROAD

TOWNSHIP KNOWLTON TOWNSHIP

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 79 ft **WIDTH** 20 ft

CONSTRUCTION DT 1910 **ALTERATION DT** **SOURCE** INSCRIPTION/PLANS

DESIGNER/PATENT DL&W RR OFFICE OF ENGINEER **BUILDER**

SETTING / CONTEXT The bridge is located in a wooded, undeveloped area. It carries a two-lane road over the overgrown two-track right-of-way of the Delaware Lackawanna & Western RR's New Jersey Cutoff. The development of the r-o-w straightened the coal-hauling line's route through the state. The project was a major engineering accomplishment for its day, and the route provides a historic context. It is an important element in the transportation history of New Jersey.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Not Individually Eligible. Agreed Potential Historic District. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one-span reinforced concrete arch bridge is skewed and has concrete balustrades with oval piercing. It is similar to other deck arch bridges in Warren & Sussex counties that are part of the DL&W RR's New Jersey Cut-Off, an ambitious engineering project undertaken 1908-1911. The route was composed exclusively of 73 reinforced concrete structures. This bridge is significant as part of the historically and technologically important railroad improvement campaign. It is well preserved.

INFOR MATION

BIBLIOGRAPHY:

Wheaton, F.L., "The New Cut-off Line of the Lackawanna Railroad", Engineering News, Vol.60, No.7, August 13, 1908.
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"Some Concrete Culverts and Small Bridges on the Slateford-Hopatcong Cut-off of the Delaware, Lackawanna & Western R.R.", Engineering News, Vol.62, No.14, September 30, 1909.
Condit, Carl W., American Building Art The Twentieth Century, 1961.
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Taber, T.T. and Taber, T.T. III, The Delaware, Lackawanna & Western Railroad in the Twentieth Century, Vols. I and II. 1980.
Lefferts, H. Leedom Jr., and Piefer, David R., Northwest New Jersey: An Inventory and History of Historic Engineering and Industry. 1979.

Physical Description: The one-span reinforced concrete deck arch bridge is skewed. The skewback foundations of the structure are set on rock, as the bridge carries a two-lane road over a cut section of the railroad right-of-way. The concrete balustrades are pierced with ovals. The roadway exhibits a vertical crest curve over the elliptical arch bridge. The construction date (1910) is inscribed at the crown of the arch in the western fascia. The right-of-way is overgrown at this point.

Historical and Technological Significance: The New Jersey Cut-Off, of which this deck arch bridge is a part, was built in 1908-1911 and is historically and technologically distinguished in the areas of engineering and transportation (Criteria A, C). The cut-off is an important engineering accomplishment of the early 20th century. The Delaware, Lackawanna & Western RR (DL&W) designed and built the line to improve the efficiency of train travel across the mountainous terrain of northwestern New Jersey in Warren, Sussex, and Morris counties. The design and construction of a railroad that rises and falls just eleven feet over its length of 28.45 miles while crossing the mountains and valleys of northwestern New Jersey is remarkable even today. The decision to use reinforced concrete exclusively for all structures along the route was a pioneering action that attracted the attention of the engineering profession. The railroad's use of reinforced concrete did much to prove the material to be as strong and durable as the engineers of the early-20th century had anticipated. The DL&W also made full use of the moldable qualities of the material, designing not just functional structures, but also aesthetically pleasing ones that enhance the beauty of the railroad.

Sixteen structures are included in the NJDOT Historic Bridge Survey, but other structures, including viaducts, tunnels, and stations, were observed within Warren and Sussex counties. The structures not included in this survey appear to have integrity consistent with those bridges and tunnels that are included.

The New Jersey Cutoff is the culmination of over 55 years of efforts by the company to improve its route across New Jersey to New York City. The Delaware, Lackawanna and Western Railroad (DL&W), composed of a network of smaller railroads in Pennsylvania, New York and New Jersey, was formed in 1853 for the purpose of moving anthracite coal from the mining regions of northeastern Pennsylvania to market locations. It started from the merger of the Liggett's Gap RR and the Delaware & Cobbs Gap RR, which had been chartered and developed around 1850 by parties interested in carrying the coal to the Erie RR to the west and to the Delaware River to the east.

As the anthracite coal mining industry grew, so did the desire to increase the access to markets. In reaching to the east the DL&W needed a connection in New Jersey. They incorporated the Warren Railroad in the 1851 to carry trains from the Delaware River at Columbia (Warren County, NJ) to Central Railroad of New Jersey tracks in Hampton (Hunterdon County, NJ). From there the coal could be moved eastward to Elizabethport (near Newark, NJ). Commuters also traveled this route to get to New York City. In the late 1860s the DL&W became dissatisfied with the CNJ connections and sought their own access to the New York markets. In 1868 they leased the Morris & Essex RR, which was developed in the 1830s and 1840s in Morris, Essex and Hudson counties and the 1850s in Warren County. The M&E crossed New Jersey from Hoboken to Phillipsburg on the Delaware River.

Though the DL&W controlled several railroads (like the M&E, Warren, Valley, etc.), each was operated separately until 1899, when new DL&W president William Truesdale centralized control of the company. This move allowed for increased efficiency for the railroad as a whole. In addition to the reorganization, Truesdale undertook an ambitious plan to modernize the routes (All background information

gathered from Taber, 1977).

In seeking a more efficient, less circuitous route to replace the 1860s Morris & Essex Railroad right-of-way, the DL&W considered three plans to build a completely new route (Taber and Taber, 1980:34-36). The plan chosen was a completely new line that would include massive cuts and fills to virtually eliminate grade changes. The existing line was nearly 40 miles long, had 57 curves comprising almost 13 miles of track, and a maximum grade of 60.2 feet per mile with a total rise and fall of 248 feet. The new layout, known as the New Jersey Cut-Off, limited the number and degree of curves and saved over 11 miles of track from the circuitous old line. This was the most expensive choice, costing $11,065,511.43 when completed (Taber and Taber, 1980:39), but the anticipated benefits for the railroad outweighed the cost.

Beginning in 1908 and under the direction of DL&W Chief Engineer George Ray, layout and design of the cut-off began. The line was to be 28.45 miles long, with a total rise and fall of just 11 feet and less than 5 miles of curved track. The new route would require 73 structures, including two massive viaducts, twelve overhead highway bridges and numerous crossings of roads and minor watercourses. Over 14 million cubic yards of both cut and fill were needed to create the relatively flat crossing of the hills and valleys of northwestern New Jersey (Taber and Taber, 1980:36).

Mr. Ray decided that reinforced concrete would be used for all structures along the route. This was the first time such a decision was made, causing the nickname of the "reinforced concrete railroad" to be used by the engineering profession when discussing the cut-off (Taber and Taber, 1980:36). Reinforced concrete was a state-of-the-art building material with yet unknown ultimate capabilities. It was thought to be as strong and durable as stone, and seemingly more permanent than wood or even steel.

Uncommon methods were used for the construction of the fills along the route. While the traditional method of building a wooden trestle to run dumping trains on was used for most fills, tracking was hung from suspended cables for the fills of greater magnitude. Dumping trains would carry fill onto the suspended tracks and dump the fill material from there. Most of the fill used on the cutoff was taken from the many cuts that were made, but even that was not enough. The DL&W bought 760 acres of farm land from which the contractors could dig additional fill. Five million pounds of dynamite was used to make the cuts. The Pequest Fill (Milepoint 55.85, Green Township, Sussex County) was the largest along the cut-off and in 1908 was claimed to be the "largest railway embankment ever made" (Engineering News, 1908:72). It was over 3 miles long and was up to 140 feet high. Over 6.5 million cubic yards of fill were necessary to reach the proper grade on this fill (Taber and Taber, 1980:36).

The DL&W chose to use similar structures for similar uses along the line. Where highway bridges were needed to cross their tracks, they designed reinforced concrete deck arch bridges, a bridge type that was capable of relatively long spans while providing dynamic and graceful forms. At least eleven deck arches were built in New Jersey, (1900G12, 1900G13, 1900K07, 1900C17, 2153166, 2153165, 2153164, 2153163, 2153162, 2153161, 2153160), all of them single span structures with one of two types of balustrades. Though design adjustments had to be made for roadway alignment and foundation conditions, the deck arch bridges are very similar structures.

Reinforced concrete arch tunnels were constructed where the cut-off crossed over roads or small waterways. These structures often supported high fill embankments as the cut-off crossed a valley. Over 35 of these structures were built along the line, and several of them are included in the Historic Bridge Survey (Wasigan and Simpson roads in Warren County, 2117152). Slab-roofed tunnels and box culverts were also built to carry the right-of-way over roads and streams.

The largest structures along the line were the two multi-span viaducts; the Delaware River Viaduct (2114159) and the Paulins Kill Viaduct (Milepoint 70.63, Knowlton Twp.). Both are open spandrel arch bridges that span valleys and larger water courses. The 9-span Delaware River Viaduct crosses the river as well as the highways that parallel it on both sides. It is 1,450 feet long and carries trains 65 feet above the river. The nine span structure has seven open spandrel arches and two deck arch approach spans on the Pennsylvania end. The 7-span Paulins Kill Viaduct in Hainesburg (Warren County) is 1100 feet long, but it is more graceful and magnificent as it rises 115 feet above the valley floor. It passes over the Paulins Kill River, the New York, Susquehanna and Western Railroad and the valley they run through. It was the most impressive structure on the DL&W main line prior to the building of the Tunkhannock Viaduct in Nicholson, Pennsylvania, completed in 1915.

Around the turn of the century, reinforced concrete arches were generally limited to relatively short and often single span bridges. The dead load carried by the arches was reduced with the introduction of open spandrel arches. The lighter structures were capable of longer spans and more aesthetically pleasing large bridges. The Walnut Lane bridge (1906-8) over Wissahickon Creek in Philadelphia was a forerunner of the type, though it used virtually no steel reinforcement in the two ribs (Condit, 1961:198). The use of reinforcement made the possibilities even greater. Under Ray's direction, the length and number of spans increased to create massive structures that dominated the landscape.

The New Jersey Cut-Off was divided into sections for bidding. Seven contractors were each awarded one section of the line, including contractors from as far away as Billings, Montana and Roanoke, Virginia. Each contract included all clearing, grading and masonry construction (Wheaton, 1908).

In addition to its engineering significance, the railroad right-of-way ranks historically as one of the most significant in the state, owing to the impact moving coal across the state had on the development of transportation systems within New Jersey. The Lehigh Valley Railroad played a significant role in the development of transportation and transportation-driven development in the northern half of the state, and the cut-off stands as one of the most ambitious remnants of the coal era in the state.

In summation, the viaducts, tunnels, overpasses, cuts, and fills on the New Jersey Cut-Off (1908-1911) form part of a unified design that was, and still is, one of the most remarkable engineering achievements of the early 20th century in the region. Furthermore, the New Jersey Cut-Off is one of the most visible remnants of the DL&W, and is illustrative of the history of one of the largest movers of coal that contributed to the transportation-driven economic growth of the northern half of the state. The New Jersey Cut-Off is a significant part of the western New Jersey historic landscape and transportation systems.

Boundary Description and Justification: The significance of the structure is based, in part, on its historic association and physical connection with a right-of-way that is both historically and technologically important. In New Jersey, the potential historic corridor appears

to be limited to the railroad right-of-way. The potential historic corridor is approximately 28 miles long stretching from the Delaware River to the eastern junction at Hopatcong, Morris County. The New Jersey Cut-Off's western junction is in Slateford, Pennsylvania on the west bank of the Delaware River. The entire route and all its related structures were not surveyed as part of this project, but those portions of the route that were surveyed or observed as part of the 1991-1993 Historic Bridge Survey have integrity of setting and original design and appear to representative of the overall state of preservation and completeness of the route in Sussex and Warren counties.

PHOTO: 165:31-33 (07/92) REVISED BY (DATE): QUAD: Portland

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2153161 **CO** WARREN **OWNER** UNKNOWN **MILEPOINT** 65.62

NAME & FEATURE INTERSECTED DIRT FARM ROAD OVER DL&W RR NEW JERSEY CUT-OFF **FACILITY** DIRT FARM ROAD

TOWNSHIP BLAIRSTOWN TOWNSHIP

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 89 ft **WIDTH** 12 ft

CONSTRUCTION DT 1911 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT DL&W RR OFFICE OF ENGINEER **BUILDER**

SETTING / CONTEXT The bridge is located in a wooded area, and is inaccessible by vehicle. The road that was originally carried by the bridge has not been maintained and has become overgrown. The one-lane structure passes over the Delaware Lackawanna & Western Railroad's New Jersey Cutoff, one of the major engineering accomplishments of the early-20th century. Its development increased the efficiency of the DL&W RR's freight-carrying trains bringing Pennsylvania coal to the New York Harbor.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Not Individually Eligible. Agreed Potential Historic District. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one-span reinforced-concrete arch bridge on a private road was inaccessible to inspection. Bridge plans show the span to be similar to at least 12 other highway overpasses along the New Jersey Cut-Off. Assuming that field check demonstrates the bridge retains its integrity, it is eligible as a contributing structure to the DL&W's New Jersey Cut-Off right-of-way. The Cut-Off is noted for its early and exclusive use of reinforced concrete structures.

INFOR MATION

BIBLIOGRAPHY:

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Lefferts, H. Leedom Jr., and Piefer, David R., Northwest New Jersey: An Inventory and History of Historic Engineering and Industry. 1979.

Physical Description: The one-span reinforced concrete deck arch bridge carries an unmaintained private road over a cut section of the railroad right-of-way. The roadway has become overgrown and the bridge is inaccessible, and it was not field inspected. Plans for the bridge show a well-detailed structure with scored spandrels above the elliptical arch. The concrete balustrades have concrete posts framing panels that are pierced with diamond shapes. A concrete rail is also diamond-shaped as it spans the concrete posts above the pierced panels. According to an unnamed person who lives near the structure, the bridge is still in place and has not been altered.

Historical and Technological Significance: The New Jersey Cut-Off, of which this deck arch bridge is a part, was built in 1908-1911 and is historically and technologically distinguished in the areas of engineering and transportation (Criteria A, C). The cut-off is an important engineering accomplishment of the early 20th century. The Delaware, Lackawanna & Western RR (DL&W) designed and built the line to improve the efficiency of train travel across the mountainous terrain of northwestern New Jersey in Warren, Sussex, and Morris counties. The design and construction of a railroad that rises and falls just eleven feet over its length of 28.45 miles while crossing the mountains and valleys of northwestern New Jersey is remarkable even today. The decision to use reinforced concrete exclusively for all structures along the route was a pioneering action that attracted the attention of the engineering profession. The railroad's use of reinforced concrete did much to prove the material to be as strong and durable as the engineers of the early-20th century had anticipated. The DL&W also made full use of the moldable qualities of the material, designing not just functional structures, but also aesthetically pleasing ones that enhance the beauty of the railroad.

Sixteen structures are included in the NJDOT Historic Bridge Survey, but other structures, including viaducts, tunnels, and stations, were observed within Warren and Sussex counties. The structures not included in this survey appear to have integrity consistent with those bridges and tunnels that are included. The DL&W offered property owners a choice for private farm roads such as this: they could have a bridge built across the right-of-way or they could sell the land on the opposite side of the tracks to the rail company. This bridge is representative of a bridge that was built for an owner who decided to retain his property on both sides of the track.

The New Jersey Cutoff is the culmination of over 55 years of efforts by the company to improve its route across New Jersey to New York City. The Delaware, Lackawanna and Western Railroad (DL&W), composed of a network of smaller railroads in Pennsylvania, New York and New Jersey, was formed in 1853 for the purpose of moving anthracite coal from the mining regions of northeastern Pennsylvania to market locations. It started from the merger of the Liggett's Gap RR and the Delaware & Cobbs Gap RR, which had been chartered and developed around 1850 by parties interested in carrying the coal to the Erie RR to the west and to the Delaware River to the east.

As the anthracite coal mining industry grew, so did the desire to increase the access to markets. In reaching to the east the DL&W needed a connection in New Jersey. They incorporated the Warren Railroad in the 1851 to carry trains from the Delaware River at Columbia (Warren County, NJ) to Central Railroad of New Jersey tracks in Hampton (Hunterdon County, NJ). From there the coal could be moved eastward to Elizabethport (near Newark, NJ). Commuters also traveled this route to get to New York City. In the late 1860s the DL&W became dissatisfied with the CNJ connections and sought their own access to the New York markets. In 1868 they leased the Morris & Essex RR, which was developed in the 1830s and 1840s in Morris, Essex and Hudson counties and the 1850s in Warren County. The M&E crossed New Jersey from Hoboken to Phillipsburg on the Delaware River.

Though the DL&W controlled several railroads (like the M&E, Warren, Valley, etc.), each was operated separately until 1899, when new DL&W president William Truesdale centralized control of the company. This move allowed for increased efficiency for the railroad as a whole. In addition to the reorganization, Truesdale undertook an ambitious plan to modernize the routes (All background information gathered from Taber, 1977).

In seeking a more efficient, less circuitous route to replace the 1860s Morris & Essex Railroad right-of-way, the DL&W considered three plans to build a completely new route (Taber and Taber, 1980:34-36). The plan chosen was a completely new line that would include massive cuts and fills to virtually eliminate grade changes. The existing line was nearly 40 miles long, had 57 curves comprising almost 13 miles of track, and a maximum grade of 60.2 feet per mile with a total rise and fall of 248 feet. The new layout, known as the New Jersey Cut-Off, limited the number and degree of curves and saved over 11 miles of track from the circuitous old line. This was the most expensive choice, costing $11,065,511.43 when completed (Taber and Taber, 1980:39), but the anticipated benefits for the railroad outweighed the cost.

Beginning in 1908 and under the direction of DL&W Chief Engineer George Ray, layout and design of the cut-off began. The line was to be 28.45 miles long, with a total rise and fall of just 11 feet and less than 5 miles of curved track. The new route would require 73 structures, including two massive viaducts, twelve overhead highway bridges and numerous crossings of roads and minor watercourses. Over 14 million cubic yards of both cut and fill were needed to create the relatively flat crossing of the hills and valleys of northwestern New Jersey (Taber and Taber, 1980:36).

Mr. Ray decided that reinforced concrete would be used for all structures along the route. This was the first time such a decision was made, causing the nickname of the "reinforced concrete railroad" to be used by the engineering profession when discussing the cut-off (Taber and Taber, 1980:36). Reinforced concrete was a state-of-the-art building material with yet unknown ultimate capabilities. It was thought to be as strong and durable as stone, and seemingly more permanent than wood or even steel.

Uncommon methods were used for the construction of the fills along the route. While the traditional method of building a wooden trestle to run dumping trains on was used for most fills, tracking was hung from suspended cables for the fills of greater magnitude. Dumping trains would carry fill onto the suspended tracks and dump the fill material from there. Most of the fill used on the cutoff was taken from the many cuts that were made, but even that was not enough. The DL&W bought 760 acres of farm land from which the contractors could dig additional fill. Five million pounds of dynamite was used to make the cuts. The Pequest Fill (Milepoint 55.85, Green Township, Sussex County) was the largest along the cut-off and in 1908 was claimed to be the "largest railway embankment ever made" (Engineering News, 1908:72). It was over 3 miles long and was up to 140 feet high. Over 6.5 million cubic yards of fill were necessary to reach the proper grade on this fill (Taber and Taber, 1980:36).

The DL&W chose to use similar structures for similar uses along the line. Where highway bridges were needed to cross their tracks, they designed reinforced concrete deck arch bridges, a bridge type that was capable of relatively long spans while providing dynamic and graceful forms. At least eleven deck arches were built in New Jersey, (1900G12, 1900G13, 1900K07, 1900C17, 2153166, 2153165, 2153164, 2153163, 2153162, 2153161, 2153160), all of them single span structures with one of two types of balustrades. Though design adjustments had to be made for roadway alignment and foundation conditions, the deck arch bridges are very similar structures.

Reinforced concrete arch tunnels were constructed where the cut-off crossed over roads or small waterways. These structures often supported high fill embankments as the cut-off crossed a valley. Over 35 of these structures were built along the line, and several of them are included in the Historic Bridge Survey (Wasigan and Simpson roads in Warren County, 2117152). Slab-roofed tunnels and box culverts were also built to carry the right-of-way over roads and streams.

The largest structures along the line were the two multi-span viaducts; the Delaware River Viaduct (2114159) and the Paulins Kill Viaduct (Milepoint 70.63, Knowlton Twp.). Both are open spandrel arch bridges that span valleys and larger water courses. The 9-span Delaware River Viaduct crosses the river as well as the highways that parallel it on both sides. It is 1,450 feet long and carries trains 65 feet above the river. The nine span structure has seven open spandrel arches and two deck arch approach spans on the Pennsylvania end. The 7-span Paulins Kill Viaduct in Hainesburg (Warren County) is 1100 feet long, but it is more graceful and magnificent as it rises 115 feet above the valley floor. It passes over the Paulins Kill River, the New York, Susquehanna and Western Railroad and the valley they run through. It was the most impressive structure on the DL&W main line prior to the building of the Tunkhannock Viaduct in Nicholson, Pennsylvania, completed in 1915.

Around the turn of the century, reinforced concrete arches were generally limited to relatively short and often single span bridges. The dead load carried by the arches was reduced with the introduction of open spandrel arches. The lighter structures were capable of longer spans and more aesthetically pleasing large bridges. The Walnut Lane bridge (1906-8) over Wissahickon Creek in Philadelphia was a forerunner of the type, though it used virtually no steel reinforcement in the two ribs (Condit, 1961:198). The use of reinforcement made the possibilities even greater. Under Ray's direction, the length and number of spans increased to create massive structures that dominated the landscape.

The New Jersey Cut-Off was divided into sections for bidding. Seven contractors were each awarded one section of the line, including contractors from as far away as Billings, Montana and Roanoke, Virginia. Each contract included all clearing, grading and masonry construction (Wheaton, 1908).

In addition to its engineering significance, the railroad right-of-way ranks historically as one of the most significant in the state, owing to the impact moving coal across the state had on the development of transportation systems within New Jersey. The Lehigh Valley Railroad played a significant role in the development of transportation and transportation-driven development in the northern half of the state, and the cut-off stands as one of the most ambitious remnants of the coal era in the state.

In summation, the viaducts, tunnels, overpasses, cuts, and fills on the New Jersey Cut-Off (1908-1911) form part of a unified design that was, and still is, one of the most remarkable engineering achievements of the early 20th century in the region. Furthermore, the New Jersey Cut-Off is one of the most visible remnants of the DL&W, and is illustrative of the history of one of the largest movers of coal that contributed to the transportation-driven economic growth of the northern half of the state. The New Jersey Cut-Off is a significant part of the western New Jersey historic landscape and transportation systems.

Boundary Description and Justification: The significance of the structure is based, in part, on its historic association and physical connection with a right-of-way that is both historically and technologically important. In New Jersey, the potential historic corridor appears to be limited to the railroad right-of-way. The potential historic corridor is approximately 28 miles long stretching from the Delaware River to the eastern junction at Hopatcong, Morris County. The New Jersey Cut-Off's western junction is in Slateford, Pennsylvania on the west bank of the Delaware River. The entire route and all its related structures were not surveyed as part of this project, but those portions of the route that were surveyed or observed as part of the 1991-1993 Historic Bridge Survey have integrity of setting and original design and appear to representative of the overall state of preservation and completeness of the route in Sussex and Warren counties.

PHOTO: NONE (07/92) REVISED BY (DATE): QUAD: Blairstown

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2153162 **CO** WARREN **OWNER** UNKNOWN **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED HELLER HILL ROAD OVER DL&W RR NEW JERSEY CUT-OFF **FACILITY** HELLER HILL ROAD

TOWNSHIP BLAIRSTOWN TOWNSHIP

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 71 ft **WIDTH** 24 ft

CONSTRUCTION DT 1910 **ALTERATION DT** **SOURCE** INSCRIPTION/PLANS

DESIGNER/PATENT DL&W RR OFFICE OF ENGINEER **BUILDER**

SETTING / CONTEXT The bridge is located in a wooded area with sparse development. It carries a two-lane road over the abandoned right-of-way of the Delaware Lackawanna & Western Railroad's New Jersey Cut-Off. The project eliminated extreme grade changes and limited curves across the hilly terrain of northwestern New Jersey, greatly increasing train efficiency. The construction of the cut-off was a major engineering accomplishment of its day, and the route provides a historic context.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Not Individually Eligible. Agreed Potential Historic District. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed one-span reinforced concrete deck-arch bridge is a high-rise structure on concrete abutments. It has a concrete balustrade with oval piercings typical of many of the New Jersey Cut-Off bridges. The bridge is one of 12 reinforced concrete deck-arch bridges along the 28.5 mile route. Though not individually significant, the bridge contributes to the important railroad-improvement campaign. The cut off is noted for its exclusive use of reinforced concrete for all its structures.

INFOR MATION

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NJDOT Bridge File: Scranton Br. RR; 64.40.

Physical Description: The one-span reinforced concrete elliptical deck arch bridge is skewed. The skewback foundations of the structure are set on rock, as the bridge carries a two-lane road over a cut section of the railroad right-of-way. The concrete balustrades are pierced with ovals, with skewed balustrades at the approaches. The construction date (1910) is inscribed at the crown of the arch in the fascia. The right-of-way is overgrown at this point, and the asphalt-paved deck has vegetation growing along both curblines.

Historical and Technological Significance: The New Jersey Cut-Off, of which this deck arch bridge is a part, was built in 1908-1911 and is historically and technologically distinguished in the areas of engineering and transportation (Criteria A, C). The cut-off is an important engineering accomplishment of the early 20th century. The Delaware, Lackawanna & Western RR (DL&W) designed and built the line to improve the efficiency of train travel across the mountainous terrain of northwestern New Jersey in Warren, Sussex, and Morris counties. The design and construction of a railroad that rises and falls just eleven feet over its length of 28.45 miles while crossing the mountains and valleys of northwestern New Jersey is remarkable even today. The decision to use reinforced concrete exclusively for all structures along the route was a pioneering action that attracted the attention of the engineering profession. The railroad's use of reinforced concrete did much to prove the material to be as strong and durable as the engineers of the early-20th century had anticipated. The DL&W also made full use of the moldable qualities of the material, designing not just functional structures, but also aesthetically pleasing ones that enhance the beauty of the railroad.

Sixteen structures are included in the NJDOT Historic Bridge Survey, but other structures, including viaducts, tunnels, and stations, were observed within Warren and Sussex counties. The structures not included in this survey appear to have integrity consistent with those bridges and tunnels that are included.

The New Jersey Cutoff is the culmination of over 55 years of efforts by the company to improve its route across New Jersey to New York City. The Delaware, Lackawanna and Western Railroad (DL&W), composed of a network of smaller railroads in Pennsylvania, New York and New Jersey, was formed in 1853 for the purpose of moving anthracite coal from the mining regions of northeastern Pennsylvania to market locations. It started from the merger of the Liggett's Gap RR and the Delaware & Cobbs Gap RR, which had been chartered and developed around 1850 by parties interested in carrying the coal to the Erie RR to the west and to the Delaware River to the east.

As the anthracite coal mining industry grew, so did the desire to increase the access to markets. In reaching to the east the DL&W needed a connection in New Jersey. They incorporated the Warren Railroad in the 1851 to carry trains from the Delaware River at Columbia (Warren County, NJ) to Central Railroad of New Jersey tracks in Hampton (Hunterdon County). From there the coal could be moved eastward to Elizabethport (Union County). In the late 1860s the DL&W became dissatisfied with the CNJ connections and sought their own access to the New York markets. In 1868 they leased the Morris & Essex RR, which was developed in the 1830s and 1840s in Morris, Essex and Hudson counties and the 1850s in Warren County. The M&E crossed New Jersey from Hoboken to Phillipsburg on the Delaware River.

Though the DL&W controlled several railroads (like the M&E, Warren, Valley, etc.), each was operated separately until 1899, when new DL&W president William Truesdale centralized control of the company. This move allowed for increased efficiency for the railroad as a

whole. In addition to the reorganization, Truesdale undertook an ambitious plan to modernize the routes (All background information gathered from Taber, 1977).

In seeking a more efficient, less circuitous route to replace the 1860s Morris & Essex Railroad right-of-way, the DL&W considered three plans to build a completely new route (Taber and Taber, 1980:34-36). The plan chosen was a completely new line that would include massive cuts and fills to virtually eliminate grade changes. The existing line was nearly 40 miles long, had 57 curves comprising almost 13 miles of track, and a maximum grade of 60.2 feet per mile with a total rise and fall of 248 feet. The new layout, known as the New Jersey Cut-Off, limited the number and degree of curves and saved over 11 miles of track from the circuitous old line. This was the most expensive choice, costing $11,065,511.43 when completed (Taber and Taber, 1980:39), but the anticipated benefits for the railroad outweighed the cost.

Beginning in 1908 and under the direction of DL&W Chief Engineer George Ray, layout and design of the cut-off began. The line was to be 28.45 miles long, with a total rise and fall of just 11 feet and less than 5 miles of curved track. The new route would require 73 structures, including two massive viaducts, twelve overhead highway bridges and numerous crossings of roads and minor watercourses. Over 14 million cubic yards of both cut and fill were needed to create the relatively flat crossing of the hills and valleys of northwestern New Jersey (Taber and Taber, 1980:36).

Mr. Ray decided that reinforced concrete would be used for all structures along the route. This was the first time such a decision was made, causing the nickname of the "reinforced concrete railroad" to be used by the engineering profession when discussing the cut-off (Taber and Taber, 1980:36). Reinforced concrete was a state-of-the-art building material with yet unknown ultimate capabilities. It was thought to be as strong and durable as stone, and seemingly more permanent than wood or even steel.

Uncommon methods were used for the construction of the fills along the route. While the traditional method of building a wooden trestle to run dumping trains on was used for most fills, tracking was hung from suspended cables for the fills of greater magnitude. Dumping trains would carry fill onto the suspended tracks and dump the fill material from there. Most of the fill used on the cutoff was taken from the many cuts that were made, but even that was not enough. The DL&W bought 760 acres of farm land from which the contractors could dig additional fill. Five million pounds of dynamite was used to make the cuts. The Pequest Fill (Milepoint 55.85, Green Township, Sussex County) was the largest along the cut-off and in 1908 was claimed to be the "largest railway embankment ever made" (Engineering News, 1908:72). It was over 3 miles long and was up to 140 feet high. Over 6.5 million cubic yards of fill were necessary to reach the proper grade on this fill (Taber and Taber, 1980:36).

The DL&W chose to use similar structures for similar uses along the line. Where highway bridges were needed to cross their tracks, they designed reinforced concrete deck arch bridges, a bridge type that was capable of relatively long spans while providing dynamic and graceful forms. At least eleven deck arches were built in New Jersey, (1900G12, 1900G13, 1900K07, 1900C17, 2153166, 2153165, 2153164, 2153163, 2153162, 2153161, 2153160), all of them single span structures with one of two types of balustrades. Though design adjustments had to be made for roadway alignment and foundation conditions, the deck arch bridges are very similar structures.

Reinforced concrete arch tunnels were constructed. These structures often supported high fill embankments. Over 35 of these structures were built along the line, according to secondary sources, and several of them are included in the Historic Bridge Survey (Wasigan and Simpson roads in Warren County, 2117152). Slab-roofed tunnels and box culverts were also built to carry the right-of-way over roads and streams.

The largest structures along the line were the two multi-span viaducts; the Delaware River Viaduct (2114159) and the Paulins Kill Viaduct (Milepoint 70.63, Knowlton Twp.). Both are open spandrel arch bridges that span valleys and larger water courses. The 9-span Delaware River Viaduct crosses the river as well as the highways that parallel it on both sides. It is 1,450 feet long and carries trains 65 feet above the river. The nine span structure has seven open spandrel arches and two deck arch approach spans on the Pennsylvania end. The 7-span Paulins Kill Viaduct in Hainesburg (Warren County) is 1100 feet long, but it is more graceful and magnificent as it rises 115 feet above the valley floor. It passes over the Paulins Kill River, the New York, Susquehanna and Western Railroad and the valley they run through. It was the most impressive structure on the DL&W main line prior to the building of the Tunkhannock Viaduct in Nicholson, Pennsylvania, completed in 1915.

Around the turn of the century, reinforced concrete arches were generally limited to relatively short and often single span bridges. The dead load carried by the arches was reduced with the introduction of open spandrel arches. The lighter structures were capable of longer spans and more aesthetically pleasing large bridges. The Walnut Lane bridge (1906-8) over Wissahickon Creek in Philadelphia was a forerunner of the type, though it used virtually no steel reinforcement in the two ribs (Condit, 1961:198). The use of reinforcement made the possibilities even greater. Under Ray's direction, the length and number of spans increased to create massive structures that dominated the landscape.

The New Jersey Cut-Off was divided into sections for bidding. Seven contractors were each awarded one section of the line, including contractors from as far away as Billings, Montana and Roanoke, Virginia. Each contract included all clearing, grading and masonry construction (Wheaton, 1908).

In addition to its engineering significance, the railroad right-of-way ranks historically as one of the most significant in the state, owing to the impact moving coal across the state had on the development of transportation systems within New Jersey. The Lehigh Valley Railroad played a significant role in the development of transportation and transportation-driven development in the northern half of the state, and the cut-off stands as one of the most ambitious remnants of the coal era in the state.

In summation, the viaducts, tunnels, overpasses, cuts, and fills on the New Jersey Cut-Off (1908-1911) form part of a unified design that was, and still is, one of the most remarkable engineering achievements of the early 20th century in the region. Furthermore, the New Jersey Cut-Off is one of the most visible remnants of the DL&W, and is illustrative of the history of one of the largest movers of coal that contributed to the transportation-driven economic growth of the northern half of the state. The New Jersey Cut-Off is a significant part of the western New Jersey historic landscape and transportation systems.

Boundary Description and Justification: The significance of the structure is based, in part, on its historic association and physical

connection with a right-of-way that is both historically and technologically important. In New Jersey, the potential historic corridor appears to be limited to the railroad right-of-way. The potential historic corridor is approximately 28 miles long stretching from the Delaware River to the eastern junction at Hopatcong, Morris County. The New Jersey Cut-Off's western junction is in Slateford, Pennsylvania on the west bank of the Delaware River. The entire route and all its related structures were not surveyed as part of this project, but those portions of the route that were surveyed or observed as part of the 1991-1993 Historic Bridge Survey have integrity of setting and original design and appear to representative of the overall state of preservation and completeness of the route in Sussex and Warren counties.

PHOTO: 167:22,185:35-36 (07/92) REVISED BY (DATE): QUAD: Blairstown

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2153163 **CO** WARREN **OWNER** UNKNOWN **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 521 OVER DL&W RR NEW JERSEY CUT-OFF **FACILITY** CR 521

TOWNSHIP BLAIRSTOWN TOWNSHIP

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 65 ft **WIDTH** 18 ft

CONSTRUCTION DT 1910 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT DL&W RR OFFICE OF ENGINEER **BUILDER**

SETTING / CONTEXT The bridge is located in a wooded area with scattered residences from the 19th and 20th centuries. The one-lane bridge on a sharp curve carries a county road over the right-of-way of the Delaware Lackawanna & Western RR NJ Cut-Off. The abandoned r-o-w was cut through rock at this point, one of the major landscape changes brought about by the line's development. The construction of the cut-off was a major engineering accomplishment of its day, and the route provides a historic context.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Agreed Potential Historic District. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The reinforced concrete elliptical arch bridge is set on high-rise concrete skewbacks. The bridge has diamond-pierced balustrades with a concrete rail above the pierced panels. The bridge is one of twelve of its type built from 1908 to 1911 on the railroad's route. It is significant as a contributing element to the DL&W RR's New Jersey Cut-Off right-of-way, an important railway-improvement campaign noted for its exclusive use of reinforced concrete.

INFOR MATION

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Lefferts, H. Leedom Jr., and Piefer, David R., Northwest New Jersey: An Inventory and History of Historic Engineering and Industry. 1979.

Physical Description: The one-span reinforced concrete deck arch bridge is skewed. The skewback foundations of the structure are set on rock, as the bridge carries a two-lane road over a cut section of the railroad right-of-way. The concrete balustrades have posts framing panels with diamond-shaped piercings. A concrete rail spans between the posts above the panels. The roadway approach has a sharp curve at the north end of the elliptical-shaped deck arch bridge.

Historical and Technological Significance: The New Jersey Cut-Off, of which this deck arch bridge is a part, was built in 1908-1911 and is historically and technologically distinguished in the areas of engineering and transportation (Criteria A, C). The cut-off is an important engineering accomplishment of the early 20th century. The Delaware, Lackawanna & Western RR (DL&W) designed and built the line to improve the efficiency of train travel across the mountainous terrain of northwestern New Jersey in Warren, Sussex, and Morris counties. The design and construction of a railroad that rises and falls just eleven feet over its length of 28.45 miles while crossing the mountains and valleys of northwestern New Jersey is remarkable even today. The decision to use reinforced concrete exclusively for all structures along the route was a pioneering action that attracted the attention of the engineering profession. The railroad's use of reinforced concrete did much to prove the material to be as strong and durable as the engineers of the early-20th century had anticipated. The DL&W also made full use of the moldable qualities of the material, designing not just functional structures, but also aesthetically pleasing ones that enhance the beauty of the railroad.

Sixteen structures are included in the NJDOT Historic Bridge Survey, but other structures, including viaducts, tunnels, and stations, were observed within Warren and Sussex counties. The structures not included in this survey appear to have integrity consistent with those bridges and tunnels that are included.

The New Jersey Cutoff is the culmination of over 55 years of efforts by the company to improve its route across New Jersey to New York City. The Delaware, Lackawanna and Western Railroad (DL&W), composed of a network of smaller railroads in Pennsylvania, New York and New Jersey, was formed in 1853 for the purpose of moving anthracite coal from the mining regions of northeastern Pennsylvania to market locations. It started from the merger of the Liggett's Gap RR and the Delaware & Cobbs Gap RR, which had been chartered and developed around 1850 by parties interested in carrying the coal to the Erie RR to the west and to the Delaware River to the east.

As the anthracite coal mining industry grew, so did the desire to increase the access to markets. In reaching to the east the DL&W needed a connection in New Jersey. They incorporated the Warren Railroad in the 1851 to carry trains from the Delaware River at Columbia (Warren County, NJ) to Central Railroad of New Jersey tracks in Hampton (Hunterdon County, NJ). From there the coal could be moved eastward to Elizabethport (near Newark, NJ). Commuters also traveled this route to get to New York City. In the late 1860s the DL&W became dissatisfied with the CNJ connections and sought their own access to the New York markets. In 1868 they leased the Morris & Essex RR, which was developed in the 1830s and 1840s in Morris, Essex and Hudson counties and the 1850s in Warren County. The M&E crossed New Jersey from Hoboken to Phillipsburg on the Delaware River.

Though the DL&W controlled several railroads (like the M&E, Warren, Valley, etc.), each was operated separately until 1899, when new DL&W president William Truesdale centralized control of the company. This move allowed for increased efficiency for the railroad as a whole. In addition to the reorganization, Truesdale undertook an ambitious plan to modernize the routes (All background information

gathered from Taber, 1977).

In seeking a more efficient, less circuitous route to replace the 1860s Morris & Essex Railroad right-of-way, the DL&W considered three plans to build a completely new route (Taber and Taber, 1980:34-36). The plan chosen was a completely new line that would include massive cuts and fills to virtually eliminate grade changes. The existing line was nearly 40 miles long, had 57 curves comprising almost 13 miles of track, and a maximum grade of 60.2 feet per mile with a total rise and fall of 248 feet. The new layout, known as the New Jersey Cut-Off, limited the number and degree of curves and saved over 11 miles of track from the circuitous old line. This was the most expensive choice, costing $11,065,511.43 when completed (Taber and Taber, 1980:39), but the anticipated benefits for the railroad outweighed the cost.

Beginning in 1908 and under the direction of DL&W Chief Engineer George Ray, layout and design of the cut-off began. The line was to be 28.45 miles long, with a total rise and fall of just 11 feet and less than 5 miles of curved track. The new route would require 73 structures, including two massive viaducts, twelve overhead highway bridges and numerous crossings of roads and minor watercourses. Over 14 million cubic yards of both cut and fill were needed to create the relatively flat crossing of the hills and valleys of northwestern New Jersey (Taber and Taber, 1980:36).

Mr. Ray decided that reinforced concrete would be used for all structures along the route. This was the first time such a decision was made, causing the nickname of the "reinforced concrete railroad" to be used by the engineering profession when discussing the cut-off (Taber and Taber, 1980:36). Reinforced concrete was a state-of-the-art building material with yet unknown ultimate capabilities. It was thought to be as strong and durable as stone, and seemingly more permanent than wood or even steel.

Uncommon methods were used for the construction of the fills along the route. While the traditional method of building a wooden trestle to run dumping trains on was used for most fills, tracking was hung from suspended cables for the fills of greater magnitude. Dumping trains would carry fill onto the suspended tracks and dump the fill material from there. Most of the fill used on the cutoff was taken from the many cuts that were made, but even that was not enough. The DL&W bought 760 acres of farm land from which the contractors could dig additional fill. Five million pounds of dynamite was used to make the cuts. The Pequest Fill (Milepoint 55.85, Green Township, Sussex County) was the largest along the cut-off and in 1908 was claimed to be the "largest railway embankment ever made" (Engineering News, 1908:72). It was over 3 miles long and was up to 140 feet high. Over 6.5 million cubic yards of fill were necessary to reach the proper grade on this fill (Taber and Taber, 1980:36).

The DL&W chose to use similar structures for similar uses along the line. Where highway bridges were needed to cross their tracks, they designed reinforced concrete deck arch bridges, a bridge type that was capable of relatively long spans while providing dynamic and graceful forms. At least eleven deck arches were built in New Jersey, (1900G12, 1900G13, 1900K07, 1900C17, 2153166, 2153165, 2153164, 2153163, 2153162, 2153161, 2153160), all of them single span structures with one of two types of balustrades. Though design adjustments had to be made for roadway alignment and foundation conditions, the deck arch bridges are very similar structures.

Reinforced concrete arch tunnels were constructed where the cut-off crossed over roads or small waterways. These structures often supported high fill embankments as the cut-off crossed a valley. Over 35 of these structures were built along the line, and several of them are included in the Historic Bridge Survey (Wasigan and Simpson roads in Warren County, 2117152). Slab-roofed tunnels and box culverts were also built to carry the right-of-way over roads and streams.

The largest structures along the line were the two multi-span viaducts; the Delaware River Viaduct (2114159) and the Paulins Kill Viaduct (Milepoint 70.63, Knowlton Twp.). Both are open spandrel arch bridges that span valleys and larger water courses. The 9-span Delaware River Viaduct crosses the river as well as the highways that parallel it on both sides. It is 1,450 feet long and carries trains 65 feet above the river. The nine span structure has seven open spandrel arches and two deck arch approach spans on the Pennsylvania end. The 7-span Paulins Kill Viaduct in Hainesburg (Warren County) is 1100 feet long, but it is more graceful and magnificent as it rises 115 feet above the valley floor. It passes over the Paulins Kill River, the New York, Susquehanna and Western Railroad and the valley they run through. It was the most impressive structure on the DL&W main line prior to the building of the Tunkhannock Viaduct in Nicholson, Pennsylvania, completed in 1915.

Around the turn of the century, reinforced concrete arches were generally limited to relatively short and often single span bridges. The dead load carried by the arches was reduced with the introduction of open spandrel arches. The lighter structures were capable of longer spans and more aesthetically pleasing large bridges. The Walnut Lane bridge (1906-8) over Wissahickon Creek in Philadelphia was a forerunner of the type, though it used virtually no steel reinforcement in the two ribs (Condit, 1961:198). The use of reinforcement made the possibilities even greater. Under Ray's direction, the length and number of spans increased to create massive structures that dominated the landscape.

The New Jersey Cut-Off was divided into sections for bidding. Seven contractors were each awarded one section of the line, including contractors from as far away as Billings, Montana and Roanoke, Virginia. Each contract included all clearing, grading and masonry construction (Wheaton, 1908).

In addition to its engineering significance, the railroad right-of-way ranks historically as one of the most significant in the state, owing to the impact moving coal across the state had on the development of transportation systems within New Jersey. The Lehigh Valley Railroad played a significant role in the development of transportation and transportation-driven development in the northern half of the state, and the cut-off stands as one of the most ambitious remnants of the coal era in the state.

In summation, the viaducts, tunnels, overpasses, cuts, and fills on the New Jersey Cut-Off (1908-1911) form part of a unified design that was, and still is, one of the most remarkable engineering achievements of the early 20th century in the region. Furthermore, the New Jersey Cut-Off is one of the most visible remnants of the DL&W, and is illustrative of the history of one of the largest movers of coal that contributed to the transportation-driven economic growth of the northern half of the state. The New Jersey Cut-Off is a significant part of the western New Jersey historic landscape and transportation systems.

Boundary Description and Justification: The significance of the structure is based, in part, on its historic association and physical connection with a right-of-way that is both historically and technologically important. In New Jersey, the potential historic corridor appears

to be limited to the railroad right-of-way. The potential historic corridor is approximately 28 miles long stretching from the Delaware River to the eastern junction at Hopatcong, Morris County. The New Jersey Cut-Off's western junction is in Slateford, Pennsylvania on the west bank of the Delaware River. The entire route and all its related structures were not surveyed as part of this project, but those portions of the route that were surveyed or observed as part of the 1991-1993 Historic Bridge Survey have integrity of setting and original design and appear to representative of the overall state of preservation and completeness of the route in Sussex and Warren counties.

PHOTO: 167:19-21 (07/92) REVISED BY (DATE): QUAD: Blairstown

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2153164 **CO** WARREN **OWNER** UNKNOWN **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED OLD DIRT ROAD OVER DL&W RR NJ CUT-OFF **FACILITY** OLD DIRT ROAD

TOWNSHIP FRELINGHUYSEN TOWNSHIP

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 65 ft **WIDTH** 18 ft

CONSTRUCTION DT 1911 **ALTERATION DT** **SOURCE** INSCRIPTION/PLANS

DESIGNER/PATENT DL&W RR OFFICE OF ENGINEER **BUILDER**

SETTING / CONTEXT The bridge is located in an isolated area, and carries an unimproved road that is the driveway to a farm over an abandoned railroad right-of-way. The line is the Delaware Lackawanna & Western Railroad's New Jersey Cut-Off, built 1908-1911. The Cut-Off involved huge amounts of cutting, filling and reinforced concrete bridge construction to eliminate extreme grade changes and limit curves. It was a major engineering accomplishment of its day, and the route provides a historic context.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Not Individually Eligible. Agreed Potential Historic District. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one-span reinforced concrete arch bridge sits on high rise concrete skewbacks. The bridge has concrete balustrades typical of oval-pierced balustrades of the cut-off bridges. The structure is one of 12 of its type along the route. It is an example of the railroad's effort to provide access for even minor existing roads over the new r-o-w. The DL&W New Jersey Cut-Off is a historically and technologically important railroad-improvement campaign noted for its use of reinforced concrete.

INFOR MATION

BIBLIOGRAPHY:

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Lefferts, H. Leedom Jr., and Piefer, David R., Northwest New Jersey: An Inventory and History of Historic Engineering and Industry. 1979.

Physical Description: The one-span reinforced concrete elliptical deck arch bridge is skewed. The skewback foundations of the structure are set on rock, as the bridge carries an unimproved road over a cut section of the railroad right-of-way. The concrete balustrades are pierced with ovals, with skewed sections at the approaches. The construction date (1911) is inscribed at the crown of the arch. The bridge is representative of the DL&W's commitment to provide bridges across their right-of-way for even minor roads and farm roads that existed prior to the line's construction. The right-of-way is now overgrown at this point.

Historical and Technological Significance: The New Jersey Cut-Off, of which this deck arch bridge is a part, was built in 1908-1911 and is historically and technologically distinguished in the areas of engineering and transportation (Criteria A, C). The cut-off is an important engineering accomplishment of the early 20th century. The Delaware, Lackawanna & Western RR (DL&W) designed and built the line to improve the efficiency of train travel across the mountainous terrain of northwestern New Jersey in Warren, Sussex, and Morris counties. The design and construction of a railroad that rises and falls just eleven feet over its length of 28.45 miles while crossing the mountains and valleys of northwestern New Jersey is remarkable even today. The decision to use reinforced concrete exclusively for all structures along the route was a pioneering action that attracted the attention of the engineering profession. The railroad's use of reinforced concrete did much to prove the material to be as strong and durable as the engineers of the early-20th century had anticipated. The DL&W also made full use of the moldable qualities of the material, designing not just functional structures, but also aesthetically pleasing ones that enhance the beauty of the railroad.

Sixteen structures are included in the NJDOT Historic Bridge Survey, but other structures, including viaducts, tunnels, and stations, were observed within Warren and Sussex counties. The structures not included in this survey appear to have integrity consistent with those bridges and tunnels that are included. The DL&W offered property owners a choice for private farm roads such as this: they could have a bridge built across the right-of-way or they could sell the land on the opposite side of the tracks to the rail company.

The New Jersey Cutoff is the culmination of over 55 years of efforts by the company to improve its route across New Jersey to New York City. The Delaware, Lackawanna and Western Railroad (DL&W), composed of a network of smaller railroads in Pennsylvania, New York and New Jersey, was formed in 1853 for the purpose of moving anthracite coal from the mining regions of northeastern Pennsylvania to market locations. It started from the merger of the Liggett's Gap RR and the Delaware & Cobbs Gap RR, which had been chartered and developed around 1850 by parties interested in carrying the coal to the Erie RR to the west and to the Delaware River to the east.

As the anthracite coal mining industry grew, so did the desire to increase the access to markets. In reaching to the east the DL&W needed a connection in New Jersey. They incorporated the Warren Railroad in the 1851 to carry trains from the Delaware River at Columbia (Warren County, NJ) to Central Railroad of New Jersey tracks in Hampton (Hunterdon County, NJ). From there the coal could be moved eastward to Elizabethport (near Newark, NJ). Commuters also traveled this route to get to New York City. In the late 1860s the DL&W became dissatisfied with the CNJ connections and sought their own access to the New York markets. In 1868 they leased the Morris & Essex RR, which was developed in the 1830s and 1840s in Morris, Essex and Hudson counties and the 1850s in Warren County. The M&E crossed New Jersey from Hoboken to Phillipsburg on the Delaware River.

Though the DL&W controlled several railroads (like the M&E, Warren, Valley, etc.), each was operated separately until 1899, when new

DL&W president William Truesdale centralized control of the company. This move allowed for increased efficiency for the railroad as a whole. In addition to the reorganization, Truesdale undertook an ambitious plan to modernize the routes (All background information gathered from Taber, 1977).

In seeking a more efficient, less circuitous route to replace the 1860s Morris & Essex Railroad right-of-way, the DL&W considered three plans to build a completely new route (Taber and Taber, 1980:34-36). The plan chosen was a completely new line that would include massive cuts and fills to virtually eliminate grade changes. The existing line was nearly 40 miles long, had 57 curves comprising almost 13 miles of track, and a maximum grade of 60.2 feet per mile with a total rise and fall of 248 feet. The new layout, known as the New Jersey Cut-Off, limited the number and degree of curves and saved over 11 miles of track from the circuitous old line. This was the most expensive choice, costing $11,065,511.43 when completed (Taber and Taber, 1980:39), but the anticipated benefits for the railroad outweighed the cost.

Beginning in 1908 and under the direction of DL&W Chief Engineer George Ray, layout and design of the cut-off began. The line was to be 28.45 miles long, with a total rise and fall of just 11 feet and less than 5 miles of curved track. The new route would require 73 structures, including two massive viaducts, twelve overhead highway bridges and numerous crossings of roads and minor watercourses. Over 14 million cubic yards of both cut and fill were needed to create the relatively flat crossing of the hills and valleys of northwestern New Jersey (Taber and Taber, 1980:36).

Mr. Ray decided that reinforced concrete would be used for all structures along the route. This was the first time such a decision was made, causing the nickname of the "reinforced concrete railroad" to be used by the engineering profession when discussing the cut-off (Taber and Taber, 1980:36). Reinforced concrete was a state-of-the-art building material with yet unknown ultimate capabilities. It was thought to be as strong and durable as stone, and seemingly more permanent than wood or even steel.

Uncommon methods were used for the construction of the fills along the route. While the traditional method of building a wooden trestle to run dumping trains on was used for most fills, tracking was hung from suspended cables for the fills of greater magnitude. Dumping trains would carry fill onto the suspended tracks and dump the fill material from there. Most of the fill used on the cutoff was taken from the many cuts that were made, but even that was not enough. The DL&W bought 760 acres of farm land from which the contractors could dig additional fill. Five million pounds of dynamite was used to make the cuts. The Pequest Fill (Milepoint 55.85, Green Township, Sussex County) was the largest along the cut-off and in 1908 was claimed to be the "largest railway embankment ever made" (Engineering News, 1908:72). It was over 3 miles long and was up to 140 feet high. Over 6.5 million cubic yards of fill were necessary to reach the proper grade on this fill (Taber and Taber, 1980:36).

The DL&W chose to use similar structures for similar uses along the line. Where highway bridges were needed to cross their tracks, they designed reinforced concrete deck arch bridges, a bridge type that was capable of relatively long spans while providing dynamic and graceful forms. At least eleven deck arches were built in New Jersey, (1900G12, 1900G13, 1900K07, 1900C17, 2153166, 2153165, 2153164, 2153163, 2153162, 2153161, 2153160), all of them single span structures with one of two types of balustrades. Though design adjustments had to be made for roadway alignment and foundation conditions, the deck arch bridges are very similar structures.

Reinforced concrete arch tunnels were constructed where the cut-off crossed over roads or small waterways. These structures often supported high fill embankments as the cut-off crossed a valley. Over 35 of these structures were built along the line, and several of them are included in the Historic Bridge Survey (Wasigan and Simpson roads in Warren County, 2117152). Slab-roofed tunnels and box culverts were also built to carry the right-of-way over roads and streams.

The largest structures along the line were the two multi-span viaducts; the Delaware River Viaduct (2114159) and the Paulins Kill Viaduct (Milepoint 70.63, Knowlton Twp.). Both are open spandrel arch bridges that span valleys and larger water courses. The 9-span Delaware River Viaduct crosses the river as well as the highways that parallel it on both sides. It is 1,450 feet long and carries trains 65 feet above the river. The nine span structure has seven open spandrel arches and two deck arch approach spans on the Pennsylvania end. The 7-span Paulins Kill Viaduct in Hainesburg (Warren County) is 1100 feet long, but it is more graceful and magnificent as it rises 115 feet above the valley floor. It passes over the Paulins Kill River, the New York, Susquehanna and Western Railroad and the valley they run through. It was the most impressive structure on the DL&W main line prior to the building of the Tunkhannock Viaduct in Nicholson, Pennsylvania, completed in 1915.

Around the turn of the century, reinforced concrete arches were generally limited to relatively short and often single span bridges. The dead load carried by the arches was reduced with the introduction of open spandrel arches. The lighter structures were capable of longer spans and more aesthetically pleasing large bridges. The Walnut Lane bridge (1906-8) over Wissahickon Creek in Philadelphia was a forerunner of the type, though it used virtually no steel reinforcement in the two ribs (Condit, 1961:198). The use of reinforcement made the possibilities even greater. Under Ray's direction, the length and number of spans increased to create massive structures that dominated the landscape.

The New Jersey Cut-Off was divided into sections for bidding. Seven contractors were each awarded one section of the line, including contractors from as far away as Billings, Montana and Roanoke, Virginia. Each contract included all clearing, grading and masonry construction (Wheaton, 1908).

In addition to its engineering significance, the railroad right-of-way ranks historically as one of the most significant in the state, owing to the impact moving coal across the state had on the development of transportation systems within New Jersey. The Lehigh Valley Railroad played a significant role in the development of transportation and transportation-driven development in the northern half of the state, and the cut-off stands as one of the most ambitious remnants of the coal era in the state.

In summation, the viaducts, tunnels, overpasses, cuts, and fills on the New Jersey Cut-Off (1908-1911) form part of a unified design that was, and still is, one of the most remarkable engineering achievements of the early 20th century in the region. Furthermore, the New Jersey Cut-Off is one of the most visible remnants of the DL&W, and is illustrative of the history of one of the largest movers of coal that contributed to the transportation-driven economic growth of the northern half of the state. The New Jersey Cut-Off is a significant part of the western New Jersey historic landscape and transportation systems.

Boundary Description and Justification: The significance of the structure is based, in part, on its historic association and physical connection with a right-of-way that is both historically and technologically important. In New Jersey, the potential historic corridor appears to be limited to the railroad right-of-way. The potential historic corridor is approximately 28 miles long stretching from the Delaware River to the eastern junction at Hopatcong, Morris County. The New Jersey Cut-Off's western junction is in Slateford, Pennsylvania on the west bank of the Delaware River. The entire route and all its related structures were not surveyed as part of this project, but those portions of the route that were surveyed or observed as part of the 1991-1993 Historic Bridge Survey have integrity of setting and original design and appear to representative of the overall state of preservation and completeness of the route in Sussex and Warren counties.

PHOTO: 167:14-15 (07/92) REVISED BY (DATE): QUAD: Blairstown

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2153165 **CO** WARREN **OWNER** UNKNOWN **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 608 OVER DL&W RR NEW JERSEY CUT-OFF **FACILITY** CR 608 (SILVER LAKE - MARKSBORO ROAD)

TOWNSHIP FRELINGHUYSEN TOWNSHIP

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 62 ft **WIDTH** 21 ft

CONSTRUCTION DT 1911 **ALTERATION DT** **SOURCE** INSCRIPTION/PLANS

DESIGNER/PATENT DL&W RR OFFICE OF ENGINEER **BUILDER**

SETTING / CONTEXT The bridge is located in a wooded area with scattered residences. It carries a two-lane county road over an abandoned railroad right-of-way, developed in 1908-1911 as the Delaware Lackawanna & Western Railroad's New Jersey Cut-Off, an ambitious project which minimized curves and grade changes to bring trains across northwestern New Jersey more efficiently. The successful project was a major engineering accomplishment of its day, and the route provides a historic context.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Not Individually Eligible. Agreed Potential Historic District. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one-span reinforced concrete elliptical arch bridge is set on high rise skewbacks. The skewed bridge has concrete balustrades typical of the oval-pierced balustrades of the cut-off bridges. The structure is one of 12 of its type along the route. The New Jersey Cut-Off is a historically important railroad-improvement campaign noted for its exclusive use of reinforced concrete structures. This bridge, like the others, is unaltered, and it contributes to the design integrity of the route.

INFOR MATION

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Lefferts, H. Leedom Jr., and Piefer, David R., Northwest New Jersey: An Inventory and History of Historic Engineering and Industry. 1979.

Physical Description: The one-span reinforced concrete elliptical deck arch bridge is skewed. The skewback foundations of the structure are set on rock, as the bridge carries a two-lane road over a shallow cut section of the railroad right-of-way. The concrete balustrades are pierced with ovals, and have skewed sections at the approaches. The roadway curves at the north approach. The construction date (1911) is inscribed in the panel of the balustrade post at the center of the span. The right-of-way is overgrown at this point.

Historical and Technological Significance: The New Jersey Cut-Off, of which this deck arch bridge is a part, was built in 1908-1911 and is historically and technologically distinguished in the areas of engineering and transportation (Criteria A, C). The cut-off is an important engineering accomplishment of the early 20th century. The Delaware, Lackawanna & Western RR (DL&W) designed and built the line to improve the efficiency of train travel across the mountainous terrain of northwestern New Jersey in Warren, Sussex, and Morris counties. The design and construction of a railroad that rises and falls just eleven feet over its length of 28.45 miles while crossing the mountains and valleys of northwestern New Jersey is remarkable even today. The decision to use reinforced concrete exclusively for all structures along the route was a pioneering action that attracted the attention of the engineering profession. The railroad's use of reinforced concrete did much to prove the material to be as strong and durable as the engineers of the early-20th century had anticipated. The DL&W also made full use of the moldable qualities of the material, designing not just functional structures, but also aesthetically pleasing ones that enhance the beauty of the railroad.

Sixteen structures are included in the NJDOT Historic Bridge Survey, but other structures, including viaducts, tunnels, and stations, were observed within Warren and Sussex counties. The structures not included in this survey appear to have integrity consistent with those bridges and tunnels that are included.

The New Jersey Cutoff is the culmination of over 55 years of efforts by the company to improve its route across New Jersey to New York City. The Delaware, Lackawanna and Western Railroad (DL&W), composed of a network of smaller railroads in Pennsylvania, New York and New Jersey, was formed in 1853 for the purpose of moving anthracite coal from the mining regions of northeastern Pennsylvania to market locations. It started from the merger of the Liggett's Gap RR and the Delaware & Cobbs Gap RR, which had been chartered and developed around 1850 by parties interested in carrying the coal to the Erie RR to the west and to the Delaware River to the east.

As the anthracite coal mining industry grew, so did the desire to increase the access to markets. In reaching to the east the DL&W needed a connection in New Jersey. They incorporated the Warren Railroad in the 1851 to carry trains from the Delaware River at Columbia (Warren County, NJ) to Central Railroad of New Jersey tracks in Hampton (Hunterdon County, NJ). From there the coal could be moved eastward to Elizabethport (near Newark, NJ). Commuters also traveled this route to get to New York City. In the late 1860s the DL&W became dissatisfied with the CNJ connections and sought their own access to the New York markets. In 1868 they leased the Morris & Essex RR, which was developed in the 1830s and 1840s in Morris, Essex and Hudson counties and the 1850s in Warren County. The M&E crossed New Jersey from Hoboken to Phillipsburg on the Delaware River.

Though the DL&W controlled several railroads (like the M&E, Warren, Valley, etc.), each was operated separately until 1899, when new DL&W president William Truesdale centralized control of the company. This move allowed for increased efficiency for the railroad as a whole. In addition to the reorganization, Truesdale undertook an ambitious plan to modernize the routes (All background information

gathered from Taber, 1977).

In seeking a more efficient, less circuitous route to replace the 1860s Morris & Essex Railroad right-of-way, the DL&W considered three plans to build a completely new route (Taber and Taber, 1980:34-36). The plan chosen was a completely new line that would include massive cuts and fills to virtually eliminate grade changes. The existing line was nearly 40 miles long, had 57 curves comprising almost 13 miles of track, and a maximum grade of 60.2 feet per mile with a total rise and fall of 248 feet. The new layout, known as the New Jersey Cut-Off, limited the number and degree of curves and saved over 11 miles of track from the circuitous old line. This was the most expensive choice, costing $11,065,511.43 when completed (Taber and Taber, 1980:39), but the anticipated benefits for the railroad outweighed the cost.

Beginning in 1908 and under the direction of DL&W Chief Engineer George Ray, layout and design of the cut-off began. The line was to be 28.45 miles long, with a total rise and fall of just 11 feet and less than 5 miles of curved track. The new route would require 73 structures, including two massive viaducts, twelve overhead highway bridges and numerous crossings of roads and minor watercourses. Over 14 million cubic yards of both cut and fill were needed to create the relatively flat crossing of the hills and valleys of northwestern New Jersey (Taber and Taber, 1980:36).

Mr. Ray decided that reinforced concrete would be used for all structures along the route. This was the first time such a decision was made, causing the nickname of the "reinforced concrete railroad" to be used by the engineering profession when discussing the cut-off (Taber and Taber, 1980:36). Reinforced concrete was a state-of-the-art building material with yet unknown ultimate capabilities. It was thought to be as strong and durable as stone, and seemingly more permanent than wood or even steel.

Uncommon methods were used for the construction of the fills along the route. While the traditional method of building a wooden trestle to run dumping trains on was used for most fills, tracking was hung from suspended cables for the fills of greater magnitude. Dumping trains would carry fill onto the suspended tracks and dump the fill material from there. Most of the fill used on the cutoff was taken from the many cuts that were made, but even that was not enough. The DL&W bought 760 acres of farm land from which the contractors could dig additional fill. Five million pounds of dynamite was used to make the cuts. The Pequest Fill (Milepoint 55.85, Green Township, Sussex County) was the largest along the cut-off and in 1908 was claimed to be the "largest railway embankment ever made" (Engineering News, 1908:72). It was over 3 miles long and was up to 140 feet high. Over 6.5 million cubic yards of fill were necessary to reach the proper grade on this fill (Taber and Taber, 1980:36).

The DL&W chose to use similar structures for similar uses along the line. Where highway bridges were needed to cross their tracks, they designed reinforced concrete deck arch bridges, a bridge type that was capable of relatively long spans while providing dynamic and graceful forms. At least eleven deck arches were built in New Jersey, (1900G12, 1900G13, 1900K07, 1900C17, 2153166, 2153165, 2153164, 2153163, 2153162, 2153161, 2153160), all of them single span structures with one of two types of balustrades. Though design adjustments had to be made for roadway alignment and foundation conditions, the deck arch bridges are very similar structures.

Reinforced concrete arch tunnels were constructed where the cut-off crossed over roads or small waterways. These structures often supported high fill embankments as the cut-off crossed a valley. Over 35 of these structures were built along the line, and several of them are included in the Historic Bridge Survey (Wasigan and Simpson roads in Warren County, 2117152). Slab-roofed tunnels and box culverts were also built to carry the right-of-way over roads and streams.

The largest structures along the line were the two multi-span viaducts; the Delaware River Viaduct (2114159) and the Paulins Kill Viaduct (Milepoint 70.63, Knowlton Twp.). Both are open spandrel arch bridges that span valleys and larger water courses. The 9-span Delaware River Viaduct crosses the river as well as the highways that parallel it on both sides. It is 1,450 feet long and carries trains 65 feet above the river. The nine span structure has seven open spandrel arches and two deck arch approach spans on the Pennsylvania end. The 7-span Paulins Kill Viaduct in Hainesburg (Warren County) is 1100 feet long, but it is more graceful and magnificent as it rises 115 feet above the valley floor. It passes over the Paulins Kill River, the New York, Susquehanna and Western Railroad and the valley they run through. It was the most impressive structure on the DL&W main line prior to the building of the Tunkhannock Viaduct in Nicholson, Pennsylvania, completed in 1915.

Around the turn of the century, reinforced concrete arches were generally limited to relatively short and often single span bridges. The dead load carried by the arches was reduced with the introduction of open spandrel arches. The lighter structures were capable of longer spans and more aesthetically pleasing large bridges. The Walnut Lane bridge (1906-8) over Wissahickon Creek in Philadelphia was a forerunner of the type, though it used virtually no steel reinforcement in the two ribs (Condit, 1961:198). The use of reinforcement made the possibilities even greater. Under Ray's direction, the length and number of spans increased to create massive structures that dominated the landscape.

The New Jersey Cut-Off was divided into sections for bidding. Seven contractors were each awarded one section of the line, including contractors from as far away as Billings, Montana and Roanoke, Virginia. Each contract included all clearing, grading and masonry construction (Wheaton, 1908).

In addition to its engineering significance, the railroad right-of-way ranks historically as one of the most significant in the state, owing to the impact moving coal across the state had on the development of transportation systems within New Jersey. The Lehigh Valley Railroad played a significant role in the development of transportation and transportation-driven development in the northern half of the state, and the cut-off stands as one of the most ambitious remnants of the coal era in the state.

In summation, the viaducts, tunnels, overpasses, cuts, and fills on the New Jersey Cut-Off (1908-1911) form part of a unified design that was, and still is, one of the most remarkable engineering achievements of the early 20th century in the region. Furthermore, the New Jersey Cut-Off is one of the most visible remnants of the DL&W, and is illustrative of the history of one of the largest movers of coal that contributed to the transportation-driven economic growth of the northern half of the state. The New Jersey Cut-Off is a significant part of the western New Jersey historic landscape and transportation systems.

Boundary Description and Justification: The significance of the structure is based, in part, on its historic association and physical connection with a right-of-way that is both historically and technologically important. In New Jersey, the potential historic corridor appears

to be limited to the railroad right-of-way. The potential historic corridor is approximately 28 miles long stretching from the Delaware River to the eastern junction at Hopatcong, Morris County. The New Jersey Cut-Off's western junction is in Slateford, Pennsylvania on the west bank of the Delaware River. The entire route and all its related structures were not surveyed as part of this project, but those portions of the route that were surveyed or observed as part of the 1991-1993 Historic Bridge Survey have integrity of setting and original design and appear to representative of the overall state of preservation and completeness of the route in Sussex and Warren counties.

PHOTO: 167:10-11 (07/92) REVISED BY (DATE): QUAD: Blairstown

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2153166 **CO** WARREN **OWNER** UNKNOWN **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED LANNING ROAD OVER DL&W RR NJ CUT-OFF **FACILITY** LANNING ROAD

TOWNSHIP FRELINGHUYSEN TOWNSHIP

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 62 ft **WIDTH** 18 ft

CONSTRUCTION DT 1911 **ALTERATION DT** **SOURCE** INSCRIPTION/PLANS

DESIGNER/PATENT DL&W RR OFFICE OF ENGINEER **BUILDER**

SETTING / CONTEXT The bridge is located in a wooded area with sparse residential development. The one-lane structure carries a winding road over the abandoned railroad right-of-way that was developed in 1908-1911 by the Delaware Lackawanna & Western RR as the New Jersey Cut-Off, a line built to increase efficiency by decreasing curves and eliminating extreme grade changes. The construction of the DL&W Cut-Off was a major engineering accomplishment of its day, and the route provides a historic context.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Not Individually Eligible. Agreed Potential Historic District. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one-span reinforced concrete deck arch bridge is set on high-rise skewbacks. The oval-pierced concrete balustrade follows the vertical crest curve of the roadway over the span. The bridge is one 12 reinforced concrete deck-arch bridges along the 28.5 mile cut-off. Though not individually significant, the bridge contributes to the historically and technologically important railroad-improvement campaign. The cut-off is noted for its exclusive use of concrete for all of its structures.

INFOR MATION

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Lefferts, H. Leedom Jr., and Piefer, David R., Northwest New Jersey: An Inventory and History of Historic Engineering and Industry. 1979.
NJDOT Bridge File: Scranton Branch RR; 62.19.

Physical Description: The one-span reinforced concrete deck arch bridge has skewback foundations set on rock. The bridge carries a two-lane road over a deep cut section of the railroad right-of-way. The concrete balustrades are pierced with ovals, with beam guiderails lining the approaches. The roadway exhibits a vertical crest curve over the elliptical arch bridge. The construction date (1911) is inscribed at the crown of the arch. The right-of-way is overgrown at this point, and the asphalt-paved deck has debris accumulating and vegetation growing along the curblines.

Historical and Technological Significance: The New Jersey Cut-Off, built in 1908-1911, is historically and technologically distinguished in the areas of engineering and transportation (Criteria A, C). The Delaware, Lackawanna & Western RR (DL&W) designed and built the line to improve the efficiency of train travel across the mountainous terrain of northwestern New Jersey. The decision to use reinforced concrete exclusively for all structures along the route was a pioneering action that attracted the attention of the engineering profession. The design and construction of a railroad that rises and falls just eleven feet over its length of 28.45 miles while crossing the mountains and valleys of northwestern New Jersey is remarkable even today. The railroad's use of reinforced concrete for all of the structures built along the road did much to prove the material to be as strong and durable as the engineers of the early-20th century had anticipated. The DL&W also made full use of the moldable qualities of the material, designing not just functional structures, but also aesthetically pleasing ones that enhance the beauty of the railroad.

Sixteen structures are included in the NJDOT Historic Bridge Survey, but other structures, including viaducts, tunnels, and stations, were observed within Warren and Sussex counties. The structures not included in this survey appear to have integrity consistent with those bridges and tunnels that are included.

The New Jersey Cutoff is the culmination of over 55 years of efforts by the company to improve its route across New Jersey to New York City. The Delaware, Lackawanna and Western Railroad (DL&W), composed of a network of smaller railroads in Pennsylvania, New York and New Jersey, was formed in 1853 for the purpose of moving anthracite coal from the mining regions of northeastern Pennsylvania to market locations. It started from the merger of the Liggett's Gap RR and the Delaware & Cobbs Gap RR, which had been chartered and developed around 1850 by parties interested in carrying the coal to the Erie RR to the west and to the Delaware River to the east.

As the anthracite coal mining industry grew, so did the desire to increase the access to markets. In reaching to the east the DL&W needed a connection in New Jersey. They incorporated the Warren Railroad in the 1851 to carry trains from the Delaware River at Columbia (Warren County, NJ) to Central Railroad of New Jersey tracks in Hampton (Hunterdon County). From there the coal could be moved eastward to Elizabethport (Union County). In the late 1860s the DL&W became dissatisfied with the CNJ connections and sought their own access to the New York markets. In 1868 they leased the Morris & Essex RR, which was developed in the 1830s and 1840s in Morris, Essex and Hudson counties and the 1850s in Warren County. The M&E crossed New Jersey from Hoboken to Phillipsburg on the Delaware River.

Though the DL&W controlled several railroads (like the M&E, Warren, Valley, etc.), each was operated separately until 1899, when new DL&W president William Truesdale centralized control of the company. This move allowed for increased efficiency for the railroad as a

whole. In addition to the reorganization, Truesdale undertook an ambitious plan to modernize the routes (All background information gathered from Taber, 1977).

In seeking a more efficient, less circuitous route to replace the 1860s Morris & Essex Railroad right-of-way, the DL&W considered three plans to build a completely new route (Taber and Taber, 1980:34-36). The plan chosen was a completely new line that would include massive cuts and fills to virtually eliminate grade changes. The existing line was nearly 40 miles long, had 57 curves comprising almost 13 miles of track, and a maximum grade of 60.2 feet per mile with a total rise and fall of 248 feet. The new layout, known as the New Jersey Cut-Off, limited the number and degree of curves and saved over 11 miles of track from the circuitous old line. This was the most expensive choice, costing $11,065,511.43 when completed (Taber and Taber, 1980:39), but the anticipated benefits for the railroad outweighed the cost.

Beginning in 1908 and under the direction of DL&W Chief Engineer George Ray, layout and design of the cut-off began. The line was to be 28.45 miles long, with a total rise and fall of just 11 feet and less than 5 miles of curved track. The new route would require 73 structures, including two massive viaducts, twelve overhead highway bridges and numerous crossings of roads and minor watercourses. Over 14 million cubic yards of both cut and fill were needed to create the relatively flat crossing of the hills and valleys of northwestern New Jersey (Taber and Taber, 1980:36).

Mr. Ray decided that reinforced concrete would be used for all structures along the route. This was the first time such a decision was made, causing the nickname of the "reinforced concrete railroad" to be used by the engineering profession when discussing the cut-off (Taber and Taber, 1980:36). Reinforced concrete was a state-of-the-art building material with yet unknown ultimate capabilities. It was thought to be as strong and durable as stone, and seemingly more permanent than wood or even steel.

Uncommon methods were used for the construction of the fills along the route. While the traditional method of building a wooden trestle to run dumping trains on was used for most fills, tracking was hung from suspended cables for the fills of greater magnitude. Dumping trains would carry fill onto the suspended tracks and dump the fill material from there. Most of the fill used on the cutoff was taken from the many cuts that were made, but even that was not enough. The DL&W bought 760 acres of farm land from which the contractors could dig additional fill. Five million pounds of dynamite was used to make the cuts. The Pequest Fill (Milepoint 55.85, Green Township, Sussex County) was the largest along the cut-off and in 1908 was claimed to be the "largest railway embankment ever made" (Engineering News, 1908:72). It was over 3 miles long and was up to 140 feet high. Over 6.5 million cubic yards of fill were necessary to reach the proper grade on this fill (Taber and Taber, 1980:36).

The DL&W chose to use similar structures for similar uses along the line. Where highway bridges were needed to cross their tracks, they designed reinforced concrete deck arch bridges, a bridge type that was capable of relatively long spans while providing dynamic and graceful forms. At least eleven deck arches were built in New Jersey, (1900G12, 1900G13, 1900K07, 1900C17, 2153166, 2153165, 2153164, 2153163, 2153162, 2153161, 2153160), all of them single span structures with one of two types of balustrades. Though design adjustments had to be made for roadway alignment and foundation conditions, the deck arch bridges are very similar structures.

Reinforced concrete arch tunnels were constructed. These structures often supported high fill embankments. Over 35 of these structures were built along the line, according to secondary sources, and several of them are included in the Historic Bridge Survey (Wasigan and Simpson roads in Warren County, 2117152). Slab-roofed tunnels and box culverts were also built to carry the right-of-way over roads and streams.

The largest structures along the line were the two multi-span viaducts; the Delaware River Viaduct (2114159) and the Paulins Kill Viaduct (Milepoint 70.63, Knowlton Twp.). Both are open spandrel arch bridges that span valleys and larger water courses. The 9-span Delaware River Viaduct crosses the river as well as the highways that parallel it on both sides. It is 1,450 feet long and carries trains 65 feet above the river. The nine span structure has seven open spandrel arches and two deck arch approach spans on the Pennsylvania end. The 7-span Paulins Kill Viaduct in Hainesburg (Warren County) is 1100 feet long, but it is more graceful and magnificent as it rises 115 feet above the valley floor. It passes over the Paulins Kill River, the New York, Susquehanna and Western Railroad and the valley they run through. It was the most impressive structure on the DL&W main line prior to the building of the Tunkhannock Viaduct in Nicholson, Pennsylvania, completed in 1915.

Around the turn of the century, reinforced concrete arches were generally limited to relatively short and often single span bridges. The dead load carried by the arches was reduced with the introduction of open spandrel arches. The lighter structures were capable of longer spans and more aesthetically pleasing large bridges. The Walnut Lane bridge (1906-8) over Wissahickon Creek in Philadelphia was a forerunner of the type, though it used virtually no steel reinforcement in the two ribs (Condit, 1961:198). The use of reinforcement made the possibilities even greater. Under Ray's direction, the length and number of spans increased to create massive structures that dominated the landscape.

The New Jersey Cut-Off was divided into sections for bidding. Seven contractors were each awarded one section of the line, including contractors from as far away as Billings, Montana and Roanoke, Virginia. Each contract included all clearing, grading and masonry construction (Wheaton, 1908).

In addition to its engineering significance, the railroad right-of-way ranks historically as one of the most significant in the state, owing to the impact moving coal across the state had on the development of transportation systems within New Jersey. The Lehigh Valley Railroad played a significant role in the development of transportation and transportation-driven development in the northern half of the state, and the cut-off stands as one of the most ambitious remnants of the coal era in the state.

In summation, the viaducts, tunnels, overpasses, cuts, and fills on the New Jersey Cut-Off (1908-1911) form part of a unified design that was, and still is, one of the most remarkable engineering achievements of the early 20th century in the region. Furthermore, the New Jersey Cut-Off is one of the most visible remnants of the DL&W, and is illustrative of the history of one of the largest movers of coal that contributed to the transportation-driven economic growth of the northern half of the state. The New Jersey Cut-Off is a significant part of the western New Jersey historic landscape and transportation systems.

Boundary Description and Justification: The significance of the structure is based, in part, on its historic association and physical

connection with a right-of-way that is both historically and technologically important. In New Jersey, the potential historic corridor appears to be limited to the railroad right-of-way. The potential historic corridor is approximately 28 miles long stretching from the Delaware River to the eastern junction at Hopatcong, Morris County. The New Jersey Cut-Off's western junction is in Slateford, Pennsylvania on the west bank of the Delaware River. The entire route and all its related structures were not surveyed as part of this project, but those portions of the route that were surveyed or observed as part of the 1991-1993 Historic Bridge Survey have integrity of setting and original design and appear to representative of the overall state of preservation and completeness of the route in Sussex and Warren counties.

PHOTO: 167:8-9,185:27-26 (07/92) REVISED BY (DATE): QUAD: Blairstown

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2154160 **CO** WARREN **OWNER** UNKNOWN **MILEPOINT** 0.4

NAME & FEATURE INTERSECTED SOUTH MAIN STREET (US 22 ALT) OVER WASHINGTON SECONDARY RR **FACILITY** SOUTH MAIN STREET (US 22 ALTERNATE)

TOWNSHIP PHILLIPSBURG TOWN

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 53 ft **WIDTH** 36 ft

CONSTRUCTION DT 1910 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT DL&W RR OFFICE OF ENGINEER **BUILDER**

SETTING / CONTEXT The bridge, located in an urban area dominated by ca. 1900 residences, carries a two-lane road with sidewalks over one active track. 100' south of the bridge is a 1910 Warren thru truss bridge over CNJ tracks (NJT Raritan Valley Line, MP 72.15) that has been determined eligible. Between the sets of two tracks, a station was built by the DL&W to serve its own line as well as that of the CNJ. The station and the bridges are located approximately 1000' from the Delaware River.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span encased stringer bridge is supported on ashlar abutments and an uncommon pier. The pier is built of steel columns with laced lateral bracing, and a built-up hammerhead steel pier cap. The columns are set in a concrete crash wall. The stringer spans are not of equal length. The deck is enclosed by paneled concrete parapets. The bridge is not technologically distinguished, as it is one of over 65 stringer spans in Warren County.

INFOR MATION

PHOTO: 172:28-30 (07/92) REVISED BY (DATE): QUAD: Easton

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2154161 **CO** WARREN **OWNER** UNKNOWN **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED INGERSOLL RAND ENTRANCE OVER WASHINGTON SECNDRY RR **FACILITY** INGERSOLL RAND ENTRANCE ROAD

TOWNSHIP PHILLIPSBURG TOWN

TYPE MULTI GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 4 **LENGTH** 122 ft **WIDTH** 22 ft

CONSTRUCTION DT 1923 **ALTERATION DT** 1944 **SOURCE** PLANS

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER** AMERICAN BRIDGE COMPANY ELMIR

SETTING / CONTEXT The bridge is located in a 20th century commercial and industrial area. The structure carries a two-lane entrance road off of US 22 and a sidewalk over one active track of the Washington Secondary RR. The road accesses the Ingersoll-Rand plant, initially developed in 1905. The facility contains some historic buildings, but the bridge is not a contributing element to the historic character.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The four-span multi-deck-girder bridge sits on ashlar and concrete abutments and steel and concrete piers. The bridge was altered in 1944 when the north end of the bridge was widened with concrete tee-beams on a concrete-widened abutment. A bent and two new concrete columns were also added then. The bridge had been previously strengthened with the replacement of a sidewalk stringer with a heavier girder that could support vehicular traffic. The bridge has not retained its design integrity.

INFOR MATION

PHOTO: 172:33-37 (07/92) REVISED BY (DATE): QUAD: Easton

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2154162 **CO** WARREN **OWNER** RAILROAD **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED NORTH MAIN ST (CR 637) OVER WASHINGTON SECONDARY RR **FACILITY** NORTH MAIN STREET (CR 637)

TOWNSHIP GREENWICH TOWNSHIP

TYPE T BEAM **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 42 ft **WIDTH** 20 ft

CONSTRUCTION DT 1916 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT DL&W RR OFFICE OF ENGINEER **BUILDER**

SETTING / CONTEXT The bridge is located at the edge of a neighborhood built in the early-20th century. Most homes have been extensively altered. The structure carries a two-lane county route over one track of the Washington Secondary. The line was developed around 1860 by the Morris & Essex Railroad, extending their tracks from Hackettstown to Phillipsburg. In 1868 the Delaware Lackawanna & Western RR took control of the line, connecting their Warren RR to the M&E in Washington.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible. Delaware, Lackawanna & Western Railroad Old Main Line Historic District, Eligible. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 1-span reinforced concrete T-beam bridge is set on rubble-course abutments with concrete caps. The five precast T-beams are skewed to the abutments. The railing is a self-supporting precast truss-like balustrade set adjacent to the beams on precast seats. The bridge is 1 of 4 similar surviving T-beams built by the DL&W RR in Warren County between 1913 and 1916. The bridges are all significant due to the early use of precast concrete and their historic association with the DL&W RR.

INFOR MATION

Bibliography:
"A. Burton Cohen Dies; Civil Engineer." New York Times. February 12, 1956.
Hirschthal, M. "Railroad Bridge of 36-Ft. Clears pan Built of Heavy Precast Units." Engineering News-Record. Vol. 96,8 (Feb. 25, 1926).
_____. "Two Precast Concrete Bridges on the Lackawanna Railroad." Engineering News Record. Vol. 91,10 (Sept. 6, 1923).
Lefferts, H. Leedom Jr., and Piefer, David R., Northwest New Jersey: An Inventory and History of Historic Engineering and Industry. 1979.
NJDOT: Bridge Files: Conrail: Washington Secondary, Milepoint 75.71. "A Reinforced-Concrete Girder and Slab Bridge with Precast Members."
Engineering News, Vol. 71,6 (Feb. 5, 1914).
Schruffer, LeRoy M. "Casting Concrete-Slab Bridges for the Pennsylvania Railroad," Engineering News, Vol. 74,3 (July 15, 1915).

Physical Description: The one-span reinforced concrete T-beam bridge sits on rubble-course abutments with concrete seats. The stone abutments are from an earlier span, with the precast concrete seats being set on flat concrete beds on top of the stone. The superstructure is composed of 5 precast reinforced concrete T-beams. Asphalt covers the deck surface between the precast Warren truss-pattern balustrades. The self-supporting balustrades are set on the bridge seats.

Historical and Technological Significance: The 1916 North Main Street Bridge is an early and technologically significant example of precast concrete T-beam construction. It was built by the Delaware, Lackawanna, and Western Railroad (DL&W) based upon designs of its Bridge Division headed by noted engineer A. Burton Cohen. From 1910 to 1920 Cohen led the DL&W Bridge Division to a national reputation for its innovative use of concrete. In engineering circles the DL&W was known as the "concrete railroad," and it did more than any other railroad to gain the widespread acceptance of concrete for long-span structures. The bridge is eligible under National Register Criteria A and C as a well-preserved example of a technologically significant bridge type and for its historical association with Cohen and the DL&W. The bridge is one of four similar precast T-beam bridges (1913-1916) over the DL&W's Washington Secondary in Warren County (2154162, 2154163, 2154165, 2154169). The bridges are all well-preserved and technologically and historically significant as the only surviving examples of their type known to exist in New Jersey.

Reinforced concrete was used mostly for small slab and deck arch spans in the 1910s, but Cohen and the DL&W tried something more aggressive with T-beam construction. The T-beam is a more efficient use of material than a slab bridge of equal length. From 1913 to 1916 they built concrete T-beam highway overpasses on the DL&W's Washington Secondary. The span of the overpasses ranged from over 30' to 37' at a time when it was unusual to build even conventional reinforced-concrete T-beam or slab bridges of that length. The beams weighed each about 14 tons, significantly less than modern precast beams, but were easily transported and functional for light highway traffic. No records have been located that specifically address the DL&W's fabrication of these spans, and it is unknown whether any others were built on former DL&W properties. Articles from the Engineering News-Record demonstrate that other railroads did not begin to build precast concrete bridges of similar span until the mid-1920s, further indicating the DL&W's advanced use of the technology. Precast concrete beam spans eventually became one of the most prevalent post-WWII highway bridge types, and the DL&W's T-beam bridges are historically significant precursors of the modern approach to bridge building.

Another precast bridge from the same period over the same rail line also illustrates the DL&W's leadership in working with reinforced concrete. 2154168 is a 2-span precast slab bridge built in 1913 that is the documented example of its type in the state.

The DL&W, composed of a network of smaller railroads in Pennsylvania, New York, and New Jersey, was formed in 1853 for the purpose of moving anthracite coal from the mining regions of northeastern Pennsylvania to market locations. In reaching to the east, in 1868 the DL&W acquired the Morris and Essex Railroad, which from 1830 to 1860 built a line from Hoboken to Phillipsburg. The line spanned by the precast T-beam spans was developed around 1860 by the Morris and Essex Railroad, which at the time was extending its tracks from Hackettstown to Phillipsburg.

The DL&W's reputation for reinforced-concrete bridge designs began in 1908 the company made engineering headlines with its decision to build a whole new line across northwestern New Jersey. The plan, known as the New Jersey Cut-Off, achieved minimum grades and

curves with massive cuts and fills and several impressively large reinforced-concrete arch viaducts. The exclusive use of reinforced concrete for all the structures along the New Jersey Cut-Off, like 2114159, was a pioneering action and set the stage for the DL&W's continued experimentation with concrete bridges.

Engineer A. Burton Cohen rose to Chief Engineer of the DL&W's Bridge Division in 1910 and designed numerous bridges for the railroad including the Tunkhannock Viaduct (1915) in Nicholson, Pennsylvania, the largest reinforced-concrete arch structure in the world. The plans for the precast T-beam bridges in Warren County were signed by Cohen as the Chief Engineer. After 1920 Cohen went into private practice continuing his specialty in reinforced-concrete structures. In New Jersey he was responsible for the 1926 open spandrel arch bridge at Journal Square in Jersey City (0900008). In 1927 the American Concrete Institute awarded Cohen a gold medal for his solutions to bridge problems "with economy as well as architectural merit."

Three of the four remaining precast concrete T-beam spans are in public use, while one (2154169) services a farm road. Conrail records indicate that two other precast T-beam bridges spanned the DL&W's Washington Secondary, but they have been replaced within the last five years.

Boundary Description and Justification: Because it is the precast technology of the span that is significant, the boundary is limited to the superstructure and the abutments. Though the railroad right-of-way has several precast bridges, they are not used exclusively. There other common-type overpasses along the line which is one of many crossing northern New Jersey. Thus the railroad route itself is not technologically significant; only some structures are.

PHOTO: 170:11-13 (07/92) REVISED BY (DATE): QUAD: Bloomsbury

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2154163 **CO** WARREN **OWNER** UNKNOWN **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BUTTERMILK BRIDGE ROAD OVER WASHINGTON SECONDARY RR **FACILITY** BUTTERMILK BRIDGE ROAD

TOWNSHIP WASHINGTON TOWNSHIP

TYPE T BEAM **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 37 ft **WIDTH** 16 ft

CONSTRUCTION DT 1916 **ALTERATION DT** Demolished **SOURCE** PLANS/NJDOT

DESIGNER/PATENT DL&W RR OFFICE OF ENGINEER **BUILDER**

SETTING / CONTEXT The bridge is located in a wooded area with a modern residence on an adjacent property. The one-lane structure carries a winding road over one track in a two-track wide right-of-way. The railroad line was developed by the Morris & Essex Railroad around 1860. Their lines reached only as far west as Hackettstown, so they constructed this extension to the Delaware River at Phillipsburg. The DL&W RR took over in 1868, connecting their Warren RR to the M&E in Washington.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Bridge was Individually Eligible. Delaware, Lackawanna & Western Railroad Old Main Line Historic District. Contributed.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one-span concrete tee-beam bridge sits on rubble-course abutments with concrete caps. The four precast beams form the deck of the span and are flanked by self-supporting precast balustrades that also rest on precast bridge seats. The span is one of six built between 1913-1916), though only four remain. All are significant due to their age, completeness, and extensive and innovative use of precast concrete by the Delaware, Lackawanna & Western Railroad.

INFOR MATION

Bibliography:

"A. Burton Cohen Dies; Civil Engineer." New York Times. February 12, 1956.
Hirschthal, M. "Railroad Bridge of 36-Ft. Clears pan Built of Heavy Precast Units." Engineering News-Record. Vol. 96,8 (Feb. 25, 1926).
_____. "Two Precast Concrete Bridges on the Lackawanna Railroad." Engineering News Record. Vol. 91,10 (Sept. 6, 1923).
Lefferts, H. Leedom Jr., and Piefer, David R., Northwest New Jersey: An Inventory and History of Historic Engineering and Industry. 1979.
NJDOT: Bridge Files: Conrail: Washington Secondary, Milepoint 69.17.
"A Reinforced-Concrete Girder and Slab Bridge with Precast Members." Engineering News, Vol. 71,6 (Feb. 5, 1914).
Schruffer, LeRoy M. "Casting Concrete-Slab Bridges for the Pennsylvania Railroad," Engineering News, Vol. 74,3 (July 15, 1915).

Physical Description: The one-span, precast, reinforced concrete T-beam bridge sits on rubble-course abutments with concrete seats. The stone abutments are from an earlier span, with the precast concrete seats being set on flat concrete beds on top of the stone. The superstructure is composed of 4 precast reinforced concrete T-beams. Asphalt covers the deck surface between the precast Warren truss-pattern balustrades. The self-supporting balustrades are set on the bridge seats.

Historical and Technological Significance: The precast 1916 T-beam Buttermilk Bridge Road bridge is an early example of its type and of a technology that is still used in concrete construction (Criteria A. C.). It was built by the Delaware, Lackawanna, and Western Railroad (DL&W) based upon designs of its Bridge Division headed by noted engineer A. Burton Cohen. From 1910 to 1920 Cohen led the DL&W Bridge Division to a national reputation for its innovative use of concrete. In engineering circles the DL&W was known as the "concrete railroad," and it did more than any other railroad to gain the widespread acceptance of concrete for long-span structures. The bridge is one of four similar precast T-beam bridges built between 1913 and 1916) over the DL&W's Washington Secondary in Warren County (2154162, North Main Street, Greenwich Twp.; 2154165 Brick Yard Road, Mansfield Twp.; 2154169 in Mansfield Twp.). The precast T-beam bridges are all well-preserved and technologically and historically significant as the only surviving 1910s examples of their type documented in New Jersey.

Reinforced concrete was used mostly for small slab and deck arch spans in the 1910s, but Cohen and the DL&W tried something more aggressive with T-beam construction. The T-beam is a more efficient use of material than a slab bridge of equal length. From 1913 to 1916 they built concrete T-beam highway overpasses on the DL&W's Washington Secondary. The span of the overpasses ranged from over 30' to 37' at a time when it was unusual to build even conventional reinforced-concrete T-beam or slab bridges of that length. The beams weighed each about 14 tons, significantly less than modern precast beams, but were easily transported and functional for light highway traffic. No records have been located that specifically address the DL&W's fabrication of these spans, and it is unknown whether any others were built on former DL&W properties. Articles from the Engineering News-Record demonstrate that other railroads did not begin to build precast concrete bridges of similar span until the mid-1920s, further indicating the DL&W's advanced use of the technology. Precast concrete beam spans eventually became one of the most prevalent post-WWII highway bridge types, and the DL&W's T-beam bridges are historically significant precursors of the modern approach to bridge building.

Another precast bridge from the same period over the same rail line also illustrates the DL&W's leadership in working with reinforced concrete. 2154168 is a 2-span precast slab bridge built in 1913 that is the documented example of its type in the state.

The DL&W, composed of a network of smaller railroads in Pennsylvania, New York, and New Jersey, was formed in 1853 for the purpose of moving anthracite coal from the mining regions of northeastern Pennsylvania to market locations. In reaching to the east, in 1868 the DL&W acquired the Morris and Essex Railroad, which from 1830 to 1860 built a line from Hoboken to Phillipsburg. The line spanned by the precast T-beam spans was developed around 1860 by the Morris and Essex Railroad, which at the time was extending its tracks from Hackettstown to Phillipsburg.

The DL&W's reputation for reinforced-concrete bridge designs began in 1908 the company made engineering headlines with its decision to build a whole new line across northwestern New Jersey. The plan, known as the New Jersey Cut-Off, achieved minimum grades and curves with massive cuts and fills and several impressively large reinforced-concrete arch viaducts. The exclusive use of reinforced

concrete for all the structures along the New Jersey Cut-Off, like 2114159, was a pioneering action and set the stage for the DL&W's continued experimentation with concrete bridges.

Engineer A. Burton Cohen rose to Chief Engineer of the DL&W's Bridge Division in 1910 and designed numerous bridges for the railroad including the Tunkhannock Viaduct (1915) in Nicholson, Pennsylvania, the largest reinforced-concrete arch structure in the world. The plans for the precast T-beam bridges in Warren County were signed by Cohen as the Chief Engineer. After 1920 Cohen went into private practice continuing his specialty in reinforced-concrete structures. In New Jersey he was responsible for the 1926 open spandrel arch bridge at Journal Square in Jersey City (0900008). In 1927 the American Concrete Institute awarded Cohen a gold medal for his solutions to bridge problems "with economy as well as architectural merit."

Three of the four remaining precast concrete T-beam spans are in public use, while one (2154169) services a farm road. Conrail records indicate that two other precast T-beam bridges spanned the DL&W's Washington Secondary, but they have been replaced within the last five years.

Boundary Description and Justification: Because it is the precast technology of the span that is significant, the boundary is limited to the superstructure and the abutments. Though the railroad right-of-way has several precast bridges, they are not used exclusively. There other common-type overpasses along the line which is one of many crossing northern New Jersey. Thus the railroad route itself is not technologically significant; only some structures are.

PHOTO: 173:39A-41A (07/92) REVISED BY (DATE): QUAD: Bloomsbury

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2154165 **CO** WARREN **OWNER** RAILROAD **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BRICK YARD ROAD OVER WASHINGTON SECONDARY OF DL&W RR **FACILITY** BRICK YARD ROAD

TOWNSHIP MANSFIELD TOWNSHIP

TYPE T BEAM **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 40 ft **WIDTH** 12 ft

CONSTRUCTION DT 1913 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT DL&W RR OFFICE OF ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in a wooded area with a large vehicle salvage yard adjacent to it. The one-lane bridge carries a narrow winding road over one active track in a two-track wide right-of-way. The RR line was developed by the Morris & Essex RR around 1860. They wanted to extend their lines to the Delaware River, at Phillipsburg, from their existing tracks to Hackettstown. The DL&W RR took control of the lines in 1868, providing them with their own access to the ports near New York.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible. Delaware, Lackawanna & Western Railroad Old Main Line Historic District, Eligible. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span precast concrete T-beam bridge sits on earlier ashlar abutments with concrete bridge seats. The three precast T-beams are set between self-supporting precast concrete truss-like balustrades. The bridge is one of four similar surviving precast T-Beam bridges (1913-1916) over the rail line. The span is significant as an unaltered example of its type and as an example of the early use of precast concrete elements for bridges by the Delaware, Lackawanna & Western Railroad.

INFORMATION

Bibliography:

"A. Burton Cohen Dies; Civil Engineer." New York Times. February 12, 1956.
Hirschthal, M. "Railroad Bridge of 36-Ft. Clears pan Built of Heavy Precast Units." Engineering News-Record. Vol. 96,8 (Feb. 25, 1926).
_____. "Two Precast Concrete Bridges on the Lackawanna Railroad." Engineering News Record. Vol. 91,10 (Sept. 6, 1923).
Lefferts, H. Leedom Jr., and Piefer, David R., Northwest New Jersey: An Inventory and History of Historic Engineering and Industry. 1979.
NJDOT: Bridge Files: Conrail: Washington Secondary, Milepoint 75.71.
"A Reinforced-Concrete Girder and Slab Bridge with Precast Members." Engineering News, Vol. 71,6 (Feb. 5, 1914).
Schruffer, LeRoy M. "Casting Concrete-Slab Bridges for the Pennsylvania Railroad," Engineering News, Vol. 74,3 (July 15, 1915).

Physical Description: The one-span reinforced concrete T-beam bridge sits on rubble-course abutments with concrete seats. The stone abutments are from an earlier span, with the precast concrete seats being set on flat concrete beds on top of the stone. The superstructure is composed of 3 precast reinforced concrete T-beams. The top of the T-beams forms the deck and wearing surface of the bridge between the precast truss-like balustrades. The self-supporting balustrades are also set on the bridge seats.

Historical and Technological Significance: The precast 1913 T-beam Brick Yard Road bridge is an early example of its type and of a technology that is still used in concrete construction (Criteria A. C.). It was built by the Delaware, Lackawanna, and Western Railroad (DL&W) based upon designs of its Bridge Division headed by noted engineer A. Burton Cohen. From 1910 to 1920 Cohen led the DL&W Bridge Division to a national reputation for its innovative use of concrete. In engineering circles the DL&W was known as the "concrete railroad," and it did more than any other railroad to gain the widespread acceptance of concrete for long-span structures. The bridge is one of four similar precast T-beam bridges built between 1913 and 1916) over the DL&W's Washington Secondary in Warren County (2154162, North Main Street, Greenwich Twp.; 2154163, Buttermilk Bridge Road, Washington Twp.; 2154165 Brick Yard Road, Mansfield Twp.; and, 2154169, Dirt Road, Mansfield Twp.). The precast T-beam bridges are all well-preserved and technologically and historically significant as the only surviving 1910s examples of their type documented in New Jersey.

Reinforced concrete was used mostly for small slab and deck arch spans in the 1910s, but Cohen and the DL&W tried something more aggressive with T-beam construction. From 1913 to 1916 they built concrete T-beam highway overpasses on the DL&W's Washington Secondary. The span of the overpasses ranged from over 30' to 37' at a time when it was unusual to build even conventional reinforced-concrete T-beam or slab bridges of that length. The beams weighed each about 14 tons, significantly less than modern precast beams, but were easily transported and functional for light highway traffic. No records have been located that specifically address the DL&W's fabrication of these spans, and it is unknown whether any others were built on former DL&W properties. Articles from the Engineering News-Record demonstrate that other railroads did not begin to build precast concrete bridges of similar span until the mid-1920s, further indicating the DL&W's advanced use of the technology. Precast concrete beam spans eventually became one of the most prevalent post-WWII highway bridge types, and the DL&W's T-beam bridges are historically significant precursors of the modern approach to bridge building.

Another precast bridge from the same period over the same rail line also illustrates the DL&W's leadership in working with reinforced concrete. 2154168 is a 2-span precast slab bridge built in 1913 that is the documented example of its type in the state.

The DL&W, composed of a network of smaller railroads in Pennsylvania, New York, and New Jersey, was formed in 1853 for the purpose of moving anthracite coal from the mining regions of northeastern Pennsylvania to market locations. In reaching to the east, in 1868 the DL&W acquired the Morris and Essex Railroad, which from 1830 to 1860 built a line from Hoboken to Phillipsburg. The line spanned by the precast T-beam spans was developed around 1860 by the Morris and Essex Railroad, which at the time was extending its tracks from Hackettstown to Phillipsburg.

The DL&W's reputation for reinforced-concrete bridge designs began in 1908 the company made engineering headlines with its decision to build a whole new line across northwestern New Jersey. The plan, known as the New Jersey Cut-Off, achieved minimum grades and curves with massive cuts and fills and several impressively large reinforced-concrete arch viaducts. The exclusive use of reinforced

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concrete for all the structures along the New Jersey Cut-Off, like 2114159, was a pioneering action and set the stage for the DL&W's continued experimentation with concrete bridges.

Engineer A. Burton Cohen rose to Chief Engineer of the DL&W's Bridge Division in 1910 and designed numerous bridges for the railroad including the Tunkhannock Viaduct (1915) in Nicholson, Pennsylvania, the largest reinforced-concrete arch structure in the world. The plans for the precast T-beam bridges in Warren County were signed by Cohen as the Chief Engineer. After 1920 Cohen went into private practice continuing his specialty in reinforced-concrete structures. In New Jersey he was responsible for the 1926 open spandrel arch bridge at Journal Square in Jersey City (0900008). In 1927 the American Concrete Institute awarded Cohen a gold medal for his solutions to bridge problems "with economy as well as architectural merit."

Three of the four remaining precast concrete T-beam spans are in public use, while one (2154169) services a farm road. Conrail records indicate that two other precast T-beam bridges spanned the DL&W's Washington Secondary, but they have been replaced within the last five years.

Boundary Description and Justification: Because it is the precast technology of the span that is significant, the boundary is limited to the superstructure and the abutments. Though the railroad right-of-way has several precast bridges, they are not used exclusively. There other common-type overpasses along the line which is one of many crossing northern New Jersey. Thus the railroad route itself is not technologically significant; only some structures are.

PHOTO: 178:44,1 (08/92) REVISED BY (DATE): QUAD: Washington

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2154166 **CO** WARREN **OWNER** NJDOT **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MAIN STREET (CR 629) OVER WASHINGTON SECONDARY OF DL&W RR **FACILITY** MAIN STREET (CR 629)

TOWNSHIP MANSFIELD TOWNSHIP

TYPE THRU GIRDER **DESIGN** PARTIALLY ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 50 ft **WIDTH** 21 ft

CONSTRUCTION DT 1914 **ALTERATION DT** **SOURCE** PLAQUE/PLANS

DESIGNER/PATENT DL&W RR OFFICE OF ENGINEER **BUILDER** AMERICAN BRIDGE COMPANY

SETTING / CONTEXT The bridge is located at the south edge of the village of Port Murray. The village was built along the Morris Canal, with late-19th and 20th century residences dominant. The bridge carries a two-lane county route over one active track in a two-track width right-of-way. An abandoned railroad station with grain hoppers is located a few hundred feet northeast. The bridge is at a boundary (DL & W RR r-o-w) of a historic district.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Not Individually Eligible. Listed. Port Murray Historic District. 06/07/1996. Contributing.

CONSULT DOCUMENTS SHPO Letter 03/12/01

SUMMARY The skewed one-span thru-girder bridge sits on earlier ashlar abutments with concrete seats and widening. The bottom flanges of the built-up girders are encased, as are the floorbeams. Pipe railings are fixed to the top of the girders. The deck is covered with brick pavers. The structure is a representative example of a common bridge type, and it is not individually technologically or historically distinguished. It is located on the boundary of the potential Port Murray Historic District and was built within its period of significance. The bridge is a contributing resource to the historic district. The nomination lists an incorrect date of construction for the bridge.

INFOR MATION

PHOTO: 178:41-43 (08/92) REVISED BY (DATE): QUAD: Washington

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2154167 **CO** WARREN **OWNER** RAILROAD **MILEPOINT** 62.39

NAME & FEATURE INTERSECTED DIRT ROAD OVER WASHINGTON SECONDARY OF DL&W RR **FACILITY** DIRT ROAD

TOWNSHIP MANSFIELD TOWNSHIP

TYPE PONY TRUSS **DESIGN** WARREN **MATERIAL** Steel

 # SPANS 1 **LENGTH** 56 ft **WIDTH** 13 ft

CONSTRUCTION DT 1900ca **ALTERATION DT** 1914 **SOURCE** STYLE/PLANS

DESIGNER/PATENT DL&W RR OFFICE OF ENGINEER **BUILDER**

SETTING / CONTEXT The bridge is located on a farm with cattle and corn fields. The one-lane bridge carries an unimproved private farm road over one active track in a two-track right-of-way. The rail line was developed by the Morris & Essex Railroad around 1860 as they extended their lines beyond Hackettstown to the Delaware River at Phillipsburg. The DL&W RR leased the M&E in 1868, allowing them access to the New York ports after connecting their Warren RR to the M&E lines in Washington.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible. Delaware, Lackawanna & Western Railroad Old Main Line Historic District, Eligible. Contributing.

CONSULT DOCUMENTS SHPO Opinion 09/24/96, Letter 6/30/95 03/12/01.

SUMMARY The one-span Warren pony truss is supported by ashlar abutments with concrete seats. The rivet-connected trusses have not been altered since the trusses were moved from Clark's Summit, PA, where they had been used for a highway bridge over DL&W trackage. The bottom chord is encased, as are the floorbeams, which directly support the slab deck. The structure is significant as a well-preserved example of its type, and is one of 4 rivet-connected Warren pony trusses in the county.

INFOR MATION

Bibliography:
NJDOT. Conrail Bridge Plan File.
Snell, James. History of Sussex and Warren Counties, New Jersey. Philadelphia: Everts and Peck, 1881.

Physical Description: The bridge is a 4-panel riveted Warren with verticals pony truss on an ashlar substructure with concrete extensions and bridge seats. It is composed almost entirely of tow-out angle section with plate set between the back-to-back members at the panel points. The inclined end posts have cover plates. The verticals are braced, and a railing is set inside the truss lines at mid-height. What is unusual about the bridge is that the bottom chord and lower panel points, floor beams, and stringers are encased in concrete, and they directly support a concrete deck. There is some impact damage that compromises the structural integrity of the span.

Historical and Technological Significance: The 56'-long riveted Warren pony truss bridge was installed at this farm crossing in 1914 and is significant not so much for being a well-preserved example of its type but because its flooring system reflects the Delaware Lackawanna & Western Railroad's innovative use of concrete as applied to bridge construction (Criterion C). Plans indicate that the trusses, which in style date from c.1900, were moved from a highway crossing east of Clark's Summit, Pennsylvania to the Port Murray area farm crossing. At that time the existing stone abutments of a prior bridge were "torn down until thoroughly good foundation" was obtained for new concrete bridge seats. The trusses were installed, and the floor beams and stringers were encased in poured-in-place concrete, and the concrete deck was poured directly on them. No other truss bridges with encased flooring systems of this type were evaluated by the Historic Bridge Survey. The span is technologically distinguished and valuable as part of the documentation in the DL&W's experimental and innovative application of concrete to a variety of structures related to the operation of their line.

The bridge carries a farm road over what was the Morris & Essex Railroad, an ambitious but not wholly successful east-west line that was acquired by the DL&W about 1870. Its original circuitous right-of-way was bypassed by the 1909-1911 New Jersey Cut-Off, which had several innovative long-span concrete bridges. This section of the Morris and Essex line known as the Washington Secondary connected Washington with Phillipsburg.

Boundary Description and Justification: The bridge is individually eligible, in and of itself, including superstructure, substructure, and right-of-way over the rail line.

PHOTO: 178:4-8 (08/92 JPH (5/96)) REVISED BY (DATE): QUAD: Washington

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NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2154168 **CO** WARREN **OWNER** RAILROAD **MILEPOINT** 58.61

NAME & FEATURE INTERSECTED DIRT ROAD OVER WASHINGTON SECONDARY OF DL&W RR **FACILITY** DIRT ROAD

TOWNSHIP MANSFIELD TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 2 **LENGTH** 47 ft **WIDTH** 12 ft

CONSTRUCTION DT 1913 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT DL&W RR OFFICE OF ENGINEER **BUILDER**

SETTING / CONTEXT The bridge is located in an area of cultivated fields and some residences scattered throughout the area. The structure carries a one-lane unimproved private farm road over one active track on a two-track right-of-way. The line was developed 1860 by the Morris & Essex Railroad, and in 1868 leased by the Delaware, Lackawanna & Western to connect with their Warren Railroad line in Washington.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible. Delaware, Lackawanna & Western Railroad Old Main Line Historic District, Eligible. Contributing.

CONSULT DOCUMENTS SHPO Opinion 09/24/96, Letter 6/30/95 03/12/01.

SUMMARY The two-span precast concrete slab bridge sits on ashlar abutments with precast bridge seats and a precast pier. The structure is a design of six slab panels simply-supported, using as many precast pieces as possible. The bottom beam of the pier and the curb of the deck were cast in place. The bridge is an early significant example of precast concrete technology and represents the DL&W's innovative use of concrete in the 1910s. It is the only known example of its type and age in New Jersey.

INFORMATION

Bibliography:
"A. Burton Cohen Dies; Civil Engineer." New York Times. February 12, 1956.
Hirschthal, M. "Railroad Bridge of 36-Ft. Clears pan Built of Heavy Precast Units." Engineering News-Record. Vol. 96,8 (Feb. 25, 1926).
_____. "Two Precast Concrete Bridges on the Lackawanna Railroad." Engineering News Record. Vol. 91,10 (Sept. 6, 1923).
Lefferts, H. Leedom Jr., and Piefer, David R., Northwest New Jersey: An Inventory and History of Historic Engineering and Industry. 1979.
NJDOT: Bridge Files: Conrail: Washington Secondary, Milepoint 58.61.
"A Reinforced-Concrete Girder and Slab Bridge with Precast Members." Engineering News, Vol. 71,6 (Feb. 5, 1914).
Schruffer, LeRoy M. "Casting Concrete-Slab Bridges for the Pennsylvania Railroad," Engineering News, Vol. 74,3 (July 15, 1915).

Physical Description: The two-span precast reinforced concrete slab bridge sits on ashlar abutments with concrete seats and a concrete pier. The stone abutments are from an earlier span, with the precast concrete seats being set on flat concrete beds on top of the stone. The pier is composed of precast columns set on a cast-in-place plinth. A precast cap crosses the columns below the slabs. The superstructure is composed of 6 precast reinforced concrete slabs. The slabs are not covered, but are framed by cast-in-place curbs and metal pipe railings.

Historical and Technological Significance: The 1913 bridge is an early and technologically significant example of precast slab construction. It was built by the Delaware, Lackawanna, and Western Railroad (DL&W) based upon designs of its Bridge Division headed by noted engineer A. Burton Cohen. From 1910 to 1920 Cohen led the DL&W Bridge Division to a national reputation for its innovative use of concrete. In engineering circles the DL&W was known as the "concrete railroad," and it did more than any other railroad to gain the widespread acceptance of concrete for long-span structures. The bridge is eligible under National Register Criteria A and C as a well-preserved example of a technologically significant bridge type and for its historical association with Cohen and the DL&W. The bridge is the only documented 1910s precast concrete slab bridge in the state. The same railroad line, the Washington Secondary, has four other related 1913-1916 precast concrete T-beam bridges (2154162, North Main Street, Greenwich Twp.; 2154163, Buttermilk Bridge Road, Washington Twp.; 2154165 Brick Yard Road, Mansfield Twp.; and, 2154169, Dirt Road, Mansfield Twp.).

Early precast concrete bridges were mostly short-span slab and deck arch designs. The 1913 slab bridge with two 23-1/2' spans is an early attempt at precast concrete slab construction, and was an ambitious length for its time. The six precast slab panels weighed significantly less than modern precast slabs, but were easily transported and functional for light highway traffic. No records have been located that specifically address the DL&W's fabrication of this span, and it is unknown whether any other precast slab spans were built on former DL&W properties. Articles from the Engineering News-Record demonstrate that other railroads did not begin to build precast concrete bridges of similar span until the mid-1920s, further indicating the DL&W's advanced use of the technology. Precast concrete slab spans eventually became an important post-WWII highway bridge type, and the DL&W's precast slab bridge is a historically significant precursor of the modern approach to bridge building.

The DL&W, composed of a network of smaller railroads in Pennsylvania, New York, and New Jersey, was formed in 1853 for the purpose of moving anthracite coal from the mining regions of northeastern Pennsylvania to market locations. In reaching to the east, in 1868 the DL&W acquired the Morris and Essex Railroad, which from 1830 to 1860 built a line from Hoboken to Phillipsburg. The line spanned by the precast slab and T-beam spans was developed around 1860 by the Morris and Essex Railroad, which at the time was extending its tracks from Hackettstown to Phillipsburg.

The DL&W's reputation for reinforced-concrete bridge designs began in 1908 when the company made engineering headlines with its decision to build a whole new line across northwestern New Jersey. The plan, known as the New Jersey Cut-Off, achieved minimum grades and curves with massive cuts and fills and several impressively large reinforced-concrete arch viaducts. The exclusive use of reinforced concrete for all the structures along the Cut-Off was a pioneering action and set the stage for the DL&W's continued experimentation with concrete bridges.

Engineer A. Burton Cohen rose to Chief Engineer of the DL&W's Bridge Division in 1910 and designed numerous bridges for the railroad including the Tunkhannock Viaduct (1915) in Nicholson, Pennsylvania, the largest reinforced-concrete arch structure in the world. The

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plans for the precast slab bridge and the four precast concrete T-beam bridges in Warren County was signed by Cohen as the Chief Engineer. After 1920 Cohen went into private practice continuing his specialty in reinforced-concrete structures. In New Jersey he was responsible for the 1926 open spandrel arch bridge at Journal Square in Jersey City (0900008). In 1927 the American Concrete Institute awarded Cohen a gold medal for his solutions to bridge problems "with economy as well as architectural merit."

Boundary Description and Justification: Because it is the precast technology of the span that is significant, and the technology of the route as a whole, the boundary is limited to the superstructure and the abutments.

PHOTO: 179:18A-21A (08/92) REVISED BY (DATE): QUAD: Hackettstown

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2154169 **CO** WARREN **OWNER** RAILROAD **MILEPOINT** 58.34

NAME & FEATURE INTERSECTED DIRT ROAD OVER WASHINGTON SECONDARY OF DL&W RR **FACILITY** DIRT ROAD

TOWNSHIP MANSFIELD TOWNSHIP

TYPE T BEAM **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 34 ft **WIDTH** 12 ft

CONSTRUCTION DT 1913 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT DL&W RR OFFICE OF ENGINEER **BUILDER**

SETTING / CONTEXT The bridge is surrounded by cultivated fields. It carries a private, unimproved farm road over one active track in a two-track wide right-of-way. The line was developed from Hackettstown to Phillipsburg by the Morris and Essex Railroad around 1860. The Delaware Lackawanna & Western RR leased the M&E in 1868, connecting their own Warren RR to it in Washington. The acquisition of the M&E provided the DL&W with their own access to the New York ports.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible. Delaware, Lackawanna & Western Railroad Old Main Line Historic District, Eligible. Contributing.

CONSULT DOCUMENTS SHPO Opinion 09/24/96, Letter 6/30/95 03/12/01.

SUMMARY The one-span precast concrete T-beam bridge is set on ashlar abutments with precast bridge seats. The deck of the bridge is formed by the T-beams, with distinctive precast truss-like balustrades at each face. The use of precast concrete is prevalent on this line from 1913-1916, when 6 precast and one precast slab bridges were built. Four T-beams and the slab span survive. This bridge, like the others, is significant due to its early and innovative use of precast concrete bridge members.

INFORMATION

Bibliography:

"A. Burton Cohen Dies; Civil Engineer." New York Times. February 12, 1956.
Hirschthal, M. "Railroad Bridge of 36-Ft. Clears pan Built of Heavy Precast Units." Engineering News-Record. Vol. 96,8 (Feb. 25, 1926).
_____. "Two Precast Concrete Bridges on the Lackawanna Railroad." Engineering News Record. Vol. 91,10 (Sept. 6, 1923).
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Schruffer, LeRoy M. "Casting Concrete-Slab Bridges for the Pennsylvania Railroad," Engineering News, Vol. 74,3 (July 15, 1915).

Physical Description: The one-span reinforced concrete T-beam bridge sits on rubble-course abutments with concrete seats. The stone abutments are from an earlier span, with the precast concrete seats being set on flat concrete beds on top of the stone. The superstructure is composed of 3 precast reinforced concrete T-beams. The deck surface is formed by the tops of the beams on the unimproved and overgrown private road. The precast Warren truss-pattern balustrades are self-supporting, and are set on the bridge seats beside the fascia beams.

Historical and Technological Significance: The precast 1913 T-beam farm road bridge is an early example of its type and of a technology that is still used in concrete construction (Criteria A. C.). It was built by the Delaware, Lackawanna, and Western Railroad (DL&W) based upon designs of its Bridge Division headed by noted engineer A. Burton Cohen. From 1910 to 1920 Cohen led the DL&W Bridge Division to a national reputation for its innovative use of concrete. In engineering circles the DL&W was known as the "concrete railroad," and it did more than any other railroad to gain the widespread acceptance of concrete for long-span structures. The bridge is one of four similar precast T-beam bridges built between 1913 and 1916) over the DL&W's Washington Secondary in Warren County (2154162, North Main Street, Greenwich Twp.; 2154163, Buttermilk Bridge Road, Washington Twp.; 2154165 Brick Yard Road, Mansfield Twp.; and, 2154165 in Mansfield Twp.). The precast T-beam bridges are all well-preserved and technologically and historically significant as the only surviving 1910s examples of their type documented in New Jersey.

Reinforced concrete was used mostly for small slab and deck arch spans in the 1910s, but Cohen and the DL&W tried something more aggressive with T-beam construction. The T-beam is a more efficient use of material than a slab bridge of equal length. From 1913 to 1916 they built concrete T-beam highway overpasses on the DL&W's Washington Secondary. The span of the overpasses ranged from over 30' to 37' at a time when it was unusual to build even conventional reinforced-concrete T-beam or slab bridges of that length. The beams weighed each about 14 tons, significantly less than modern precast beams, but were easily transported and functional for light highway traffic. No records have been located that specifically address the DL&W's fabrication of these spans, and it is unknown whether any others were built on former DL&W properties. Articles from the Engineering News-Record demonstrate that other railroads did not begin to build precast concrete bridges of similar span until the mid-1920s, further indicating the DL&W's advanced use of the technology. Precast concrete beam spans eventually became one of the most prevalent post-WWII highway bridge types, and the DL&W's T-beam bridges are historically significant precursors of the modern approach to bridge building.

Another precast bridge from the same period over the same rail line also illustrates the DL&W's leadership in working with reinforced concrete. 2154168 is a 2-span precast slab bridge built in 1913 that is the documented example of its type in the state.

The DL&W, composed of a network of smaller railroads in Pennsylvania, New York, and New Jersey, was formed in 1853 for the purpose of moving anthracite coal from the mining regions of northeastern Pennsylvania to market locations. In reaching to the east, in 1868 the DL&W acquired the Morris and Essex Railroad, which from 1830 to 1860 built a line from Hoboken to Phillipsburg. The line spanned by the precast T-beam spans was developed around 1860 by the Morris and Essex Railroad, which at the time was extending its tracks from Hackettstown to Phillipsburg.

The DL&W's reputation for reinforced-concrete bridge designs began in 1908 the company made engineering headlines with its decision to build a whole new line across northwestern New Jersey. The plan, known as the New Jersey Cut-Off, achieved minimum grades and

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curves with massive cuts and fills and several impressively large reinforced-concrete arch viaducts. The exclusive use of reinforced concrete for all the structures along the New Jersey Cut-Off, like 2114159, was a pioneering action and set the stage for the DL&W's continued experimentation with concrete bridges.

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Three of the four remaining precast concrete T-beam spans are in public use, while one (2154169) services a farm road. Conrail records indicate that two other precast T-beam bridges spanned the DL&W's Washington Secondary, but they have been replaced within the last five years.

Boundary Description and Justification: Because it is the precast technology of the span that is significant, the boundary is limited to the superstructure and the abutments. Though the railroad right-of-way has several precast bridges, they are not used exclusively. There other common-type overpasses along the line which is one of many crossing northern New Jersey. Thus the railroad route itself is not technologically significant; only some structures are.

PHOTO: 179:22A-24A (08/92) REVISED BY (DATE): QUAD: Hackettstown

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2160152 **CO** WARREN **OWNER** STATE AGENCY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WELSH SPUR ROAD OVER RARITAN VALLEY LINE RR **FACILITY** WELSH SPUR ROAD

TOWNSHIP GREENWICH TOWNSHIP

TYPE GIRDER **DESIGN** OPEN WEB **MATERIAL** Wrought Iron

 # SPANS 1 **LENGTH** 40 ft **WIDTH** 12.3 ft

CONSTRUCTION DT 1890ca **ALTERATION DT** Unknown **SOURCE** STYLE/INSCRIPTION

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge is located on the driveway of a horse farm. The one-lane structure crosses an inactive railroad line with one track remaining in the right-of-way. This line was developed in the early 1850s by the Central RR of New Jersey. It reached from the New York ports to the Delaware River at Phillipsburg where it connected with other railroads and canals, with its primary purpose hauling coal to the ports. In 1976 the bankrupt line was divided between Amtrak and NJT.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible. Central Railroad of NJ Main Line Corridor. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95 11/22/95. DOE 11/30/95.

SUMMARY The ca. 1890 lattice-web thru-girders sit on stone abutments (inscribed 1907) with timber seats. The girders were most likely moved to this location some time in the 20th century. The lattice is formed by the crossing of rolled T-sections and flat bars between built-up flanges. Rolled floorbeams are hung from the bottom flanges, and they support timber stringers and the plank deck. This is one of less than 5 remaining lattice girders identified in the state, and it is a well-preserved.

INFOR MATION

Bibliography:

Anderson, Elaine. The Central Railroad of New Jersey's First 100 Years. Easton, PA: 1984.
NJDOT. Conrail Bridge File.
New Jersey Transit. NJT Historic Railroad Bridge Survey. 1991.
Phoenix Bridge Company Records. Bridge Order Books. Hagley Museum and Library.
Snell, James. History of Sussex and Warren Counties, New Jersey. Philadelphia: 1881.

Physical Description: The 40'-long thru girder bridge incorporates iron lattice web girders that appear to have been modified for service at this crossing. The top and bottom flanges are built-up of angle and plate, and the diagonals are t-sections and flat bars. The only verticals are at the end of the girders. Rolled floor beams that extend beyond the girders have been hung from the bottom flanges with carriage bolts. The arrangement does not look original. The stringers and deck are timber. The girders are supported on ashlar abutments inscribed "1907". The seat is narrower than the present span, which bears on timber cribbing. There is no scaring on the top flanges to suggest that these girders were once deck girders.

Historical and Technological Significance: Although no bridge plans to indicate date of fabrication or moving to this site have been located, even undocumented the Central Railroad of New Jersey's wrought iron lattice web girder bridge at a farm crossing is technologically significant as a rare survivor of an early bridge type (Criterion C). The lattice webbing on the Welsh Spur Road bridge is similar in style and construction to a bridge over the same line at milepoint 53.38 in Hunterdon County. That span is included in the NJT 1990-1991 bridge survey, and it is given a date of 1891, but no documentation for the source of the date nor the name of the fabricator is identified on their survey form. The span is also similar to two ca. 1890 lattice web deck girders in Hudson County. Both Bergen Avenue over Conrail in Jersey City (0900011) and Ocean Avenue over Conrail in Jersey City were built by the Central Railroad of New Jersey over its Newark and New York branch. All four bridges have the T-section diagonals and all four are iron. According to Phoenix Bridge Company records at the Hagley Museum and Library, the Central Railroad of New Jersey purchased several lattice through girder spans for unspecified locations in the 1880s and 1890s. The bridge company manufactured the lattice through girder bridge type from the 1870s until about 1900 for both highway and railroad use.

It is likely that the Welsh Spur Road girders are not original to the crossing. The span rests on timber cribbing, and it appears to be wider than the seat notches in the ashlar abutments that are inscribed 1907. There are several instances of earlier trusses being moved to farm crossings such as this one, so historic precedent and physical evidence support the contention that the early girders were moved to this site after 1907. The Central New Jersey originally developed the right-of-way through Warren County in the early 1850s.

Boundary Description and Justification. The bridge is individually eligible, in and of itself, including superstructure, substructure, and right-of-way over the rail line.

PHOTO: 168:39-,169:21 (07/92) REVISED BY (DATE): QUAD: Bloomsbury

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2160153 **CO** WARREN **OWNER** STATE AGENCY **MILEPOINT** 66.51

NAME & FEATURE INTERSECTED PINE HOLLOW ROAD OVER RARITAN VALLEY LINE RR **FACILITY** PINE HOLLOW ROAD

TOWNSHIP GREENWICH TOWNSHIP

TYPE THRU TRUSS **DESIGN** DOUBLE INTERSECTION WARREN **MATERIAL** Steel

 # SPANS 1 **LENGTH** 93 ft **WIDTH** 10.5 ft

CONSTRUCTION DT 1898 **ALTERATION DT** Demolished **SOURCE** PLANS

DESIGNER/PATENT CRR NJ OFFICE OF ENGINEER **BUILDER** PASSAIC ROLLING MILL COMPANY

SETTING / CONTEXT The bridge is located in a wooded area, at the end of a paved road lined with 19th and 20th century residences. The road continues unimproved, over the span and further into the woods. The structure crosses one track in an abandoned right-of-way of the CNJ RR wide enough for two tracks. The railroad was developed here in the early 1850s for the transfer of the eastern Pennsylvania coal to the New York ports. It is now used mostly for passenger trains and now belongs to NJT and Amtrak.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Bridge was Individually Eligible. Central Railroad of NJ Main Line Corridor. Contributed.

CONSULT DOCUMENTS SHPO Letter 6/30/95 11/22/95. DOE 11/30/95.

SUMMARY The one-span riveted double-intersection Warren thru-truss bridge sits on stone abutments. The members of the truss are virtually unaltered with the exception of impact damage. One of the verticals is severely twisted and an adjacent diagonal is also bent. The truss is built-up using channel and angle sections, lacing bars and cover plates. The floorbeam-stringer floor system was strengthened in 1914 and 1941. The bridge is well-preserved, and is one of two examples of its type in Warren County.

INFOR MATION

Bibliography:
Condit, Carl. American Building Art 19th Century. New York: 1960.
Darnell, Victor. Directory of American Bridge Building Companies 1840-1900. Washington, D.C.: Society for Industrial Archeology, 1984.
Snell, James. History of Sussex and Warren County New Jersey. Philadelphia, 1881.
NJDOT: Bridge Plan File; Raritan Valley Ln, 66.51.

Physical Description: The bridge is a 6-panel rivet-connected double-intersection Warren thru truss. The top chord and inclined end posts are composed of toe-out channel joined on both the top and bottom face with lacing. The bottom chord is made up of angles linked by a laced web. The compression diagonals are also laced angles while the tensile members are one of two types; angles with battens or angles with lacing. Each panel is subdivided with a subtie carrying floor beams. The portal braces have lattice infill, and the lateral bracing and sway bracing are original. There was no original railing on the inner faces of the trusses. The 10'-5" wide bridge has rolled floor beams that have been strengthened and carries a wood plank deck.

Historical and Technological Significance: The 1898 6-panel riveted construction double-intersection Warren thru truss bridge with subdivided panels is technologically significant as a rare survivor of an uncommon truss type. It also has unusual construction details (Criterion C). According to plans, the bridge was designed by the Central Railroad of New Jersey (CNJ) and fabricated by the Passaic Rolling Mill of Paterson. Although the capacity has been reduced due to deterioration and impact damage, the bridge is otherwise unaltered adding to its technological distinction. The top chord of toe-out channel with top and bottom lacing is an unusual detail. The Warren truss, which is distinguished by members designed to carry both tensile and compressive forces, was developed in 1846 by British engineers, but did not become popular until the 1890s when a successful means of performing field rivets became available. The double intersection Warren thru truss, a variation on the standard Warren truss design, was not an uncommon bridge type from the 1890s into the first decade of the 20th century and a small handful survive in New Jersey including Buttzville Road over Pequest River (2102307, 1902, White Township), also evaluated as significant.

The Passaic Rolling Mill, fabricator of the span, was established in Paterson in 1877, and in 1884, its fabricating capacity was 12,000 tons, making it one of the largest works in the country at that time. They produced structural steel as well as bridge components. The Central Railroad of New Jersey was the first railroad in Warren County, and its importance is linked to the fact that it provided access across New Jersey with the coal-rich Lehigh Valley region of Pennsylvania. This right-of-way was part of the 1847-chartered extension to Easton of the Elizabeth and Somerville Railroad. The extension was known as the Somerville and Easton Railroad, and in 1850, the two companies were merged and restyled the Central Railroad of New Jersey. The line to Easton was completed in 1852, and it served as the route that the Lehigh Valley Railroad also crossed to Jersey City until the LVRR completed its own route in the early 1870s. It is not known if this is the first span to eliminate the grade crossing at Springtown, as the area was then known.

The flooring system was strengthened in 1914 and 1941 with the addition of angles and/or plates to the floor beams. The bridge now services an unimproved road.

Boundary Description and Justification: The bridge is individually eligible, in and of itself, including superstructure, substructure, and right-of-way over the rail line.

PHOTO: 168:25-33 (07/92) REVISED BY (DATE): QUAD: Bloomsbury

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US
November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2160164 **CO** WARREN **OWNER** STATE AGENCY **MILEPOINT** 71.16

NAME & FEATURE INTERSECTED RARITAN VALLEY LINE RR OVER CENTER STREET **FACILITY** RARITAN VALLEY LINE RR

TOWNSHIP PHILLIPSBURG TOWN

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 60 ft **WIDTH** 30 ft

CONSTRUCTION DT 1911 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT CNJ RR OFFICE OF ENGINEER **BUILDER**

SETTING / CONTEXT The bridge is located in an urban area of ca.1900 worker's housing and a plant manufacturing ductile iron pipe. The structure carries one active track in a two-track right-of-way over a two-lane street with two sidewalks. The line was developed in Phillipsburg in 1852, connecting the railroads of eastern Pennsylvania with the ports of New York. The line eventually became used for passenger trains, and was divided between Amtrak and New Jersey Transit in 1976.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Central Railroad of NJ Main Line Corridor. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95. DOE 11/30/95.

SUMMARY The one-span reinforced concrete arch bridge sits on low scored concrete abutments with ashlar wingwalls. The elliptical arch has scored spandrel walls to accent the arch. Metal pipe railings are set in the concrete at the top of both spandrel walls, framing the ballasted deck. The bridge is a representative example of a common pre-World War I type, one of over 15 reinforced concrete arch bridges in Warren County. It is not technologically or historically distinguished.

INFOR MATION

PHOTO: 173:19A-22A (07/92) REVISED BY (DATE): QUAD: Easton

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 3000001 **CO** BURLINGTON **OWNER** PRIVATE **MILEPOINT** 34.3

NAME & FEATURE INTERSECTED NJ 73 OVER DELAWARE RIVER **FACILITY** NJ 73

TOWNSHIP PALMYRA BOROUGH

TYPE DOUBLE LEAF BASCULE **DESIGN** SCHERZER **MATERIAL** Steel

 # SPANS 8 **LENGTH** 3659 ft **WIDTH** 38 ft

CONSTRUCTION DT 1929 **ALTERATION DT** **SOURCE** H.BISBEE "SIGNPOSTS"

DESIGNER/PATENT SCHERZER BRIDGE COMPANY **BUILDER**

SETTING / CONTEXT The Tacony-Palmyra bridge carries the four-lane state highway over the mile-wide Delaware River between New Jersey and Pennsylvania. Palmyra seems to have been founded in the early years after the Camden and Amboy Railroad's construction. Streets are laid on a grid corresponding to the railroad. The Burlington County Bridge Commission operates the toll bridge as an agent for the county, which acquired the bridge from a private operator in 1948.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The eight-span bridge, built in 1928-1929, has a double intersection steel arch main span and a rolling lift double leaf bascule adjacent to the arch to provide a 240-foot clear channel for navigation. It is supported on stone piers and abutments. The bridge is significant as a main transportation artery between Pennsylvania and New Jersey, and for its uncommon combination of a steel arch with bascule spans. It is also one of the two important examples of a steel arch bridge in the state.

INFOR MATION

PHOTO: 303:7-8 (03/92) REVISED BY (DATE): QUAD: Frankford

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 3000002 **CO** BURLINGTON **OWNER** PRIVATE **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 413 OVER DELAWARE RIVER **FACILITY** CR 413

TOWNSHIP BURLINGTON CITY

TYPE VERTICAL LIFT **DESIGN** **MATERIAL** Steel

 # SPANS 7 **LENGTH** 2301 ft **WIDTH** 20 ft

CONSTRUCTION DT 1931 **ALTERATION DT** **SOURCE** H.BISBEE "SIGNPOSTS"

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The Burlington-Bristol bridge carries the two-lane county road over the Delaware River from New Jersey to Pennsylvania. Burlington has a long history and was the capital of West Jersey in early colonial years. In the 1930s, the town was an important center for regional agricultural. The area immediately around the bridge has a mixture of 20th-century residences, industry, and St Mary's Hall, built in 1837 as a private Episcopal school for girls.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The seven-span vertical lift bridge has reinforced concrete abutments and piers. The lift span vertical clearance of 540 feet and has the drive machinery located on the span, rather than the towers. The approach spans are primarily steel stringers, although the 3 spans immediately west of the lift span are Warren deck trusses, and rest on reinforced concrete and latticed channel beam columns. The bridge is unusually large for a vertical lift, and is a significant transportation link.

INFOR MATION

PHOTO: 302:25A-26A (12/91) REVISED BY (DATE): QUAD: Bristol

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 3000003 **CO** BURLINGTON **OWNER** PRIVATE **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 543 OVER RANCOCAS CREEK **FACILITY** CR 543

TOWNSHIP RIVERSIDE TOWNSHIP

TYPE SWING SPAN **DESIGN** CENTER BEARING **MATERIAL** Steel

 # SPANS 3 **LENGTH** 394 ft **WIDTH** 36 ft

CONSTRUCTION DT 1934 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT ASH, HOWARD, NEEDLES & TAMMEN **BUILDER** AMERICAN BRIDGE COMPANY

SETTING / CONTEXT The bridge carries a two-lane road over tidal Rancocas Creek in the small township of Riverside, an area with a long German ethnic tradition and on the 1830s Camden & Amboy Railroad line. The bridge is near the mouth of creek that forms one of the primary waterway systems in Burlington County. The immediate area has mixed industry on the south side and 19th and 20th residences on the north side. The bridge is dedicated to two war veterans.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 3-span Warren pony truss swing bridge rests on reinforced concrete abutments and later steel beams built over and superseding the masonry piers. The trusses are fabricated with welded connections making the span an early state example of a welded truss bridge. The brick operators house is at the south side of the bridge. In operable condition with its original drive mechanism, the bridge is technologically and historically noteworthy. There are apparently few original plans of the bridge.

INFOR MATION

PHOTO: 310:3-7 (01/92) REVISED BY (DATE): QUAD: Beverly

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 3000006 **CO** BURLINGTON **OWNER** PRIVATE **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 543 OVER POMPESTON CREEK **FACILITY** CR 543

TOWNSHIP RIVERTON BOROOUGH

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 33 ft **WIDTH** 46 ft

CONSTRUCTION DT 1934 **ALTERATION DT** 1967 **SOURCE** PLAQUE

DESIGNER/PATENT H. B. SMITH, COUNTY ENGINEER **BUILDER** BURLINGTON COUNTY

SETTING / CONTEXT The bridge carries the four-lane county road over Pompeston Creek in Riverton, a town adjacent to Palmyra and the Delaware River. The immediate area is a mix of 19th and 20th century commercial and residential buildings. The bridge is adjacent to the railroad tracks that run parallel to the road. The Camden and Amboy Railroad was developed in the early 1830s, but it crosses the creek on a relatively new prestressed box beam span on masonry abutments.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The steel stringer bridge rests on reinforced concrete abutments which are adjacent to the abutments of the railroad bridge. There is about three feet between the two bridges' superstructures. The bridge was widened from 36' to 46' in 1967, the year the east parapet was also added. The reinforced concrete railing on the west side of the bridge is original to 1934. The bridge is a common type and is not technologically or historically distinguished.

INFOR MATION

PHOTO: 305:5-6 (01/92) REVISED BY (DATE): QUAD: Frankford

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 3000007 **CO** BURLINGTON **OWNER** PRIVATE **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 543 OVER SWEDES RUN **FACILITY** CR 543

TOWNSHIP DELRAN TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 37 ft **WIDTH** 46 ft

CONSTRUCTION DT 1934 **ALTERATION DT** 1967 **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries the four-lane county road over Swedes Run, near the creeks junction with the Delaware River. A marina with boat storage surrounds the bridge on the west. The region is generally marked by 20th century commercial buildings. The bridge is adjacent to a bridge on the railroad, which runs parallel to the road on a right-of-way developed by the Camden & Amboy Railroad in the 1830s.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one-span steel stringer rests on reinforced concrete abutments and wingwalls, which are adjacent to the parallel railroad bridge. There are about 8 feet between the two superstructures. The bridge was widened from 36' to 46' in 1967, and the new stringers are supported on concrete abutment extensions. The reinforced concrete and pipe parapets also date to 1967. The bridge is not technologically or historically distinguished.

INFOR MATION

PHOTO: 303:3-4 (01/92) REVISED BY (DATE): QUAD: Beverly

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 3000168 **CO** SOMERSET **OWNER** STATE AGENCY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MAIN STREET OVER DELAWARE & RARITAN CANAL **FACILITY** MAIN STREET

TOWNSHIP SOUTH BOUND BROOK BOROUGH

TYPE SWING SPAN **DESIGN** CENTER BEARING **MATERIAL** Steel

 # SPANS 2 **LENGTH** 86 ft **WIDTH** 24 ft

CONSTRUCTION DT 1920 **ALTERATION DT** 1978 **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries two-lanes of traffic across the Delaware and Raritan Canal in the industrial village of South Bound Brook. The canal, which was built in the 1830s to carry barges from New Brunswick to Trenton, parallels the Raritan River along this portion of its route. The bridge is just downstream from a restored lock. South of the bridge is a brick factory complex (c.1880-1920). The Delaware and Raritan Canal R-O-W is a National Register Listed property (5/11/73).

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Individually Eligible. Listed. D&R Canal. 05/11/1973. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bobtail, deck girder, center-bearing swing span is one of six movable bridges across the Delaware and Raritan Canal. Constructed in 1920 for the PA RR late in the operation of the canal, the bridge retains its operating machinery, but it is sealed. The bridge employs representative swing span technology, and although no longer operable has not been significantly altered. The bridge is a contributing element to the D & R Canal whose right-of-way is NR-listed. No original plans are available.

INFOR MATION

Bibliography:

McKelvey, William. Delaware & Raritan Canal A Pictorial History. 1975.
NJDOT. Plan File: 3000168.

Physical Description: The single-span bobtail center-bearing swing span bridge has a long end of approximately 51' and a tail end of 35'. The span with a 24' roadway has built-up girders placed 10' apart with the rest of the structure supported on built-up brackets. The abutments and swing pier are concrete. The floor beams, stringers, three-rail high railings, and open grid steel deck were installed in 1978. The operating mechanism with its sets of reduction gears that activate the drive pinion and electric motors remain in place under the girder, but they have not been maintained. The concrete counterweight is also still in place. The bridge has welded elements locking it in the closed position at both the heel and toe ends. The tender's shanty and controls have been removed.

Historical and Technological Significance: The bobtail center-bearing swing span deck girder bridge was built in 1920 by the Pennsylvania Railroad, and while not contemporary with the heyday of the canal, is the largest and most complete of the extant moveable bridges to cross the National Register-listed Delaware and Raritan Canal right-of-way. The canal, which runs from Bordentown to New Brunswick, was completed in 1834, and it served as an important transportation route for coal from eastern Pennsylvania bound for the New York market. The Pennsylvania Railroad acquired the canal in 1871 when it leased the United New Jersey and Rail Company in order to get that company's rail routes to New York City. The PA RR did not emphasize the canal aspect of the operation. Marine-borne freight dropped dramatically so that by World War I there was little commercial traffic on the canal. In 1924 there were only two mule-drawn boat captains remaining.

Regardless of how little traffic existed, the railroad was responsible for maintaining the bridges that crossed the canal. In 1920 the Pennsylvania Railroad replaced the swing span that carried Main Street over the canal with a built-up deck girder bobtail swing span. No original plans or construction records for the bridge remain with any state agency. It is assumed, based on the history of other bridges, that the span was designed by the PA RR Office of Chief Engineer. The bridge is not operable; it was fixed in the late 1960s, and while the operating mechanism remains in place, it has not been maintained and the source of power and operator's controls and shanty have been removed.

The bridge crosses the historic right-of-way of the Delaware & Raritan Canal, and while it was built before the canal was abandoned by the PA RR in 1933, it is not associated historically with the heyday of canal operations. The bridge is a good representative example of a bobtail swing span, and it remains one of the largest formerly moveable spans over the canal and is thus both historically and technologically noteworthy (criteria A, C).

Boundary Description & Justification: The bridge crosses the National Register-listed right-of-way of the Delaware & Raritan Canal. That nomination did no address structures related to or crossing the right-of-way. This bridge is significant because of its type and history. The span itself and the limits of the canal right-of-way are evaluated as significant.

PHOTO: 107:15-21 (11/30/91) REVISED BY (DATE): QUAD: Bound Brook

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 3000169 **CO** MIDDLESEX **OWNER** STATE AGENCY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED LANDING LANE OVER DELAWARE & RARITAN CANAL **FACILITY** LANDING LANE

TOWNSHIP NEW BRUNSWICK CITY

TYPE SWING SPAN **DESIGN** CENTER BEARING **MATERIAL** Steel

 # SPANS 1 **LENGTH** 74 ft **WIDTH** 20 ft

CONSTRUCTION DT 1920 **ALTERATION DT** 1969ca **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge carries a two lane road and a sidewalk over the Delaware and Raritan Canal (right-of-way listed 5/11/73). The canal is no longer in use for navigation of boats. The bridge is near a high rise residential building and a wooded park area. It is also immediately west of the former Landing Lane thru truss bridge over the Raritan River that was replaced in 1991.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Listed. D&R Canal. 05/11/1973. Noncontributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The variable depth thru-girder bridge was built as a swing span but it is now stationary. The motor has been removed, and structural supports now block the ring around which the bridge once rotated. Timber blocking supports are present at the abutment. The pipe railing is original. One of several swing spans built by the PA RR when the canal was in decline, its value is for its historical association rather than its technological significance. The bridge was made inoperable about 1969.

INFOR MATION

PHOTO: 118:5A-7A (02/92) REVISED BY (DATE): QUAD: Plainfield

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 3001150 **CO** MERCER **OWNER** STATE AGENCY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MONTGOMERY STREET OVER D&R CANAL FEEDER **FACILITY** MONTGOMERY STREET

TOWNSHIP TRENTON CITY

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 2 **LENGTH** 24 ft **WIDTH** 23.8 ft

CONSTRUCTION DT 1916 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT PA RR OFFICE OF ENGINEER **BUILDER**

SETTING / CONTEXT The bridge crosses the D & R Canal Feeder in a mid-19th century residential section of Trenton dominated by row houses interspersed with warehouses. The area has been redeveloped, so the historic setting of the canal and neighborhood has been lost. Some vacant land adjacent to canal (lined with sheet piling) and bridge.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Listed. D&R Canal. 05/11/1973. Noncontributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY Although the right-of-way of the feeder is listed in the Register, the low rise slab bridge with a concrete parapet that replaced a swing span in 1916 is not. The feeder, which is still part of the regional water system, was closed to traffic about 1913, and fixed bridges were designed and built by the PA RR at all the canal crossings in Trenton ca. 1920. This is one of 11 nearly identical slab bridges over the canal. Parkside Ave. is the more significant of the feeder bridges in Trenton.

INFOR MATION

PHOTO: 4:33-34 (05/91) REVISED BY (DATE): QUAD: Trenton West

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 3001151 **CO** MERCER **OWNER** STATE AGENCY **MILEPOINT** 43.2

NAME & FEATURE INTERSECTED NORTH BROAD STREET (US 206 NB) OVER D&R CANAL FEEDER **FACILITY** NORTH BROAD STREET (US 206 NORTHBOUND)

TOWNSHIP TRENTON CITY

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 2 **LENGTH** 28 ft **WIDTH** 36.4 ft

CONSTRUCTION DT 1917 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT PA RR OFFICE OF ENGINEER **BUILDER**

SETTING / CONTEXT The bridge crosses the D & R Canal Feeder in a redeveloped section of downtown Trenton. While the canal right-of-way is historically important, the bridge is not. Surrounding area has had too many buildings removed to retain its historic mid-19th century character. The short span is outside the period of significance of the canal feeder. It was designed by and built for the PA RR after the waterway was closed to traffic about 1913.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Listed. D&R Canal. 05/11/1973. Noncontributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The low rise slab bridge with a concrete paneled parapet is one of 11 nearly identical spans designed and erected by the Pennsylvania Railroad over the abandoned canal feeder. It is supported on concrete abutments and pier. All the fixed bridges over the waterway replaced the historic swing spans. The bridge is not technologically distinctive, and it is not part of a potential historic district.

INFOR MATION

PHOTO: 4:31-32 (05/91) REVISED BY (DATE): QUAD: Trenton West

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 3001152 **CO** MERCER **OWNER** STATE AGENCY **MILEPOINT** 43.2

NAME & FEATURE INTERSECTED WARREN STREET (US 206 SOUTHBOUND) OVER D&R CANAL FEEDER **FACILITY** WARREN STREET (US 206 SOUTHBOUND)

TOWNSHIP TRENTON CITY

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 2 **LENGTH** 24 ft **WIDTH** 36 ft

CONSTRUCTION DT 1916 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT PA RR OFFICE OF ENGINEER **BUILDER**

SETTING / CONTEXT Although the bridge crosses the historic Canal Feeder, the area surrounding it has lost its historic value through the demolition of most of the buildings. Some good early rowhouses survive to the south. A modern park is off the northeast corner. There is no district potential.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Listed. D&R Canal. 05/11/1973. Noncontributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The simple reinforced concrete slab bridge with a solid concrete parapet is one of 11 such spans constructed in the late teens by the Pennsylvania Railroad over the Feeder. When the feeder closed to navigation about 1913, the short swing spans were replaced by fixed bridges. While the right-of-way of the canal is significant, the bridges are not as they were built after the period of significance. The bridge is unaltered.

INFOR MATION

PHOTO: 4:29-30 (05/91) REVISED BY (DATE): QUAD: Trenton West

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 3001153 **CO** MERCER **OWNER** STATE AGENCY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED SPRING & NORTH WILLOW STREETS OVER D&R CANAL FEEDER **FACILITY** SPRING AND NORTH WILLOW STREETS

TOWNSHIP TRENTON CITY

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 2 **LENGTH** 40 ft **WIDTH** 80 ft

CONSTRUCTION DT 1917 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT PA RR OFFICE OF ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge, which crosses the historic canal feeder on the north side of Trenton, is located in what was a fully developed 19th-century mixed use area, but most of the resources have been demolished. Crossing a bend in the feeder, the bridge carries the intersection of two streets and an grassy island with a period lamp standard.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Listed. D&R Canal. 05/11/1973. Noncontributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The short low rise slab bridge on concrete abutments is one of 11 nearly identical spans built for the Pennsylvania Railroad after the Feeder was closed to navigation about 1913. It has the same concrete paneled parapet of the other bridges. While the right-of-way of the canal is historic, the bridge is outside the period of significance of the canal and feeder. It is also not technologically distinguished.

INFOR MATION

PHOTO: 4:27-28 (05/91) REVISED BY (DATE): QUAD: Trenton West

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 3001154 **CO** MERCER **OWNER** STATE AGENCY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PASSAIC STREET OVER D&R CANAL FEEDER **FACILITY** PASSAIC STREET

TOWNSHIP TRENTON CITY

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 34 ft **WIDTH** 27.6 ft

CONSTRUCTION DT 1920 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT PA RR OFFICE OF ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT Although crossing the historic D & R Canal Feeder, the bridge is no longer in a historic setting owing the number of surrounding buildings that have been lost. Much of the area has been cleared or redeveloped. The bridge carries a 2-lane city street over the feeder. There is no district potential to the area.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Listed. D&R Canal. 05/11/1973. Noncontributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The short low rise slab bridge with a concrete paneled parapet is one of 11 nearly identical bridges over the feeder. It is a 1920 replacement of the narrow swing span that serviced the crossing until the feeder was closed to traffic about 1913. The Pennsylvania Railroad, which owned the feeder until the 1940s, designed and had the fixed slab bridges built between 1916 and 1920. The bridge is outside the period of significance of the canal and feeder.

INFOR MATION

PHOTO: 4:24-25 (05/91) REVISED BY (DATE): QUAD: Trenton West

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 3001155 **CO** MERCER **OWNER** STATE AGENCY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WEST HANOVER STREET OVER D&R CANAL FEEDER **FACILITY** WEST HANOVER STREET

TOWNSHIP TRENTON CITY

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 2 **LENGTH** 27 ft **WIDTH** 40 ft

CONSTRUCTION DT 1916 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT PA RR OFFICE OF ENGINEER **BUILDER**

SETTING / CONTEXT Unlike the similar bridges across the feeder to the south, the historic setting of this span is somewhat complete. The area retains its mid-19th century character, and what may have been a tenders house stands (original location?) at the northwesterly corner. While the right-of-way of the feeder is significant, the bridge was built after its period of significance. It is also much newer than the adjacent resources.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Listed. D&R Canal. 05/11/1973. Noncontributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The low-rise concrete slab bridge with concrete paneled parapets and concrete abutments was built by the PA Railroad after the Feeder was closed to navigation about 1913. The bridge is not technologically innovative, and it would be a noncontributing resource to any potential historic district owing to its 1916 date of construction. It is mostly unaltered and was designed by the railroad. While the canal right-of-way is listed, none of the bridges crossing it are included in the nomination.

INFOR MATION

PHOTO: 4:23-24 (05/91) REVISED BY (DATE): QUAD: Trenton West

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 3001156 **CO** MERCER **OWNER** STATE AGENCY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CALHOUN STREET OVER D&R CANAL FEEDER **FACILITY** CALHOUN STREET

TOWNSHIP TRENTON CITY

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 24 ft **WIDTH** 43.6 ft

CONSTRUCTION DT 1919 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT PA RR OFFICE OF ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT Located in what was a late-19th century residential area, its integrity has been lost through demolition and redevelopment. The bridge carries a narrow 2-lane city street over the historic right-of-way of the D & R Canal Feeder. There is no historic district potential.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Listed. D&R Canal. 05/11/1973. Noncontributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The low rise slab bridge with a concrete paneled parapet is one of 11 nearly identical spans built over the Feeder between 1916 and 1920. It is supported on concrete abutments. The bridge postdates the period of significance of the canal and feeder, which were closed to navigation about 1913. The span is technologically undistinguished.

INFOR MATION

PHOTO: 4:19-20 (05/91) REVISED BY (DATE): QUAD: Trenton West

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 3001157 **CO** MERCER **OWNER** STATE AGENCY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED FOOT PATH OVER D&R CANAL FEEDER **FACILITY** FOOT PATH

TOWNSHIP TRENTON CITY

TYPE SLAB **DESIGN** CONTINUOUS **MATERIAL** Reinforced Concrete

 # SPANS 4 **LENGTH** 24 ft **WIDTH** 100 ft

CONSTRUCTION DT 1920ca **ALTERATION DT** **SOURCE** STYLE

DESIGNER/PATENT PA RR OFFICE OF ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The pedestrian bridge in a linear park formed by the right-of-way of the canal feeder and tow path through a late-19th century residential neighborhood. The green band protects the water feature which is part of the regional water supply. The surrounding houses date from ca. 1890-1910. The canal feeder was closed to navigation about 1913 by its owner, the Pennsylvania RR.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Listed. D&R Canal. 05/11/1973. Noncontributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The continuous 4-span low rise slab foot bridge is supported on concrete abutments and piers and has a paneled concrete parapet. It is accessed by graceful pyramidal steps on each end. Although the ca. 1920 slab bridge is well preserved, it is outside its period of significance of both the canal feeder and the surrounding ca. 1900 residential area. The linear park in which the foot bridge is located visually adds to the ambiance of the area.

INFOR MATION

PHOTO: 4:17-18 (05/91) REVISED BY (DATE): QUAD: Trenton West

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 3001158 **CO** MERCER **OWNER** STATE AGENCY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PROSPECT STREET OVER D&R CANAL FEEDER **FACILITY** PROSPECT STREET

TOWNSHIP TRENTON CITY

TYPE SLAB **DESIGN** CONTINUOUS **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 29 ft **WIDTH** 40 ft

CONSTRUCTION DT 1920 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT PA RR OFFICE OF ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT Located in an architecturally distinguished late-19th century residential area, the bridge is an element in a street realignment that came about when the old Feeder swing span was replaced by a fixed bridge in 1920. The improvement resulted in the island on the W. State Street side of the water feature. The Feeder is flanked by green space that makes a green belt through the area. Neighborhood has integrity.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Listed. D&R Canal. 05/11/1973. Noncontributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The low rise slab bridge with a concrete paneled parapets and concrete abutments is picturesquely sited, but it is outside the periods of significance of both the canal and the surrounding late-19th century neighborhood. It was designed by and built by the Pennsylvania Railroad after the canal feeder was closed to navigation about 1913. The modest structure is not technologically distinguished. The park in which it is located does contribute to the ambiance of the area.

INFOR MATION

PHOTO: 4:13-16 (05/91) REVISED BY (DATE): QUAD: Trenton West

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 3001160 **CO** MERCER **OWNER** NJDOT **MILEPOINT**

NAME & FEATURE INTERSECTED D&R CANAL FEEDER OVER PARKSIDE AVENUE **FACILITY** D & R CANAL FEEDER & BELVIDERE BRANCH RR

TOWNSHIP TRENTON CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 4 **LENGTH** 60 ft **WIDTH** 90 ft

CONSTRUCTION DT 1909 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT PENNSYLVANIA RR **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge, originally known as the Cadwalader Park Tunnel, is an integral part of a major city park. Its Neo-Classical detailing was designed to complement the casually landscaped early-20th century park which is located just north of the bridge. The park, designed by the Olmsted firm in 1891, is surrounded by an architecturally significant turn-of-the-century residential neighborhood. The park includes the acreage historically associated with the Italianate McCall Mansion.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Individually Eligible. Listed. McCall Mansion. 02/06/1973; D&R Canal Historic District, 05/11/1973. Contributing.

CONSULT DOCUMENTS SHPO Letter 3/12/01

SUMMARY The handsome, concrete aqueduct with Neo-Classical-style balustrades and octagonal columns is the most significant "City Beautiful" bridge in the area, and it may well be the earliest. It was designed and built by the Pennsylvania Railroad to carry the canal and railroad over the entrance to Cadwalader Park which was developed after 1888 on the grounds of the McCall Mansion. The house and surrounding 100 acres are listed, but the aqueduct is not rated. It is a contributing resource to both the McCall Mansion House and the Delaware & Raritan Canal Historic District. It is also individually significant based on its type, completeness, and history.

INFOR MATION

PHOTO: 3:10A-11A (05/91) REVISED BY (DATE): QUAD: Trenton West

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 3001161 **CO** MERCER **OWNER** STATE AGENCY **MILEPOINT**

NAME & FEATURE INTERSECTED D&R CANAL FEEDER OVER SULLIVAN WAY **FACILITY** D & R CANAL FEEDER

TOWNSHIP EWING TOWNSHIP

TYPE UNKNOWN **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 3 **LENGTH** No Data **WIDTH** No Data

CONSTRUCTION DT 1920ca **ALTERATION DT** **SOURCE** STYLE

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The overpass located at the entrance to a substantial mid-20th century residential area carries the Canal Feeder and towpath over the road that leads to the historic state mental facility. The feeder right-of-way continues on into Trenton proper. The Canal Feeder right-of-way is listed in the National Register, but structure is not addressed.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Listed. D&R Canal. 05/11/1973. Noncontributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY Although the Feeder right-of-way is listed in the National Register, related bridges and aqueducts are not because they were constructed after the facility was closed to marine traffic and outside the period of significance. The concrete aqueduct has concrete bents and abutments. It is finished with a pipe railing. Its detailing is a reflection of the City Beautiful philosophy. The aqueduct at Parkside Ave.(3001160) is a better example of the concept and structural type.

INFOR MATION

PHOTO: 3:8a-9a (05/91) REVISED BY (DATE): QUAD: Trenton West

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 3001165 **CO** MERCER **OWNER** STATE AGENCY **MILEPOINT** 2.15

NAME & FEATURE INTERSECTED UPPER FERRY ROAD OVER D&R CANAL FEEDER **FACILITY** UPPER FERRY ROAD (NJ 175)

TOWNSHIP EWING TOWNSHIP

TYPE SLAB **DESIGN** CONTINUOUS **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 35 ft **WIDTH** 30 ft

CONSTRUCTION DT 1920 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT PA RR OFFICE OF ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The short concrete slab bridge with a paneled concrete parapet crosses the Feeder just east of the interchange with US 95. The canal and towpath are tree lined, and a substantial mid-20th century residential area is located to the east of the right-of-way which is now a linear park. The canal itself is listed in the National Register, but the features crossing it are not.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Listed. D&R Canal. 05/11/1973. Noncontributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The short low rise slab bridge with a paneled parapet in concrete was built for the PA RR in 1920. it is the only one of the 11 nearly identical spans built over the feeder to retain the original pipe railing, which is inscribed with the railroad's cypher. Although the canal and feeder right-of-way are listed in the National Register, the bridge was built outside their period of significance. It replaces the a swing span made obsolete when the feeder was closed to navigation about 1913.

INFOR MATION

PHOTO: 9:23A-24A (08/91) REVISED BY (DATE): QUAD: Trenton West

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 3001174 **CO** HUNTERDON **OWNER** STATE AGENCY **MILEPOINT** 0.16

NAME & FEATURE INTERSECTED BRIDGE STREET OVER D&R FEEDER CANAL **FACILITY** BRIDGE STREET

TOWNSHIP LAMBERTVILLE CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 35 ft **WIDTH** 40.2 ft

CONSTRUCTION DT 1920 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT PA RR OFFICE OF ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane city street and sidewalks over the D&R feeder canal in the center of Lambertville, a NR-listed historic district. Many converted 19th century buildings serve as retail businesses. Adjacent to the bridge is a former Bel-Del RR station. The canal feeder was closed to waterborne traffic about 1913. The canal R-O-W is also NR-listed, but bridges over it are not. The bridge is not a contributing resource to either district because of its age and style.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Listed. Lambertville Historic District. 06/30/1983. Noncontributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The steel stringer bridge with concrete abutments and paneled concrete parapets is similar to others over the feeder canal in Mercer county. The modest bridge was constructed in 1920, after the canal feeder was closed to navigation. Although located within the historic district noted for its transportation network, the bridge is outside of the 19th-century period of historical significance and is thus a noncontributing resource. It is also not technologically noteworthy.

INFOR MATION

PHOTO: 68M:25-26 (07/91) REVISED BY (DATE): QUAD: Lambertville

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 3001178 **CO** HUNTERDON **OWNER** STATE AGENCY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BRIDGE STREET OVER D&R FEEDER CANAL **FACILITY** BRIDGE STREET

TOWNSHIP STOCKTON BORO

TYPE T BEAM **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 2 **LENGTH** 59 ft **WIDTH** 20 ft

CONSTRUCTION DT 1926 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT PA RR OFFICE OF CHIEF ENGINEER **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane street and 2 sidewalks over the Delaware & Raritan Canal Feeder. It is located near a thru truss bridge spanning the Delaware River on one of the two major streets in the town. It is also near the bridge guard's shanty. The canal feeder right-of-way is National Register-listed, but the bridges that cross the canal and feeder are not part of the nomination. The span was built after the canal feeder was closed to navigation about 1913.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Listed. D&R Canal. 05/11/1973. Noncontributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The concrete tee beam bridge is supported on a concrete center pier and concrete abutments and wingwalls. The four narrow tee beams with diaphragms are widely spaced. The concrete parapet with posts is ornamented with 4 light standards cast by the Foran F & M Co. of Flemington. The bridge is not technologically innovative or significant, and it was constructed after the canal feeder was closed to navigation (about 1913). The bridge was designed by the railroad because they owned the canal.

INFOR MATION

PHOTO: 613:10-13 (02/92) REVISED BY (DATE): QUAD: Stockton

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 3100001 **CO** CAPE MAY **OWNER** PRIVATE **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED OCEAN HIGHWAY OVER GREAT EGG HARBOR **FACILITY** OCEAN HIGHWAY

TOWNSHIP OCEAN CITY

TYPE DOUBLE LEAF BASCULE **DESIGN** TRUNNION **MATERIAL** Steel

 # SPANS 85 **LENGTH** 3437 ft **WIDTH** 21.8 ft

CONSTRUCTION DT 1928 **ALTERATION DT** 1977, 1993 **SOURCE** PLAQUE

DESIGNER/PATENT HARRINGTON, HOWARD & ASH **BUILDER** PHOENIX BRIDGE COMPANY

SETTING / CONTEXT The bridge carries two lanes of traffic and a single sidewalk over the Great Egg Harbor north of Ocean City. South of the bridge is a late 20th-century summer residential community bordering the beach. To the north is a salt marsh and causeway. The bridge is the northernmost of five movable span bridges on Cape May County's Ocean Highway. It is privately owned and operated by the Ocean City Coastal Hwy Bridge Co. It is currently posted for 3 tons.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 1928 bridge consists of a double leaf bascule span, 5 deck girder spans, and 79 steel stringer approach spans. The bascule has a two story concrete operators house; original open gearing, electric motors, haunched deck girder superstructure, concrete counterweights, and concrete substructure. The bridge is one of the earliest examples of a movable Harrington, Howard & Ash design in NJ. It is historically distinguished, and a very complete example of its type.

INFOR MATION

Bibliography:
Cape May County Bridge Commission. HNTB. "Engineering Report to Cape May County Bridge Commission on Existing Ocean Highway Toll Bridge Cape May County New Jersey," July 1, 1965.
Cape May County Bridge Commission. Minutes 1934-1940. Brown, Kathi Ann. Design By Diversity. Kansas City, Missouri: The Lowell Press, 1989.New Jersey Laws, Session of 1910.

Physical Description: The main span of the 3437'-long bridge is a 122'-long double-leaf trunnion haunched deck-girder span with a steel grid deck. The multi-girder approach spans are supported on concrete pile and cap beam bents, and the whole bridge is enclosed by a 3-rail high metal railing installed in 1947-48. Opposing corners of the movable leafs are set with 2-story, flat-roofed concrete operators houses supported on bracketed cantilevers from the concrete piers. The other corners have one-story machinery houses that also serve as lookouts off the safety walks.

Although there have been some changes to the bridge as a result of maintenance and improvements, overall the structure and operating mechanism are complete. The bridge appears and operates as originally designed with the leafs pivoting on the original trunnions. A counterweight is affixed to the tail end of each leaf. The operating machinery, with open gear sets and shafts, appears to be largely original or in kind replacements. The electrical and control systems also appear to be largely original, but the trolley-like control panel and dead men were replaced with a modern panel and wiring in 1993. The safety gates are modern, and the original signals were removed in 1993. The one-story, hip-roofed structure at the south end of the bridge is the original office for the bridge company. It has a modern overhead garage door on the south elevation and an exterior coating added in 1993, but otherwise it complete and contributes to the historical significance of the span. It is now used as a day room.

The original toll booth was replaced by the present one in 1977. There have been repairs to several approach span bents, and the bridge is currently posted for 3 tons.

Historical and Technological Significance: The double-leaf trunnion bridge was built by the Ocean City Coastal Highway Bridge Company and its subsidiary Ocean City Longport Automobile Bridge Company in 1927-1928. The company was chartered by the state legislature in 1927, and they contracted with Harrington, Howard & Ash (later Ash, Howard, Needles & Tammen) of Kansas City, Missouri and New York for the design. The span is the earliest of the bridges between the barrier islands in Cape May and Atlantic counties, and it is the second of the Ash, Howard, Needles & Tammen-design movable spans that would become extremely popular in the region (the earliest is 0406158, US 30 over Cooper River built in 1927). The bridge is significant as an early and remarkably complete example of its type and design, with most of its original operating machinery, and for its historical significance with the practice of being erected by a private-sector organization (criteria A. C.). Technologically it represents mid-1920s refinements in the important trunnion bascule bridge design developed in Chicago in the last years of the 19th and early years of the 20th century. The Ocean City-Longport bridge is one of over a dozen of the same patented design built in the region between 1928 and 1940. Another of the same design was built on the Ocean Highway over Corsons Inlet for the Cape May Bridge Commission in 1947-48 (not included in the survey because of it date of construction).

The Ocean City-Longport bridge company was not financially successful, and the owners filed for bankruptcy in August, 1934. In 1946, the Cape May County Bridge Commission, which owned and operated 6 other bridges further south on the Ocean Highway, refinanced its indebtedness in order to be able to purchase and rehabilitate the bankrupt Ocean City-Longport bridge. They paid $720,000 for it. The bridge had suffered from deferred maintenance during the 1930s and war years. Starting in 1947, the commission rehabilitated it by reconditioning the deck of the approach spans. The original concrete deck was completely removed, supporting girders and floor beams were realigned and repaired where needed, it was redecked with concrete, and new metal railings were installed. The roadway and sidewalk were reconfigured with two safety walks flanking the 23'-wide cartway instead of the original arrangement of one 5'-wide sidewalk. Repairs were also made to the electrical equipment and the operators houses. New doors and windows were installed on the operators houses in 1955, and the steel grid deck was also installed on the movable leafs then.

The Cape May County Bridge Commission, owners of the bridge since 1946, was established by the county in 1934 for the purpose of having a means to apply for Federal Emergency Administration of Public Works funds to build movable bridges over navigable channels and two fixed bridges on the Ocean Highway in the county. A quasi-public commission, the original members were George N. Smith from Wildwood Crest, Luther C. Ogden, a former county freeholder, of Cape May City, and G. W. Bergner, mayor of Avalon. The purpose of the commission was to "finance, construct, maintain, and operate self-liquidating toll bridges within the county." Having the private commission meant that the bridges could be constructed without cost to the county. Improving vehicular access to the Shore resort communities was viewed as a means of balancing the decline of train service to the tourist and seasonal-resident oriented area.

Ocean Highway was a route designation enacted by the 1910 New Jersey Senate and General Assembly (Chapter 220). The highway was to stretch from Atlantic Highlands in Monmouth County to Cape May City in Cape May County along, "as far as possible," improved existing roads near the ocean. The Commissioner of Public Roads was authorized to make route improvements where necessary with a $50,000. appropriation from the vehicle license fund. The improvements were made to the roadway over the next four years, but bridges were not a part of that work.

Ocean Highway was an element in the promotion of the Jersey Shore as a tourist and seasonal residence area. The route, which incorporates local and county streets, does not possess the integrity of setting nor technological significance to be evaluated as a potential historic district. It is merely a route designation that in Cape May County was promoted as the shortest route from Atlantic City to Cape May City.

The consulting engineer firm of Harrington, Ash & Howard (reorganized in 1928 as Ash, Howard, Needles & Tammen) from New York City played a pivotal role in the history of private bridge commissions in the region. By 1928, the firm, founded in Kansas City, Missouri in 1914 as the successor to one started by J.A.L. Waddell, had established itself nationally as one of the leading designers of movable bridges, especially vertical lift bridges. Waddell was associated with the firm until he and John Harrington went their separate ways in 1914. The company opened its New City office in 1922 under the leadership of John L. Harrington who had taken on new partners. The patent associated with the design of this particular bridge relates to the trunnion tower, and it was granted in 1926.

Boundary Description and Justification: The bridge is evaluated as individually significant because of its technology, its completeness, and its historic background. It is not located within a potential historic district nor along a potentially eligible historic route. Therefore, the significant boundary is limited to the substructure and superstructure of the entire span.

PHOTO: 188:4-13 (10/03/92 JPH (5/96)) REVISED BY (DATE): QUAD: Ocean City

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 3100003 **CO** CAPE MAY **OWNER** PRIVATE **MILEPOINT** 0.0
NAME & FEATURE INTERSECTED OCEAN HIGHWAY OVER TOWNSENDS INLET **FACILITY** OCEAN HIGHWAY
TOWNSHIP AVALON BOROUGH
TYPE SINGLE LEAF BASCULE **DESIGN** TRUNNION **MATERIAL** Steel
 # SPANS 27 **LENGTH** 1373 ft **WIDTH** 19.7 ft

CONSTRUCTION DT 1939 **ALTERATION DT** **SOURCE** PLAQUE
DESIGNER/PATENT ASH HOWARD NEEDLES & TAMMEN **BUILDER** BETHLEHEM STEEL COMPANY

SETTING / CONTEXT The toll bridge carries two lanes of traffic and two sidewalks over a navigable channel between Sea Isle City and Avalon. North of the bridge is Townsend's Inlet municipal park with beach and parking lot. The area on both sides of the inlet is developed with late-20th century summer residences. The toll bridge is privately operated by the Cape May County Bridge Commission.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No
CONSULT STATUS Individually Eligible.
CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 27 span bridge has a single-leaf bascule span and 26 deck girder and rolled stringer approach spans. The 57' tapered deck girder with floor beams trunnion bascule is well preserved with its original or inkind replacement gear sets, electrical systems, controls, and concrete operator's and mechanical houses. The bridge is 1 of 4 similar bridges built 1938-1940 for the Cape May County Bridge Comm. with funding from the WPA. All are historically and technologically significant.

INFOR MATION

Bibliography:
Brown, Kathi Ann. Design By Diversity. Kansas City, Missouri: The Lowell Press, 1989.
Cape May County Bridge Commission. Minutes 1934-1940.
New Jersey Laws, Session of 1910.
Seely, Bruce. Building the American Highway System. Philadelphia: Temple University Press, 1989.

Physical Description: The main span of the 27-span bridge is a 57'-long haunched deck girder with floor beams single-leaf trunnion bascule with a steel grid deck. The concrete counterweight is affixed to the underside of the tail end of the movable span. The approach spans are stringers and built-up deck girders supported on concrete pier bents with concrete cap beams for the stringers and braced concrete columns for the girders and movable leaf. A metal railing and safety sidewalks flank the roadway of the entire span. The cantilevered flat-roofed concrete Moderne-style operator's house on the inland side of the movable leaf is matched by a corresponding lookout with a bench on the ocean side. The toll booth is also a flat-roofed concrete structure, and it is located in the center of bridge adjacent to the movable leaf. The toll taker also serves as the bridge operator. Safety gates and signals are activated from the toll booth, but all other controls for operating the span are in the nearby operator's house.

The operating mechanisms are primarily original or in kind replacements. The bridge operates by means of a pinion that engages a rack fixed to the outside of the girder near the trunnion. The enclosed primary and open secondary reducers and open drive gear sets are original as are the trunnions and supporting columns. The control panel and electrical panel also appear to be original. The bridge is powered by an electrical motor.

Historical and Technological Significance: The bridge over Townsends Inlet is one of four nearly identical trunnion movable bridges designed by Ash Howard Needles & Tammen that were built under one contract for the Cape May County Bridge Commission in 1938-1940. The bridges were opened to the traveling public June 1940. The span is a well preserved representative example of what is the most common movable bridge type in the Jersey Shore region. Technologically it represents mid-1920s refinements in the important trunnion bascule bridge design developed in the early years of the 20th century. It is one of over a dozen of the same patented design built in the area between 1928 and 1940. Another was built on the Ocean Highway over Corsons Inlet for the Cape May Bridge Commission in 1947-48. Historically the bridges are monuments to the effectiveness of Depression-era New Deal programs to improve America's infrastructure (criteria A. C.).

The Cape May County Bridge Commission was established by the county in 1934 for the purpose of having a means to apply for Federal Emergency Administration of Public Works funds to build movable bridges over navigable channels and two fixed bridges on the Ocean Highway in the county. A quasi-public commission, the original members were George N. Smith from Wildwood Crest, Luther C. Ogden, a former county Freeholder, of Cape May City, and G. W. Bergner, mayor of Avalon. The purpose of the commission was to "finance, construct, maintain, and operate self-liquidating toll bridges within the county." Having the private commission meant that the bridges could be constructed without cost to the county. Improving vehicular access to the Shore resort communities was viewed as a means of balancing the decline of train service to the tourist and seasonal-resident oriented area.

Ocean Highway was a route designation enacted by the 1910 New Jersey Senate and General Assembly (Chapter 220). The highway was to stretch from Atlantic Highlands in Monmouth County to Cape May City in Cape May County along, "as far as possible," improved existing roads near the ocean. The Commissioner of Public Roads was authorized to make route improvements where necessary with a $50,000. appropriation from the vehicle license fund. The improvements were made to the roadway over the next four years, but bridges were not a part of that work.

Ocean Highway was an element in the promotion of the Jersey Shore as a tourist and seasonal residence area. The route, which incorporates local and county streets, does not possess the integrity of setting nor technological significance to be evaluated as a potential historic district. It is merely a route designation that in Cape May County was promoted as the shortest route from Atlantic City to Cape May City.

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US
November 12, 2002

The consulting engineer firm of Ash Howard Needles & Tammen (AHNT) from New York City played a pivotal role in the history of the bridge commission. By 1934, the firm, founded in Kansas City, Missouri in 1914 as the successor to one started by J.A.L. Waddell, had established itself nationally as one of the leading designers of movable bridges, especially vertical lift bridges. Waddell was associated with the firm until he and John Harrington went their separate ways in 1914. The company opened its New City office in 1922 under the leadership of Harrington, Howard and Ash. Work-relief program funded projects were an important source of work for AHNT, as it was for most engineering firms during the Depression, and the Cape May Ocean Highway bridges were a sustaining project for the New York office. The AHNT patent associated with the design of this particular bridge relates to the trunnion tower, and it was granted in 1926.

It was reported at the May 22, 1935 annual meeting of the Cape May County Bridge Commission that AHNT attended the meeting, and that they had prepared, on behalf of the commission, the actual application, complete with plans and specifications, to the Federal Administration of Public Works for $1,650,000 to build the Ocean Highway bridges. The application was not approved until June 14, 1938, at which time $744,545 was a grant and $910,000 was a loan. Work on the bridges began immediately.

The funding from the Federal Administration of Public Works met several objectives of various federal programs. It provided work for the unemployed. It was anticipated that between 350 and 500 local men would be put to work in addition to many "outside men," (CMCBC Minutes, 7/1/38). The bridges would improve traffic and focus on efficiency, as defined in engineering terms, which was a goal of the Bureau of Public Roads. Work relief-funded projects like the Cape May County Ocean Highway bridges kept the golden age of highway development alive during the Depression, when the lack of state and local funds would otherwise have stopped the effort (Seely, p. 88-91).

The four AHNT-designed movable bridges built on the Ocean Highway (3100003, 0500028, 3100005, 3100006) are all evaluated as significant because all are in a nearly complete state of preservation. The fact that they were built with funds made available through the federal government in an effort to create work is not sufficiently significant enough to meet National Register criteria because so many public works projects during the mid- to late-1930s were funded exactly the same way. The bridges were also not built with federally funded work crews such as the Civilian Conservation Corps (CCC).

Boundary Description and Justification: The bridge is evaluated as individually distinguished. While its immediate setting remains unchanged, the route of which it is a part does not possess the integrity or historical significance to be a potential historic district. Therefore, the bridge including the approach spans and structures related to its operation are evaluated as the limit of the historic resource.

PHOTO: 189:1,37-44 (10/03/92) REVISED BY (DATE): QUAD: Avalon

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 3100005 **CO** CAPE MAY **OWNER** PRIVATE **MILEPOINT** 0.0
NAME & FEATURE INTERSECTED OCEAN HIGHWAY OVER GRASSY SOUND **FACILITY** OCEAN HIGHWAY
TOWNSHIP MIDDLE TOWNSHIP
TYPE SINGLE LEAF BASCULE **DESIGN** TRUNNION **MATERIAL** Steel
 # SPANS 23 **LENGTH** 1073 ft **WIDTH** 19.7 ft

CONSTRUCTION DT 1939 **ALTERATION DT** **SOURCE** PLAQUE
DESIGNER/PATENT ASH, HOWARD, NEEDLES & TAMMEN **BUILDER** BETHLEHEM STEEL COMPANY

SETTING / CONTEXT The toll bridge carries two lanes of traffic and two sidewalks over navigable Grassy Sound north of North Wildwood. North of the bridge is an undeveloped island and salt meadows. To the south are salt meadows with some 20th-century residential development and a small marina. The toll bridge is privately operated by the Cape May County Bridge Commission.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No
CONSULT STATUS Individually Eligible.
CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 23 span bridge has a 57' single-leaf trunnion bascule main span and 22 deck girder and stringer approach spans. The substructure is concrete. The bridge and operating equipment, including gears and operators house, are well preserved. The span is one of 4 similar bridges built 1938-40 on the Ocean Highway by the Cape May County Bridge Comm. with WPA funding. The group represents a major civic improvement, and all bridges are historically and technologically distinguished.

INFORMATION

Bibliography:
Brown, Kathi Ann. Design By Diversity. Kansas City, Missouri: The Lowell Press, 1989.
Cape May County Bridge Commission. Minutes 1934-1940.
New Jersey Laws, Session of 1910.
Seely, Bruce. Building the American Highway System. Philadelphia: Temple University Press, 1989.

Physical Description: The main span of the 23-span bridge is a 57'-long haunched deck girder with floor beams single-leaf trunnion bascule with a steel grid deck. The concrete counterweight is affixed to the underside of the tail end of the movable span. The approach spans are stringers and built-up deck girders supported on concrete pier bents with concrete cap beams for the stringers and braced concrete columns for the girders and movable leaf. A metal railing and safety sidewalks flank the roadway of the entire span. The cantilevered flat-roofed concrete Moderne-style operator's house on the ocean side of the movable leaf is matched by a corresponding lookout with a bench on the inland side. The toll booth is also a flat-roofed concrete structure, and it is located in the center of the bridge adjacent to the movable leaf. The toll taker also serves as the bridge operator. Safety gates and signals are activated from the toll booth, but all other controls for operating the span are in the nearby operator's house.

The operating mechanisms are primarily original or in kind replacements. The bridge operates by means of a pinion that engages a rack fixed to the outside of the girder near the trunnion. The enclosed primary and open secondary reducers and open drive gear sets are original as are the trunnions and supporting columns. The control panel and electrical panel also appear to be original. The bridge is powered by an electrical motor. The machinery brake is original.

Historical and Technological Significance: The bridge over Grassy Sound is one of four nearly identical trunnion movable bridges designed by Ash Howard Needles & Tammen that were built under one contract for the Cape May County Bridge Commission in 1938-1940. The bridges were opened to the traveling public June 1940. The span is a well preserved representative example of what is the most common movable bridge type in the Jersey Shore region. Technologically it represents mid-1920s refinements in the important trunnion bascule bridge design developed in the early years of the 20th century. It is one of over a dozen of the same patented design built in the area between 1928 and 1940. Another was built on the Ocean Highway over Corsons Inlet for the Cape May Bridge Commission in 1947-48. Historically the bridges are monuments to the effectiveness of Depression-era New Deal programs to improve America's infrastructure (criteria A. C.).

The Cape May County Bridge Commission was established by the county in 1934 for the purpose of having a means to apply for Federal Emergency Administration of Public Works funds to build movable bridges over navigable channels and two fixed bridges on the Ocean Highway in the county. A quasi-public commission, the original members were George N. Smith from Wildwood Crest, Luther C. Ogden, a former county Freeholder, of Cape May City, and G. W. Bergner, mayor of Avalon. The purpose of the commission was to "finance, construct, maintain, and operate self-liquidating toll bridges within the county." Having the private commission meant that the bridges could be constructed without cost to the county. Improving vehicular access to the Shore resort communities was viewed as a means of balancing the decline of train service to the tourist and seasonal-resident oriented area.

Ocean Highway was a route designation enacted by the 1910 New Jersey Senate and General Assembly (Chapter 220). The highway was to stretch from Atlantic Highlands in Monmouth County to Cape May City in Cape May County along, "as far as possible," improved existing roads near the ocean. The Commissioner of Public Roads was authorized to make route improvements where necessary with a $50,000. appropriation from the vehicle license fund. The improvements were made to the roadway over the next four years, but bridges were not a part of that work.

Ocean Highway was an element in the promotion of the Jersey Shore as a tourist and seasonal residence area. The route, which incorporates local and county streets, does not possess the integrity of setting nor technological significance to be evaluated as a potential historic district. It is merely a route designation that in Cape May County was promoted as the shortest route from Atlantic City to Cape May City.

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US
November 12, 2002

The consulting engineer firm of Ash Howard Needles & Tammen (AHNT) from New York City played a pivotal role in the history of the bridge commission. By 1934, the firm, founded in Kansas City, Missouri in 1914 as the successor to one started by J.A.L. Waddell, had established itself nationally as one of the leading designers of movable bridges, especially vertical lift bridges. Waddell was associated with the firm until he and John Harrington went their separate ways in 1914. The company opened its New City office in 1922 under the leadership of Harrington, Howard, and Ash. Work-relief program funded projects were an important source of work for AHNT, as it was for most engineering firms during the Depression, and the Cape May Ocean Highway bridges were a sustaining project for the New York office. The AHNT patent associated with the design of this particular bridge relates to the trunnion tower, and it was granted in 1926.

It was reported at the May 22, 1935 annual meeting of the Cape May County Bridge Commission that AHNT attended the meeting, and that they had prepared, on behalf of the commission, the actual application, complete with plans and specifications, to the Federal Administration of Public Works for $1,650,000 to build the Ocean Highway bridges. The application was not approved until June 14, 1938, at which time $744,545 was a grant and $910,000 was a loan. Work on the bridges began immediately.

The funding from the Federal Administration of Public Works met several objectives of various federal programs. It provided work for the unemployed. It was anticipated that between 350 and 500 local men would be put to work in addition to many "outside men," (CMCBC Minutes, 7/1/38). The bridges would improve traffic and focus on efficiency, as defined in engineering terms, which was a goal of the Bureau of Public Roads. Work relief-funded projects like the Cape May County Ocean Highway bridges kept the golden age of highway development alive during the Depression, when the lack of state and local funds would otherwise have stopped the effort (Seely, p. 88-91).

The four AHNT-designed movable bridges built on the Ocean Highway (3100003, 0500028, 3100005, 3100006) are all evaluated as significant because all are in a nearly complete state of preservation. The fact that they were built with funds made available through the federal government in an effort to create work is not sufficiently significant enough to meet National Register criteria because so many public works projects during the mid- to late-1930s were funded exactly the same way. The bridges were also not built with federally funded work crews such as the Civilian Conservation Corps (CCC).

Boundary Description and Justification: The bridge is evaluated as individually distinguished. While its immediate setting remains unchanged, the route of which it is a part does not possess the integrity or historical significance to be a potential historic district. Therefore, the bridge including the approach spans and structures related to its operation are evaluated as the limit of the historic resource.

PHOTO: 429:37a-42a (10/04/93) REVISED BY (DATE): QUAD: Stone Harbor

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 3100006 **CO** CAPE MAY **OWNER** PRIVATE **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED OCEAN HIGHWAY OVER MIDDLE THOROFARE **FACILITY** OCEAN HIGHWAY

TOWNSHIP LOWER TOWNSHIP

TYPE SINGLE LEAF BASCULE **DESIGN** TRUNNION **MATERIAL** Steel

 # SPANS 22 **LENGTH** 1044 ft **WIDTH** 19.7 ft

CONSTRUCTION DT 1940 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT ASH, HOWARD, NEEDLES & TAMMEN **BUILDER** BETHLEHEM STEEL COMPANY

SETTING / CONTEXT The bridge carries two lanes of traffic and two sidewalks over Middle Thorofare, a navigable channel north of Cape May. The surrounding area is a salt meadow with moderate development including a fish cannery and marina south of the bridge. The toll bridge is privately operated by the Cape May County Bridge Commission.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 22-span bridge has a 57' single leaf trunnion bascule span and 21 deck girder with floorbeams approach spans on concrete pier bents. The span is well preserved with the original operating equipment and concrete operators house. The span is one of 4 similar movable bridges built 1938-40 on the Ocean Highway for the Cape May County Bridge Comm. The project was designed by AHNT, and it was funded by the WPA. An important civic project, the bridges are historically and technologically notable.

INFOR MATION

Bibliography:
Brown, Kathi Ann. Design By Diversity. Kansas City, Missouri: The Lowell Press, 1989.
Cape May County Bridge Commission. Minutes 1934-1940.
New Jersey Laws, Session of 1910.
Seely, Bruce. Building the American Highway System. Philadelphia: Temple University Press, 1989.

Physical Description: The main span of the 22-span bridge is a 57'-long haunched deck girder with floor beams single-leaf trunnion bascule with a steel grid deck. The concrete counterweight is affixed to the underside of the tail end of the movable span. The approach spans are stringers and built-up deck girders supported on concrete pier bents with concrete cap beams for the stringers and braced concrete columns for the girders and movable leaf. A metal railing and safety sidewalks flank the roadway of the entire span. The cantilevered flat-roofed concrete Moderne-style operator's house on the inland side of the movable leaf is matched by a corresponding lookout with a bench on the ocean side. The toll booth is also a flat-roofed concrete structure, and it is located in the center of bridge adjacent to the movable leaf. The toll taker also serves as the bridge operator. Safety gates and signals are activated from the toll booth, but all other controls for operating the span are in the nearby operator's house.

The operating mechanisms are primarily original or in kind replacements. The bridge operates by means of a pinion that engages a rack fixed to the outside of the girder near the trunnion. The enclosed primary and open secondary reducers and open drive gear sets are original as are the trunnions and supporting columns. The control panel and electrical panel also appear to be original. The bridge is powered by an electrical motor.

Historical and Technological Significance: The bridge over Middle Thorofare is one of four nearly identical trunnion movable bridges designed by Ash Howard Needles & Tammen that were built under one contract for the Cape May County Bridge Commission in 1938-1940 (3100003, 0500028, 3100005, 3100006). The bridges were opened to the traveling public June 1940. The span is a well preserved representative example of what is the most common movable bridge type in the Jersey Shore region. Technologically it represents mid-1920s refinements in the important trunnion bascule bridge design developed in the early years of the 20th century. It is one of over a dozen of the same patented design built in the area between 1928 and 1940. Another was built on the Ocean Highway over Corsons Inlet for the Cape May Bridge Commission in 1947-48. Historically the bridges are monuments to the effectiveness of Depression-era New Deal programs to improve America's infrastructure (criteria A. C.).

The Cape May County Bridge Commission was established by the county in 1934 for the purpose of having a means to apply for Federal Emergency Administration of Public Works funds to build movable bridges over navigable channels and two fixed bridges on the Ocean Highway in the county. A quasi-public commission, the original members were George N. Smith from Wildwood Crest, Luther C. Ogden, a former county Freeholder, of Cape May City, and G. W. Bergner, mayor of Avalon. The purpose of the commission was to "finance, construct, maintain, and operate self-liquidating toll bridges within the county." Having the private commission meant that the bridges could be constructed without cost to the county. Improving vehicular access to the Shore resort communities was viewed as a means of balancing the decline of train service to the tourist and seasonal-resident oriented area.

Ocean Highway was a route designation enacted by the 1910 New Jersey Senate and General Assembly (Chapter 220). The highway was to stretch from Atlantic Highlands in Monmouth County to Cape May City in Cape May County along, "as far as possible," improved existing roads near the ocean. The Commissioner of Public Roads was authorized to make route improvements where necessary with a $50,000. appropriation from the vehicle license fund. The improvements were made to the roadway over the next four years, but bridges were not a part of that work.

Ocean Highway was an element in the promotion of the Jersey Shore as a tourist and seasonal residence area. The route, which incorporates local and county streets, does not possess the integrity of setting nor technological significance to be evaluated as a potential historic district. It is merely a route designation that in Cape May County was promoted as the shortest route from Atlantic City to Cape May City.

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The consulting engineer firm of Ash Howard Needles & Tammen (AHNT) from New York City played a pivotal role in the history of the bridge commission. By 1934, the firm, founded in Kansas City, Missouri in 1914 as the successor to one started by J.A.L. Waddell, had established itself nationally as one of the leading designers of movable bridges, especially vertical lift bridges. Waddell was associated with the firm until he and John Harrington went their separate ways in 1914. The company opened its New City office in 1922 under the leadership of Harrington, Howard, and Ash. Work-relief program funded projects were an important source of work for AHNT, as it was for most engineering firms during the Depression, and the Cape May Ocean Highway bridges were a sustaining project for the New York office. The AHNT patent associated with the design of this particular bridge relates to the trunnion tower, and it was granted in 1926.

It was reported at the May 22, 1935 annual meeting of the Cape May County Bridge Commission that AHNT attended the meeting, and that they had prepared, on behalf of the commission, the actual application, complete with plans and specifications, to the Federal Administration of Public Works for $1,650,000 to build the Ocean Highway bridges. The application was not approved until June 14, 1938, at which time $744,545 was a grant and $910,000 was a loan. Work on the bridges began immediately.

The funding from the Federal Administration of Public Works met several objectives of various federal programs. It provided work for the unemployed. It was anticipated that between 350 and 500 local men would be put to work in addition to many "outside men," (CMCBC Minutes, 7/1/38). The bridges would improve traffic and focus on efficiency, as defined in engineering terms, which was a goal of the Bureau of Public Roads. Work relief-funded projects like the Cape May County Ocean Highway bridges kept the golden age of highway development alive during the Depression, when the lack of state and local funds would otherwise have stopped the effort (Seely, p. 88-91).

The four AHNT-designed movable bridges built on the Ocean Highway (3100003, 0500028, 3100005, 3100006) are all evaluated as significant because all are in a nearly complete state of preservation. The fact that they were built with funds made available through the federal government in an effort to create work is not sufficiently significant enough to meet National Register criteria because so many public works projects during the mid- to late-1930s were funded exactly the same way. The bridges were also not built with federally funded work crews such as the Civilian Conservation Corps (CCC).

Boundary Description and Justification: The bridge is evaluated as individually distinguished. While its immediate setting remains unchanged, the route of which it is a part does not possess the integrity or historical significance to be a potential historic district. Therefore, the bridge including the approach spans and structures related to its operation are evaluated as the limit of the historic resource.

PHOTO: 189:2-8 (01/19/93) REVISED BY (DATE): QUAD: Wildwood

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 3200001 **CO** CUMBERLAND **OWNER** STATE AGENCY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED HANSEY CREEK ROAD OVER HANSEY'S CREEK **FACILITY** HANSEY CREEK ROAD

TOWNSHIP DOWNE TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Wood

 # SPANS 5 **LENGTH** 83 ft **WIDTH** 17.2 ft

CONSTRUCTION DT 1937 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The single-lane wide bridge spans a tidal estuary in a broad wetlands near the Delaware Bay. Closed to traffic and located at the end of a country road, the bridge now provides pedestrian access to the NJDEP's Turkey Point Fish and Wildlife Management Area. A boat launch is located next to the bridge.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The five-span, timber-stringer bridge has timber-pile bents and abutments. The bridge is hipped at the third pier from the north, and has an unequal northern most span. It is in poor condition and rapidly deteriorating. No records have been found to confirm the bridge's date of construction or its repair record. Timber stringers are common in the region. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 401:9-10 (09/91) REVISED BY (DATE): QUAD: Port Norris

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 3300301 **CO** WARREN **OWNER** PRIVATE **MILEPOINT** 0.1

NAME & FEATURE INTERSECTED US 22 OVER PCRR & BROAD STREET **FACILITY** US 22

TOWNSHIP PHILLIPSBURG TOWN

TYPE DECK GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 5 **LENGTH** 330 ft **WIDTH** 40 ft

CONSTRUCTION DT 1937 **ALTERATION DT** **SOURCE**

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge is an approach to the east side of the US 22 bridge over the Delaware River. The eastern approach spans carry four lanes of the highway and two sidewalks over a two-lane street, a one-track railroad and property owned by the Delaware River Joint Bridge Toll Commission.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Potential Historic District. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The five-span deck girder bridge with concrete piers and an abutment is skewed to carry a curved roadway. The abutment, pier columns and the arched struts are scored. The simple-span girders are built-up and support rolled floorbeams which support stringers and the deck. Overhang brackets support the sidewalk with a metal railing at each face. The bridge is structurally part of the truss bridge owned and operated by the Delaware River commission. The bridge's main span, which carries US 22 over the Delaware River is potentially eligible to listed under Criteria C, but, was outside the scope of the survey. This approach spans would have the same NR status as the main truss spans.

INFOR MATION

PHOTO: 172:38-;173:-17 (07/92) REVISED BY (DATE): QUAD: Easton

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 3305151 **CO** WARREN **OWNER** STATE AGENCY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PARK ROAD OVER DEER PARK LAKE SPILLWAY **FACILITY** PARK ROAD

TOWNSHIP ALLAMUCHY TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 25 ft **WIDTH** 10.9 ft

CONSTRUCTION DT 1920 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge is located in Allamuchy State Park, at the spillway of Deer Park Lake. It carries a one-lane unimproved trail which leads around the lake over the spillway.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The small one-span concrete slab bridge is seated on ashlar abutments. Concrete walls are present upstream to direct water under the bridge as it spills over rubble stone and natural debris. The timber formwork is present below the slab, with steel straps holding it in place. Beam guiderails are at each edge of the span. The structure is technologically and historically undistinguished, being a small example of a relatively common bridge type.

INFOR MATION

PHOTO: 184:11-13 (08/92) REVISED BY (DATE): QUAD: Tranquility

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 3367150 **CO** OCEAN **OWNER** STATE AGENCY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED NEW GUINEA ROAD OVER CEDAR CREEK **FACILITY** NEW GUINEA ROAD

TOWNSHIP BERKELEY TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel, Wood

 # SPANS 2 **LENGTH** 28 ft **WIDTH** 12 ft

CONSTRUCTION DT 1909ca **ALTERATION DT** **SOURCE** NR NOMINATION

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The single-lane bridge spans the concrete spillway from an earthen dam used to hold back water from Cedar Creek to feed the nearby cranberry bogs. It is located within the boundaries of Double Trouble State Park, but is not within the Double Trouble Historic District, a late-19th and early-20th century cranberry bog village located to the northwest. The gates used to control the water levels in the bogs have been removed from the bridge's gate frame.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 2-span timber and steel stringer bridge has a concrete substructure. The abutments and pier have been gunited, and timber stringers added to support the roadway. According to local records, the cranberry bogs were expanded and improved in c.1909, an approximate date for the construction of the bridge. The bridge is heavily altered, and it is not within the boundaries of the nearby Double Trouble Historic District. It is not historically or technologically distinguished.

INFOR MATION

PHOTO: 162:27a-30a (06/21/92) REVISED BY (DATE): QUAD: Toms River

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 3367151 **CO** OCEAN **OWNER** STATE AGENCY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED COWS HEAD ROAD OVER CEDAR CREEK **FACILITY** COWS HEAD ROAD

TOWNSHIP BERKELEY TOWNSHIP

TYPE ARCH **DESIGN** BARREL **MATERIAL** Reinforced Concrete

 # SPANS 2 **LENGTH** 23 ft **WIDTH** 10.9 ft

CONSTRUCTION DT 1909ca **ALTERATION DT** **SOURCE** NR NOMINATION

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The single-lane bridge spans the spillway from Mill Pond within the Double Trouble Historic District, an early-20th century cranberry bog village. The district is located within Double Trouble State Park. The bridge is structurally associated with a dam and raceway once used to store water for the bogs and to supply water power for a saw mill. The dam, but not the bridge, is listed as a contributing structure in the National Register nomination.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Not Individually Eligible. Listed. Double Trouble Historic District. 02/23/1978. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 2-span concrete arch bridge with stepped wingwalls is an integral feature of the Double Trouble Historic District's Mill Pond Dam. The bridge has been gunited, wood railings added, and the six-bay timber gate frame rebuilt. The bridge was probably built c.1909 when the Double Trouble Company purchased the land and expanded the cranberry bogs. The bridge is a representative example of period technology, and makes a significant contribution to the National Register district.

INFOR MATION

SOURCES:
Double Trouble Historic District Nomination. New Jersey State Historic Preservation Office. 1977.

PHYSICAL DESCRIPTION: The two-span reinforced-concrete barrel arch bridge crosses the spillway from Mill Pond dam. The bridge has stepped concrete wing walls and pier. Extending between the upstream abutments is a 6-bay timber frame for the spillway gates. The frame has been rebuilt but the metal gate racks and gears appear older. The earth-filled arch bridge has a gravel road surface and wood railing. The bridge has been sprayed with gunite.

HISTORICAL AND TECHNOLOGICAL SIGNIFICANCE: The Cows Head Road over Cedar Creek bridge is within the boundaries of the Double Trouble Historic District, an early-20th century cranberry bog and village. The bridge is a contributing structure to the historic district and is eligible under National Register Criterion A. The bridge is upstream from the village and is part of the dam and water system used to maintain the cranberry bogs. Stylistically the bridge dates from the first decades of the 20th century, and probably was constructed c.1909 when the Double Trouble Company improved the cranberry bogs.

The Double Trouble National Register Nomination rates the Mill Pond dam, of which the bridge is structurally a part, as a contributing structure. However, the bridge is not specifically rated in the National Register Nomination. Considering the bridge is a representative example of period technology and an integral part of the district's water and irrigation systems, it thus makes a significant contribution to the National Register District.

The bridge has been altered by the reconstruction of the spillway gate frame, the addition of modern wood railings, and the application of gunite. The alterations do not compromise the bridge's contribution to the historic district.

BOUNDARY DESCRIPTION AND JUSTIFICATION: The bridge is within the described boundaries of the Double Trouble Historic District as delineated on the Toms River USGS quad map accompanying the nomination.

PHOTO: 162:31a-34a (06/21/92) REVISED BY (DATE): QUAD: Toms River

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 3461150 **CO** SUSSEX **OWNER** STATE AGENCY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED SKELLENGER ROAD OVER BIG FLAT BROOK **FACILITY** SKELLENGER ROAD

TOWNSHIP SANDYSTON TOWNSHIP

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Steel

 # SPANS 2 **LENGTH** 40 ft **WIDTH** 20 ft

CONSTRUCTION DT 1942 **ALTERATION DT** **SOURCE** PLANS

DESIGNER/PATENT UNKNOWN **BUILDER** CIVILIAN CONSERVATION CORPS

SETTING / CONTEXT The bridge carries a 2-lane park road over a shallow stream, and it is located within the Stokes State Forest. Camp sites are located nearby.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 2-span deck arch bridge is lined with corrugated metal and has stone spandrel walls and a concrete substructure. The parapets are stone masonry. A utility pipe is supported along the east fascia. Constructed with stone work to be compatible with the park setting, the metal arch bridge is a late example of an arch span, and it is not technologically or historically distinguished.

INFOR MATION

PHOTO: 1902:42-43 (08/92) REVISED BY (DATE): QUAD: Culvers Gap

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 3461153 **CO** SUSSEX **OWNER** STATE AGENCY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED OLD STATE ROAD OVER TUTTLES BROOK **FACILITY** OLD STATE ROAD

TOWNSHIP SANDYSTON TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 24 ft **WIDTH** 22 ft

CONSTRUCTION DT 1935 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a 2-lane road over a small stream, and it is located within the Stokes State Forest. The setting is wooded and undeveloped, and camp sites are near by.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased stringer bridge supported on stone masonry abutments from a previous span is flanked by 2-rail concrete railings, a common design from the county engineer. One of over 25 pre-1945 stringer bridges in the county, the span is an example of a common type, and it is not technologically innovative nor historically distinguished.

INFOR MATION

PHOTO: 1902:22-23 (08/92) REVISED BY (DATE): QUAD: Culvers Gap

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 3481151 **CO** BURLINGTON **OWNER** STATE AGENCY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WHITESBOG ROAD OVER POLE BRIDGE BRANCH **FACILITY** WHITESBOG ROAD

TOWNSHIP PEMBERTON TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Wood

 # SPANS 2 **LENGTH** 28 ft **WIDTH** 18.1 ft

CONSTRUCTION DT 1926 **ALTERATION DT** **SOURCE** COUNTY RECORDS

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge carries an unimproved two-lane road over a minor water feature in an isolated section of the Piney Woods. There is no development adjacent to the bridge. It is located west of and outside the boundaries of the Whitesbog Historic District, a nomination that recognizes the historical significance of the local cranberry industry and the related village of Whitesbog. The bridge crosses a stream that is used to irrigate the bogs.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 2-span wood stringer bridge is supported on wood abutments and a pile bent. The stringers, plank deck, and plain railing are inkind replacements of original/early fabric. One of over 20 wood stringer bridges in Burlington County, the span is not technologically or historically noteworthy. It is also located outside the boundaries of the National Register-listed historic district of Whitesbog.

INFOR MATION

PHOTO: 38:38-39 (07/91) REVISED BY (DATE): QUAD: Browns Mills

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 3481153 **CO** BURLINGTON **OWNER** STATE AGENCY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED TURKEY BUZZARD BRIDGE ROAD OVER BISPHAMS MILL CREEK **FACILITY** TURKEY BUZZARD BRIDGE ROAD

TOWNSHIP PEMBERTON TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Wood

 # SPANS 1 **LENGTH** 21 ft **WIDTH** 17.9 ft

CONSTRUCTION DT 1939 **ALTERATION DT** **SOURCE** BUR CO RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The dilapidated, one-lane bridge crosses Bisphams Mill Creek in Lebanon State Forest, about two mile northeast of the village of Ong's Hat, the site of a colonial hamlet. The Lebanon State Forest dates to 1908. The road is unimproved gravel and the immediate vicinity has heavy vegetation.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one-span timber stringer has a wooden railing, timber abutments, and the wooden deck is half gone. The decaying bridge originally built in 1939 is a representative example of a common bridge type in the county. It is not historically or technologically distinguished. Jurisdiction of the bridge was transferred from the county to the state in 1955.

INFOR MATION

PHOTO: 305:36-37 (03/92) REVISED BY (DATE): QUAD: Browns Mills

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 3481156 **CO** BURLINGTON **OWNER** STATE AGENCY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WHITESBOG ROAD OVER POLE BRIDGE BRANCH CANAL **FACILITY** WHITESBOG ROAD

TOWNSHIP PEMBERTON TOWNSHIP

TYPE BOX CULVERT **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 4 **LENGTH** 23 ft **WIDTH** 10.1 ft

CONSTRUCTION DT 1935 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The structure carries one-lane of an unimproved road over an irrigation canal in an isolated section of the Whitesbog cranberry plantation in the Piney Woods. The 1500-acre cranberry plantation was developed between 1850 and 1940, and it contains a "highly engineered agricultural water supply system." The plantation is now an addition to Lebanon State Forest and was purchased by the State in 1967. The bogs, irrigation system, and related buildings are well preserved.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Not Individually Eligible. Listed. Whitesbog Historic District. 10/27/1988. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 4-cell reinforced concrete box culvert with a concrete spillway apron is finished with low concrete parapets. Although not technologically significant, it was built as part of the water supply system of the Whitesbog cranberry farm, a National Register-listed historic district. The culvert was built within the period of significance of the district, and the series of dams, canals, and culverts on the farm are cited as contributing, but they are not inventoried in the nomination.

INFOR MATION

PHOTO: 38:40-41 (07/91) REVISED BY (DATE): QUAD: Browns Mills

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 3485153 **CO** CAMDEN **OWNER** STATE AGENCY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED FLEMING PIKE OVER ALBERTSON BRANCH **FACILITY** FLEMING PIKE

TOWNSHIP WATERFORD TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Timber

 # SPANS 1 **LENGTH** 21 ft **WIDTH** 14.4 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge is isolated on an inaccessible sand road in an undeveloped portion of the Pine Barrens. It spans a small tributary of the Mullica River.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The short span carried on timber pile bents is a composite steel and wood stringer. Rolled I beams are used for the fascia stringers while all others are wood. The back and wing walls are also timber, and there is no railing. The simple bridge is not historically or technologically significant.

INFOR MATION

PHOTO: 33:21-22 (05/01/91) REVISED BY (DATE): QUAD: Hammonton

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 3485155 **CO** CAMDEN **OWNER** STATE AGENCY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BURNT HOUSE ROAD OVER MULLICA RIVER **FACILITY** BURNT HOUSE ROAD

TOWNSHIP WATERFORD TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Wood

 # SPANS 4 **LENGTH** 40 ft **WIDTH** 10 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT This structure spans the Mullica River in an undeveloped, isolated section of the New Jersey pine barrens. The river is the county line between Burlington and Camden.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY This 1930 timber stringer structure rests on plank abutments and three wooden bents. It was built as part of a state forest improvement program. It has been extensively repaired in a piecemeal fashion. This structure is a heavily modified example of this structural type that is found throughout the New Jersey Pine Barrens. It is not historically nor technologically noteworthy.

INFOR MATION

PHOTO: 304:39A-40A (08/01/91) REVISED BY (DATE): QUAD: Medford Lk

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 3485158 **CO** BURLINGTON **OWNER** STATE AGENCY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED HAMPTON ROAD OVER SPRINGERS BROOK **FACILITY** HAMPTON ROAD

TOWNSHIP WASHINGTON TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Wood

 # SPANS 2 **LENGTH** 36 ft **WIDTH** 22.7 ft

CONSTRUCTION DT 1927 **ALTERATION DT** Rebuilt: 1952 **SOURCE** COUNTY RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries a rural two-lane road over a minor water feature in a wooded setting in the Wharton State Forest preserve. There is no development near the bridge.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The simple, 2-span stringer bridge is composed entirely of wood members, including the abutments, pile bent, plank deck, and plain braced railing. Constructed in 1927, it was rebuilt with inkind materials in 1952. The bridge is a representative example of a common bridge type in Burlington County and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 304:41a,43a (07/91) REVISED BY (DATE): QUAD: Indian Mills

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 3485161 **CO** BURLINGTON **OWNER** STATE AGENCY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED EAGLE ROAD OVER TULPEHOCKEN CREEK **FACILITY** EAGLE ROAD

TOWNSHIP WASHINGTON TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Wood

 # SPANS 3 **LENGTH** 51 ft **WIDTH** 18.6 ft

CONSTRUCTION DT 1940 **ALTERATION DT** **SOURCE** BUR CO RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The one-lane bridge carries an unimproved road over the Tulpehocken Creek in the Wharton State Forest, which the state purchased in the 1950s and 1960s from the estate of Joseph Wharton, a Philadelphia financier who had originally planned to secure a water supply for Philadelphia. Currently, the forest is primarily recreational, and the stream that flows under the bridge is a canoe route.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The three-span timber stringer bridge rests on timber piles and abutments. The piles are square, and the pile bents have horizontal and diagonal traverse bracing. The timber railing is braced from extensions of the timber pile caps. The bridge has timber curbs. The bridge is in good repair, suggesting that much of the fabric has been replaced inkind since erection in 1940. The bridge is technologically and historically undistinguished. It was transferred to state jurisdiction in 1955.

INFOR MATION

PHOTO: 304:3A-4A (03/92) REVISED BY (DATE): QUAD: Jenkins

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 3485166 **CO** BURLINGTON **OWNER** STATE AGENCY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WASHINGTON ROAD OVER WEST BRANCH OF WADING RIVER **FACILITY** WASHINGTON ROAD (GODFREY BRIDGE #1)

TOWNSHIP WASHINGTON TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Wood

 # SPANS 7 **LENGTH** 101 ft **WIDTH** 11.5 ft

CONSTRUCTION DT 1944 **ALTERATION DT** 1985 **SOURCE** BUR CO RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The one-lane bridge carries the narrow road over the West Branch of Wading River in Wharton State Forest, which the state purchased in the 1950s and 1960s from the estate of Joseph Wharton, a Philadelphia financier who originally hoped to secure a water supply for Philadelphia. Currently the forest is primarily recreational, and one of the forest's canoe routes flows under the bridge. The bridge is adjacent to a second, shorter, but similarly constructed bridge (3485167).

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The seven-span timber stringer bridge rests on timber piles and abutments. The pile bents have diagonal bracing, and piles and timber sheeting make up the abutments. The timber pile caps support the timber stringers and deck. The railings consist of two stacked modern metal guide railings on vertical metal posts that date to ca. 1985. The condition of the wood members suggests that the bridge is composed primarily modern inkind replacement material. The span is not distinguished.

INFOR MATION

PHOTO: 304:2A (03/92) REVISED BY (DATE): QUAD: Jenkins

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 3485167 **CO** BURLINGTON **OWNER** STATE AGENCY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WASHINGTON ROAD OVER WEST BRANCH OF WADING RIVER **FACILITY** WASHINGTON ROAD (GODFREY BRIDGE #2)

TOWNSHIP WASHINGTON TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Wood

 # SPANS 3 **LENGTH** 45 ft **WIDTH** 11.5 ft

CONSTRUCTION DT 1944 **ALTERATION DT** 1985 **SOURCE** BUR CO RECORDS

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The one-lane bridge carries the narrow road over the west branch of Wading River in Wharton State Forest, which the state purchased in the 1950s and 1960s from the estate of Joseph Wharton, a Philadelphia financier who had hoped to secure a water supply for Philadelphia. Currently, the forest is primarily recreational, and one of the forest's canoe routes flows under the bridge. The bridge is adjacent to a second, longer, but similarly constructed timber bridge (3485166).

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The three-span bridge rests on timber piles, pile caps, and abutments. The stringers and deck are timber. The railings are two stacked modern guide rails on vertical metal posts added ca. 1985, replacing wood railings. The bridge is in good condition, and it is unlikely that any material in the superstructure dates to 1944. The bridge is historically and technologically undistinguished. It was transferred by the county to the state in 1955.

INFOR MATION

PHOTO: 304:44A, 1A (03/92) REVISED BY (DATE): QUAD: Jenkins

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 3800004 **CO** BERGEN **OWNER** PRIVATE **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED LINWOOD AVENUE OVER I-95 **FACILITY** LINWOOD AVENUE

TOWNSHIP FORT LEE BOROUGH

TYPE THRU GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 4 **LENGTH** 238 ft **WIDTH** 30 ft

CONSTRUCTION DT 1931 **ALTERATION DT** 1964 **SOURCE** NJDOT/PLANS

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER** GEORGE M. BREWSTER & SON

SETTING / CONTEXT The 2-lane bridge with sidewalks carries a one-way city street over the depressed multi-lane approach to the George Washington Bridge (GWB). The overpass and three other overpasses (3800005,9 & 0209150) were built in 1930-31 in coordination with the GWB in order to carry preexisting traffic patterns over the approach. The approach itself does not constitute a historic corridor because it is not technologically innovative and has lost its integrity of setting with numerous modern intrusions.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Rt 46 Historic District, Eligible. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95, Opinion 2/21/97.

SUMMARY In 1931 the bridge was built as a 2-span thru girder with concrete substructure. In 1964, as part of the GWB lower level expansion, steel stringer spans were added to each side of the bridge making it a 4-span structure. The railings and chain-link fences are modern replacements. The altered overpass is not technologically or historically significant because it is an example of a typical NJ State Hwy. Dept. design solution to separating traffic in a congested area.

INFOR MATION

PHOTO: 213:8-9 (02/92) REVISED BY (DATE): QUAD: Central Park

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 3800005 **CO** BERGEN **OWNER** PRIVATE **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CENTER AVENUE OVER I-95 **FACILITY** CENTER AVENUE

TOWNSHIP FORT LEE BOROUGH

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 7 **LENGTH** 426 ft **WIDTH** 40 ft

CONSTRUCTION DT 1931 **ALTERATION DT** 1964 **SOURCE** NJDOT/PLANS

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER** GEORGE M. BREWSTER & SON

SETTING / CONTEXT The 4-lane bridge with sidewalks carries a city street over the depressed multi-lane approach to the George Washington Bridge (GWB). The overpass and three other overpasses (3800004,9 & 0209150) were built in 1930-31 in coordination with the GWB in order to carry preexisting traffic patterns over the approach. The approach itself does not constitute a historic corridor because it is not technologically innovative and has lost its integrity of setting with numerous modern intrusions.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Rt 46 Historic District, Eligible. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95, Opinion 2/21/97.

SUMMARY In 1931 the bridge was originally built as a 2-span steel stringer with concrete substructure. In 1964, as part of the GWB lower level expansion, 3 steel stringer spans and 2 concrete T-beam spans were added to either side. The T-beam spans are closed off by walls and act as storage facilities. The altered overpass is not historically or technologically significant because it is an example of a typical NJ State Highway Department design solution to separating traffic in a congested area.

INFOR MATION

PHOTO: 213:10-13 (02/92) REVISED BY (DATE): QUAD: Central Park

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 3800009 **CO** BERGEN **OWNER** PRIVATE **MILEPOINT** 1.4

NAME & FEATURE INTERSECTED LEMOINE AVENUE (NJ 67) OVER I-95 **FACILITY** LEMOINE AVENUE (NJ 67)

TOWNSHIP FORT LEE BOROUGH

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 7 **LENGTH** 480 ft **WIDTH** 65 ft

CONSTRUCTION DT 1931 **ALTERATION DT** 1961 **SOURCE** NJDOT

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER** GEORGE M. BREWSTER & SON

SETTING / CONTEXT The 4-lane bridge with sidewalks spans the depressed multi-lane approach to the George Washington Bridge (GWB). The overpass and 3 other overpasses (3800004,5 & 0209150) were built in 1930-1931 in coordination with the GWB in order to carry preexisting traffic patterns over the approach. The approach itself does not constitute a historic corridor because it is not technologically innovative and has lost its integrity of setting with numerous modern intrusions including nearby high rises.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Rt 46 Historic District, Eligible. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95, Opinion 2/21/97.

SUMMARY In 1931 the bridge was originally built as a 4-span steel stringer with concrete substructure. In 1961, as part of the GWB lower level expansion, 3 steel stringer spans were added, 2 to the south and 1 to the north. Concrete parapets and chain-link fences are modern additions. The altered overpass is not technologically or historically significant because it is an example of a typical NJ State Highway Department design solution to separating traffic in a congested area.

INFOR MATION

PHOTO: 213:14-16 (02/92) REVISED BY (DATE): QUAD: Central Park

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 3800016 **CO** BERGEN **OWNER** PRIVATE **MILEPOINT** 73.7

NAME & FEATURE INTERSECTED I 95 OVER HUDSON TERRACE **FACILITY** I-95

TOWNSHIP FORT LEE BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 4 **LENGTH** 167 ft **WIDTH** 90 ft

CONSTRUCTION DT 1930 **ALTERATION DT** 1964 **SOURCE** NJDOT

DESIGNER/PATENT PORT AUTHORITY OF NEW YORK **BUILDER**

SETTING / CONTEXT The 8-lane bridge carries I-95, median, and 2 safety sidewalks over the 4-lane Hudson Terrace. The bridge was built in 1930 as part of the George Washington Bridge (GWB) project, and was designed to carry the upper level approach traffic over an important 1920s N-S route. The GWB approach, itself, does not constitute a historic corridor because it is not technologically innovative and has lost its integrity of setting with numerous modern intrusions including high-rise buildings.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible. Rt 46 Historic District, Eligible. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95, Opinion 2/21/97.

SUMMARY The 4-span encased steel stringer bridge rests on stone abutments and steel rigid-frame bents. In 1964 it was widened on both sides with rolled steel stringers. Original metal railings remain and Port Authority maintenance buildings have been constructed under the two end spans. The bridge is structurally and visually associated with the adjacent nationally distinguished GWB. It is the only NJ approach span constructed by the Port Authority and is historically significant.

INFOR MATION

Bibliography:
AGLAS. "Port Authority of NY and NJ, Inspection Report," 1990.
Transactions of the American Society of Civil Engineers, vol. 97, 1933.
Paper No. 1825, "George Washington Bridge: Approaches and Highway Connections" by J.C. Evans, Esq.
"Plan of New Jersey Approach," Engineering News-Record. Vol. 107 (Oct. 22, 1931), pp.662-664.
Bauer, J.L. "New Jersey Approaches to the George Washington Bridge." Civil Engineering. Vol. 2, No. 3 (March, 1932), pp. 160-163.

Physical Description: The 4-span, 94'-wide stringer bridge with encased and exposed rolled I-section steel stringers is supported on reinforced concrete abutments and built-up steel rigid frame bents. The encased stringers are those in the original, center portion of the 174'-long span. A modern concrete median barrier separates opposing traffic, and a 2' wide safety walk is at each fascia. The bridge is finished with a modern, 3- rail high metal railing of standard state design. Originally built in 1930, the span was widened on both sides in 1964 with rolled steel stringers. Port Authority storage facilities were constructed under the end spans adjacent to the abutments.

When the lower level of the George Washington Bridge was opened in the early 1960s, traffic to and from that level is carried via ramps that pass under Hudson Terrace.

Historical and Technological Significance: While the encased stringer bridge was constructed as part of the New Jersey approach network to the National Register-eligible George Washington Bridge, neither it does not have integrity of original design and setting. It was widened on both sides in 1964, and the original railing was also replaced with the present one at that time. In addition to the structural alterations, the setting has been significantly changed to accommodate access to the lower level of the George Washington Bridge that was opened in the early 1960s. While the suspension bridge is significant, this bridge is too altered to be significant. The rigid frame bents are found on other bridges in the region that possess integrity of setting and design (0917150).

"It was deemed desirable in planning the New Jersey approach to accomplish the actual traffic distribution at as great a distance from the bridge as economical and physical considerations would permit, and at the same time avoid all semblance of a plaza where undue concentration of traffic could occur" (EN-R). Three state highways (NJ 1,4,6) and local roads are distributed into or from the approach road west of Linwood Avenue in Ft. Lee. From that point east to the toll plaza, local streets are carried over the approach road on overpasses. After the toll plaza, the approach road is carried over the easternmost local street, Hudson Terrace. The goal of the planners and designers was to eliminate all grade crossings and safely speed up traffic. It was accomplished, like it had been on other projects undertaken by the New Jersey State Highway Department, by overpasses and ramped breakouts. With the exception of the 3-level grade separation near the western limits of the approach, which presents "the most interesting structural layout of the project" (0202160, 0206187; evaluated as eligible) (EN-R), the design of the highway, interchanges, and structures is not innovative and is representative of ideas and designs that the Department had used elsewhere throughout state.

Interestingly, the decision was made in 1929 to build the approach roads and structures to their full capacity and width, although only half the anticipated demand existed when the GW bridge was completed. It was expected that the facility would never have to be widened. Since completion in 1930, there have been many changes to the distributing highways and their ramps. When the lower level of the bridge was planned in 1959, the viaduct over Hudson Terrace was to be widened, and the ramp servicing the Palisades Parkway was added. At that time the bridge lost its integrity of original design. While the historical significance of the bridge is unchanged (it is still the closest approach span to the west end of the GW bridge, and it was built as part of that large project), it does not appear as it did when it achieved its historical significance and is thus not an eligible resource.

The Port of New York Authority designed the approach as far west as Lemoine Avenue, but they built (secured the property and paid for) the portion only as far as Hoyt Street, which is about the location of the toll plaza. The Authority paid the state of New Jersey to build the rest of the approach road and to improve the state routes feeding the approach (EN-R). The Port Authority design team was headed by J.C. Evans, terminal engineer. New Jersey's efforts were lead by J.L. Bauer, New Jersey State Highway Engineer, and Morris Goodkind, state bridge engineer. The New Jersey work was built by M. Brewster & Sons of Bogota, NJ.

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

PHOTO: 213:17-19 (02/92) REVISED BY (DATE): QUAD: Central Park

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 3800019 **CO** HUDSON **OWNER** PRIVATE **MILEPOINT** 1.9

NAME & FEATURE INTERSECTED NJ 495 OVER PLEASANT AVENUE **FACILITY** NJ 495

TOWNSHIP WEEHAWKEN TOWNSHIP

TYPE MULTI GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 70 ft **WIDTH** 68.5 ft

CONSTRUCTION DT 1937 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT PORT OF NEW YORK AUTHORITY **BUILDER**

SETTING / CONTEXT The bridge carries NJ 495, the divided six-lane approach highway to the Lincoln Tunnel, over a busy urban street. It is located in an urban area of 1920s houses with some post-1950 infill, plus some commercial and residential buildings from other eras nearby. The bridge is part of the limited access corridor that links US 1&9 with the 1937 Lincoln Tunnel through congested Hudson County.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Rt 3 (I-495) Highway Approach to Lincoln Tunnel Historic District, Eligible. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95, Comments 11/17/99.

SUMMARY The bridge is composed of four well detailed haunched deck girders with built-up floor beams and is supported on bearings on concrete columns. Outer portions of the substructure, which includes columns faced with a Moderne-style stone veneer, is similar to the detailing on other bridges along the 1937-38 approach to the Lincoln Tunnel. The bridge is not individually distinguished, but it is significant as part of an important limited-access highway that is technologically noteworthy.

INFORMATION

Bibliography:
Ammann, O.H. (Chief Engineer of the PA): "Planning the Lincoln Tunnel Under the Hudson" in Civil Engineering, 7, June 1937, 387-391).
Condit, Carl: American Building Art, Twentieth Century (NY: Oxford Univ. Press, 1961).
Port Authority: Annual Reports, 1956

Physical Description: The single-span haunched deck girder bridge composed of four girders with rolled floor beams is supported on engaged columns set into stone-faced concrete abutments. The stringer and floor beam connections are riveted. The girders are nicely detailed, and the roadway is enclosed by a metal fence-like railing. The bridge carries the elevated limited access highway over a city street, and it is linked to other sections of the highway by T-beam viaducts. The bridge is well preserved.

Historical and Technological Significance: The girder bridge is an original element of an approximately 2.8-mile long major transportation artery built 1938-1939 to serve as the main approach to the recently completed Lincoln Tunnel (first tube). The road is technologically and historically significant as a major engineering solution to building a highway that was both limited access and local through a congested area with significant geological considerations. The problem was solved in an innovative and aesthetic manner that retains its integrity of design and setting. It was designated Route 3 when built, and it became the heaviest-used single commuter line into the city, by virtue of serving the vast majority of the bus lines into New York City from the west. The structure is not individually distinguished, but it is a contributing resource to the potential historic route and thus has been evaluated as significant (Criterion C). Twenty-one structures were identified as being contributing resources along the right-of-way that stretches from US 1 & 9 to the Lincoln Tunnel.

The Palisades (called Bergen Hill locally) forms a ridge parallel to and just west of the Hudson River for several miles. The rock ridge is a barrier that must be crossed in some fashion by every transportation artery approaching New York City from the west in Bergen and Hudson counties. The oldest crossing of Bergen Hill is that now occupied by the PATH system and built by a predecessor of the Pennsylvania RR 1830-1834. The approach to the Lincoln Tunnel was the last major crossing of the Palisades (unless one counts the upgrading of the George Washington Bridge approaches in the 1960s). The Port of New York Authority built both the tunnel and the Route 3 New Jersey approach to the tunnel in close cooperation with state, county, and local officials. O.H. Ammann was the Director of Engineering on the project, and J.C. Evans served as Chief Engineer.

To get past Bergen Hill an open cut was decided upon, partly because it would be cheaper than a tunnel (which would require expensive equipment to remove exhaust gases), and also because local officials wanted the approach highway to be usable also as an arterial route across the ridge for local traffic. This decision required structures to carry the approach highway from the low meadows west of Bergen Hill up to the level of the cut through the Hill, and then back down to the tunnel mouth east of Bergen Hill. Major bridges were required for both of these tasks (Ammann, 391). In addition numerous bridges had to be built to take pre-existing local streets over the cut, and for the crossing of Hudson Boulevard (now JFK Boulevard) a very special type of grade separation structure was designed. The cut itself was, however, quite conventional, and most of the bridges were also conventional, if highly refined in their details (cut stone coverings for parts of their abutments, haunched fascia deck girders with patterned stiffeners, Art Moderne railings, and the like). When viewed as a whole, the entire roadway is a remarkable engineering accomplishment with visual cohesiveness achieved by repetition of bridge type and uniform Moderne detailing along the length of the project.

PHOTO: 201:40-41 (06/07/91) REVISED BY (DATE): QUAD: Weehawken

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 3800020 **CO** HUDSON **OWNER** PRIVATE **MILEPOINT** 2.3
NAME & FEATURE INTERSECTED NJ 495 VIADUCT OVER VACANT LAND **FACILITY** NJ 495 VIADUCT
TOWNSHIP WEEHAWKEN TOWNSHIP
TYPE T BEAM **DESIGN** **MATERIAL** Reinforced Concrete
 # SPANS 7 **LENGTH** 172 ft **WIDTH** 69 ft
CONSTRUCTION DT 1937 **ALTERATION DT** **SOURCE** NJDOT
DESIGNER/PATENT PORT OF NEW YORK AUTHORITY **BUILDER**

SETTING / CONTEXT The structure carries an elevated portion of NJ 495, a divided 6-lane highway serving as the approach to Lincoln Tunnel, over vacant land between two city streets. It connects 3800019, a deck girder span over a city street, with 3800024 over Park Avenue. The surrounding residential area is mainly early-20th century row houses with post-1950 houses and apartment buildings added as infill.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No
CONSULT STATUS Not Individually Eligible. Rt 3 (I-495) Highway Approach to Lincoln Tunnel Historic District, Eligible. Contributing.
CONSULT DOCUMENTS SHPO Letter 6/30/95, Comments 11/17/99.

SUMMARY The 172'-long viaduct composed of T-beam spans on concrete piers is finished with arched fascia beams. A concrete parapet encloses the roadway, and a stone-faced parapet serves as a curb on the lower level. The bridge is a well-preserved original element of the 1937-38 corridor to link US 1&9 with the newly opened first tube of the Lincoln Tunnel. The highway is a historically significant and technologically innovative solution to building a superhighway through a congested area.

INFOR MATION

Bibliography:
Ammann, O.H. "Planning the Lincoln Tunnel Under the Hudson," Civil Engineering, 7, (June, 1937), pp. 387-391.
Port Authority of New York. Annual Report. 1956.

Physical Description: The approximately 13-span T-beam and slab structure is finished with arched fascia beams, concrete columns, and concrete parapets. The viaduct is part of a large, continuous structure, so the exact number of spans was not determined. The slab is used where the viaduct, used to maintain grade between two deck girder bridges over local streets, is founded on bedrock. The bridge is detailed to match other spans on the 2.8-mile long limited access route. It appears to be unaltered.

Historical and Technological Significance: The T-beam and slab viaduct is an original element of an approximately 2.8-mile long major transportation artery built 1938-1939 to serve as the main approach to the recently completed Lincoln Tunnel (first tube). The road is technologically and historically significant as a major engineering solution to building a highway that was both limited access and local through a congested area with significant geological considerations. The problem was solved in an innovative and aesthetic manner that retains its integrity of design and setting. It was designated Route 3 when built, and it became the heaviest-used single commuter line into the city, by virtue of serving the vast majority of the bus lines into New York City from the west. The structure is not individually distinguished, but it is a contributing resource to the potential historic route and thus has been evaluated as significant (Criterion C). Twenty-one structures were identified as being contributing resources along the right-of-way that stretches from US 1 & 9 to the Lincoln Tunnel.

The Palisades (called Bergen Hill locally) forms a ridge parallel to and just west of the Hudson River for several miles. The rock ridge is a barrier that must be crossed in some fashion by every transportation artery approaching New York City from the west in Bergen and Hudson counties. The oldest crossing of Bergen Hill is that now occupied by the PATH system and built by a predecessor of the Pennsylvania RR 1830-1834. The approach to the Lincoln Tunnel was the last major crossing of the Palisades (unless one counts the upgrading of the George Washington Bridge approaches in the 1960s). The Port of New York Authority built both the tunnel and the Route 3 New Jersey approach to the tunnel in close cooperation with state, county, and local officials. O.H. Ammann was the Director of Engineering on the project, and J.C. Evans served as Chief Engineer.

To get past Bergen Hill an open cut was decided upon, partly because it would be cheaper than a tunnel (which would require expensive equipment to remove exhaust gases), and also because local officials wanted the approach highway to be usable also as an arterial route across the ridge for local traffic. This decision required structures to carry the approach highway from the low meadows west of Bergen Hill up to the level of the cut through the Hill, and then back down to the tunnel mouth east of Bergen Hill. Major bridges were required for both of these tasks (Ammann, 391). In addition numerous bridges had to be built to take pre-existing local streets over the cut, and for the crossing of Hudson Boulevard (now JFK Boulevard) a very special type of grade separation structure was designed. The cut itself was, however, quite conventional, and most of the bridges were also conventional, if highly refined in their details (cut stone coverings for parts of their abutments, haunched fascia deck girders with patterned stiffeners, Art Moderne railings, and the like). When viewed as a whole, the entire roadway is a remarkable engineering accomplishment with visual cohesiveness achieved by repetition of bridge type and uniform Moderne detailing along the length of the project.

Boundary Description and Justification: The structure is one element of road development that is historically and technologically noteworthy. Because of the commonality of design, type, setting, and history that the structures on the route share and the state of preservation of the resource, the right-of-way of NJ 495 from the intersection with US 1 & 9 and the Lincoln Tunnel is evaluated as a potential historic district. This structure is along that right-of-way, so it is a contributing resource. The significant boundary is limited to the actual right-of-way between the aforementioned points.

PHOTO: 201:42,43 (06/07/91) REVISED BY (DATE): QUAD: Weehawken

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 3800021 **CO** HUDSON **OWNER** PRIVATE **MILEPOINT** 2.55
NAME & FEATURE INTERSECTED SOUTH RAMP OF NJ 495 OVER PARK AVENUE **FACILITY** NJ 495
TOWNSHIP WEEHAWKEN TOWNSHIP
TYPE DECK GIRDER **DESIGN** **MATERIAL** Steel
 # SPANS 1 **LENGTH** 428 ft **WIDTH** 22 ft

CONSTRUCTION DT 1938 **ALTERATION DT** **SOURCE** NJDOT
DESIGNER/PATENT PORT OF NEW YORK AUTHORITY **BUILDER**

SETTING / CONTEXT The bridge carries an eastbound entry ramp from a local street up to an elevated section of NJ 495, the divided 6-lane highway approach to the Lincoln Tunnel. The 5-component span that includes this structure crosses a busy city street in a densely developed 20th century residential area of row houses. The span handles three levels of local and through traffic. NJ 495 has the visual and historical cohesiveness to be a district.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No
CONSULT STATUS Not Individually Eligible. Rt 3 (I-495) Highway Approach to Lincoln Tunnel Historic District, Eligible. Contributing.
CONSULT DOCUMENTS SHPO Letter 6/30/95, Comments 11/17/99.

SUMMARY The bridge, part of a 5-component interconnected structure, is composed of a simply supported built-up deck girder with floor beams on the inside (north), and a much shallower outside girder that is carried on varying length rolled I-section columns that bear on the girder of 380023. In turn, the north side girder for the bridge also supports Bridge 3800024 via the same I-section posts. The well-preserved bridge is part of a historically and technologically significant thoroughfare.

INFOR MATION

Bibliography:
Ammann, O.H. "Planning the Lincoln Tunnel Under the Hudson," Civil Engineering, 7, (June, 1937), pp. 387-391.
Port Authority of New York. Annual Report. 1956.

Physical Description: The deck girder bridge is part of a 5-component, interconnected span. This section is composed of a simply supported built-up deck girder with floor beams on the inside (north) and a much shallower outside girder that is supported on a series of varying height rolled I-section columns that bear of the girder for 3800023. In turn, the north girder of this bridge serves as the bearing for columns that support 3800024. The roadway is enclosed by a metal railing that matches that used all along the roadway. The structure appears unaltered.

Historical and Technological Significance: The deck girder bridge is an original element of an approximately 2.8-mile long major transportation artery built 1938-1939 to serve as the main approach to the recently completed Lincoln Tunnel (first tube). The road is technologically and historically significant as a major engineering solution to building a highway that was both limited access and local through a congested area with significant geological considerations. The problem was solved in an innovative and aesthetic manner that retains its integrity of design and setting. It was designated Route 3 when built, and it became the heaviest-used single commuter line into the city, by virtue of serving the vast majority of the bus lines into New York City from the west. The structure is not individually distinguished, but it is a contributing resource to the potential historic route and thus has been evaluated as significant (Criterion C). Twenty-one structures were identified as being contributing resources along the right-of-way that stretches from US 1 & 9 to the Lincoln Tunnel.

The Palisades (called Bergen Hill locally) forms a ridge parallel to and just west of the Hudson River for several miles. The rock ridge is a barrier that must be crossed in some fashion by every transportation artery approaching New York City from the west in Bergen and Hudson counties. The oldest crossing of Bergen Hill is that now occupied by the PATH system and built by a predecessor of the Pennsylvania RR 1830-1834. The approach to the Lincoln Tunnel was the last major crossing of the Palisades (unless one counts the upgrading of the George Washington Bridge approaches in the 1960s). The Port of New York Authority built both the tunnel and the Route 3 New Jersey approach to the tunnel in close cooperation with state, county, and local officials. O.H. Ammann was the Director of Engineering on the project, and J.C. Evans served as Chief Engineer.

To get past Bergen Hill an open cut was decided upon, partly because it would be cheaper than a tunnel (which would require expensive equipment to remove exhaust gases), and also because local officials wanted the approach highway to be usable also as an arterial route across the ridge for local traffic. This decision required structures to carry the approach highway from the low meadows west of Bergen Hill up to the level of the cut through the Hill, and then back down to the tunnel mouth east of Bergen Hill. Major bridges were required for both of these tasks (Ammann, 391). In addition numerous bridges had to be built to take pre-existing local streets over the cut, and for the crossing of Hudson Boulevard (now JFK Boulevard) a very special type of grade separation structure was designed. The cut itself was, however, quite conventional, and most of the bridges were also conventional, if highly refined in their details (cut stone coverings for parts of their abutments, haunched fascia deck girders with patterned stiffeners, Art Moderne railings, and the like). When viewed as a whole, the entire roadway is a remarkable engineering accomplishment with visual cohesiveness achieved by repetition of bridge type and uniform Moderne detailing along the length of the project.

Boundary Description and Justification: The structure is one element of road development that is historically and technologically noteworthy. Because of the commonality of design, type, setting, and history that the structures on the route share and the state of preservation of the resource, the right-of-way of NJ 495 from the intersection with US 1 & 9 and the Lincoln Tunnel is evaluated as a potential historic district. This structure is along that right-of-way, so it is a contributing resource. The significant boundary is limited to the actual right-of-way between the aforementioned points.

PHOTO: 201:33-36; also (06/07/91) REVISED BY (DATE): QUAD: Weehawken

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US
November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 3800024 **CO** HUDSON **OWNER** PRIVATE **MILEPOINT** 0.0
NAME & FEATURE INTERSECTED NJ 495 OVER PARK AVENUE **FACILITY** NJ 495
TOWNSHIP WEEHAWKEN TOWNSHIP
TYPE DECK GIRDER **DESIGN** **MATERIAL** Steel
 # SPANS 1 **LENGTH** 111 ft **WIDTH** 69 ft
CONSTRUCTION DT 1938 **ALTERATION DT** **SOURCE** NJDOT
DESIGNER/PATENT PORT OF NEW YORK AUTHORITY **BUILDER**

SETTING / CONTEXT The bridge carries an elevated portion of the divided 6-lane highway approach to Lincoln Tunnel, over a busy city street. It is part of a 4-structure overpass that also carries an access ramp to US 495 and a local-traffic service road over Park Ave. The 3-level structure is located in a predominantly early-20th century residential area of row houses. This bridge is flanked by spans 0917163 (north) and 0917162 (south).

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No
CONSULT STATUS Not Individually Eligible. Rt 3 (I-495) Highway Approach to Lincoln Tunnel Historic District, Eligible. Contributing.
CONSULT DOCUMENTS SHPO Letter 6/30/95, Comments 11/17/99.

SUMMARY The bridge is composed of interior built-up girders that bear on engaged columns and rolled stringers with stiffeners on the outside. All are connected by floor beams, and the rolled stringers bear on steel columns carried by the flanking girders of parallel spans. A plain metal railing is used as a protective barrier. The well-preserved bridge is an original element in the technologically innovative and historically significant roadway developed through a congested area in the late 1930s.

INFORMATION

Bibliography:
Ammann, O.H. "Planning the Lincoln Tunnel Under the Hudson," Civil Engineering, 7, (June, 1937), pp. 387-391.
Port Authority of New York. Annual Report. 1956.

Physical Description: The deck girder bridge is the top level of a 5-component, interconnected span. This section is composed of a built-up deck girders with floor beams on the inside (north) and rolled stringers with stiffeners on the outside. The stringer rolled section column supports bear on parallel girders. The roadway is enclosed by a metal railing that matches that used all along the roadway. The structure appears unaltered.

Historical and Technological Significance: The deck girder bridge is an original element of an approximately 2.8-mile long major transportation artery built 1938-1939 to serve as the main approach to the recently completed Lincoln Tunnel (first tube). The road is technologically and historically significant as a major engineering solution to building a highway that was both limited access and local through a congested area with significant geological considerations. The problem was solved in an innovative and aesthetic manner that retains its integrity of design and setting. It was designated Route 3 when built, and it became the heaviest-used single commuter line into the city, by virtue of serving the vast majority of the bus lines into New York City from the west. The structure is not individually distinguished, but it is a contributing resource to the potential historic route and thus has been evaluated as significant (Criterion C). Twenty-one structures were identified as being contributing resources along the right-of-way that stretches from US 1 & 9 to the Lincoln Tunnel.

The Palisades (called Bergen Hill locally) forms a ridge parallel to and just west of the Hudson River for several miles. The rock ridge is a barrier that must be crossed in some fashion by every transportation artery approaching New York City from the west in Bergen and Hudson counties. The oldest crossing of Bergen Hill is that now occupied by the PATH system and built by a predecessor of the Pennsylvania RR 1830-1834. The approach to the Lincoln Tunnel was the last major crossing of the Palisades (unless one counts the upgrading of the George Washington Bridge approaches in the 1960s). The Port of New York Authority built both the tunnel and the Route 3 New Jersey approach to the tunnel in close cooperation with state, county, and local officials. O.H. Ammann was the Director of Engineering on the project, and J.C. Evans served as Chief Engineer.

To get past Bergen Hill an open cut was decided upon, partly because it would be cheaper than a tunnel (which would require expensive equipment to remove exhaust gases), and also because local officials wanted the approach highway to be usable also as an arterial route across the ridge for local traffic. This decision required structures to carry the approach highway from the low meadows west of Bergen Hill up to the level of the cut through the Hill, and then back down to the tunnel mouth east of Bergen Hill. Major bridges were required for both of these tasks (Ammann, 391). In addition numerous bridges had to be built to take pre-existing local streets over the cut, and for the crossing of Hudson Boulevard (now JFK Boulevard) a very special type of grade separation structure was designed. The cut itself was, however, quite conventional, and most of the bridges were also conventional, if highly refined in their details (cut stone coverings for parts of their abutments, haunched fascia deck girders with patterned stiffeners, Art Moderne railings, and the like). When viewed as a whole, the entire roadway is a remarkable engineering accomplishment with visual cohesiveness achieved by repetition of bridge type and uniform Moderne detailing along the length of the project.

Boundary Description and Justification: The structure is one element of road development that is historically and technologically noteworthy. Because of the commonality of design, type, setting, and history that the structures on the route share and the state of preservation of the resource, the right-of-way of NJ 495 from the intersection with US 1 & 9 and the Lincoln Tunnel is evaluated as a potential historic district. This structure is along that right-of-way, so it is a contributing resource. The significant boundary is limited to the actual right-of-way between the aforementioned points.

PHOTO: 201:32-33, 37-3 (06/07/91) REVISED BY (DATE): QUAD: Weehawken

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 3800026 **CO** HUDSON **OWNER** PRIVATE **MILEPOINT** 2.7

NAME & FEATURE INTERSECTED NJ 495 AND SOUTH RAMP OF NJ 495 OVER VACANT LAND **FACILITY** NJ 495

TOWNSHIP WEEHAWKEN TOWNSHIP

TYPE T BEAM **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 13 **LENGTH** 161 ft **WIDTH** 69 ft

CONSTRUCTION DT 1937 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT PORT OF NEW YORK AUTHORITY **BUILDER**

SETTING / CONTEXT The viaduct carries NJ 495, the divided 6-lane highway approach to the Lincoln Tunnel, between JFK Blvd. East (3800027) and Park Ave. (3800024). It is an element in a limited-access highway that passes through a residential area dominated by 1920s and post-1950s detached townhouses and apartment buildings. Weehawken Town Hall is to the south on the east side of the Palisades.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Rt 3 (I-495) Highway Approach to Lincoln Tunnel Historic District, Eligible. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95, Comments 11/17/99.

SUMMARY The T-beam structure maintains the elevation of NJ 495 between other bridges over city streets. It is finished with arched fascia beams to repeat the detailing of similar spans on the route. The center of the viaduct is carried on bedrock. While not individually significant, it is a contributing element to the historically and technologically significant 1937 road that linked a major Hudson River crossing with the west side of the Palisades.

INFOR MATION

Bibliography:
Ammann, O.H. "Planning the Lincoln Tunnel Under the Hudson," Civil Engineering, 7, (June, 1937), pp. 387-391.
Port Authority of New York. Annual Report. 1956.

Physical Description: The 6-span T-beam viaduct is finished with arched fascia beams, concrete columns, every other one of which is load-bearing, and concrete parapets. The viaduct is part of a large, continuous structure that carries the limited access highway above the grade of the parallel city street. The viaduct is also used to maintain grade between two deck girder bridges over local streets, is founded on bedrock. The bridge is detailed to match other spans on the 2.8-mile long limited access route. It appears to be unaltered.

Historical and Technological Significance: The T-beam viaduct is an original element of an approximately 2.8-mile long major transportation artery built 1938-1939 to serve as the main approach to the recently completed Lincoln Tunnel (first tube). The road is technologically and historically significant as a major engineering solution to building a highway that was both limited access and local through a congested area with significant geological considerations. The problem was solved in an innovative and aesthetic manner that retains its integrity of design and setting. It was designated Route 3 when built, and it became the heaviest-used single commuter line into the city, by virtue of serving the vast majority of the bus lines into New York City from the west. The structure is not individually distinguished, but it is a contributing resource to the potential historic route and thus has been evaluated as significant (Criterion C). Twenty-one structures were identified as being contributing resources along the right-of-way that stretches from US 1 & 9 to the Lincoln Tunnel.

The Palisades (called Bergen Hill locally) forms a ridge parallel to and just west of the Hudson River for several miles. The rock ridge is a barrier that must be crossed in some fashion by every transportation artery approaching New York City from the west in Bergen and Hudson counties. The oldest crossing of Bergen Hill is that now occupied by the PATH system and built by a predecessor of the Pennsylvania RR 1830-1834. The approach to the Lincoln Tunnel was the last major crossing of the Palisades (unless one counts the upgrading of the George Washington Bridge approaches in the 1960s). The Port of New York Authority built both the tunnel and the Route 3 New Jersey approach to the tunnel in close cooperation with state, county, and local officials. O.H. Ammann was the Director of Engineering on the project, and J.C. Evans served as Chief Engineer.

To get past Bergen Hill an open cut was decided upon, partly because it would be cheaper than a tunnel (which would require expensive equipment to remove exhaust gases), and also because local officials wanted the approach highway to be usable also as an arterial route across the ridge for local traffic. This decision required structures to carry the approach highway from the low meadows west of Bergen Hill up to the level of the cut through the Hill, and then back down to the tunnel mouth east of Bergen Hill. Major bridges were required for both of these tasks (Ammann, 391). In addition numerous bridges had to be built to take pre-existing local streets over the cut, and for the crossing of Hudson Boulevard (now JFK Boulevard) a very special type of grade separation structure was designed. The cut itself was, however, quite conventional, and most of the bridges were also conventional, if highly refined in their details (cut stone coverings for parts of their abutments, haunched fascia deck girders with patterned stiffeners, Art Moderne railings, and the like). When viewed as a whole, the entire roadway is a remarkable engineering accomplishment with visual cohesiveness achieved by repetition of bridge type and uniform Moderne detailing along the length of the project.

Boundary Description and Justification: The structure is one element of road development that is historically and technologically noteworthy. Because of the commonality of design, type, setting, and history that the structures on the route share and the state of preservation of the resource, the right-of-way of NJ 495 from the intersection with US 1 & 9 and the Lincoln Tunnel is evaluated as a potential historic district. This structure is along that right-of-way, so it is a contributing resource. The significant boundary is limited to the actual right-of-way between the aforementioned points.

PHOTO: 201:2,3,7 (06/07/91) REVISED BY (DATE): QUAD: Weehawken

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 3800027 **CO** HUDSON **OWNER** PRIVATE **MILEPOINT** 0.0
NAME & FEATURE INTERSECTED NJ 495 OVER JFK BOULEVARD EAST **FACILITY** NJ 495
TOWNSHIP WEEHAWKEN TOWNSHIP
TYPE MULTI GIRDER **DESIGN** **MATERIAL** Steel
 # SPANS 5 **LENGTH** 375 ft **WIDTH** 78.5 ft

CONSTRUCTION DT 1937 **ALTERATION DT** **SOURCE** NJDOT
DESIGNER/PATENT PORT OF NEW YORK AUTHORITY **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge carries NJ 495, the divided six-lane approach highway to the Lincoln Tunnel, over a busy city street and service road in Weehawken. It is located in an urban residential area of 1920s through post-1950 detached town houses and apartment buildings.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No
CONSULT STATUS Individually Eligible. Rt 3 (I-495) Highway Approach to Lincoln Tunnel Historic District, Eligible. Contributing.
CONSULT DOCUMENTS SHPO Comments 11/17/99, Letter 03/12/01.

SUMMARY The multi-span curved bridge is composed of varying length built-up deck plate girders supported on concrete columns and abutments, some with stone facing that matches the masonry used along the historic approach to the 1937 Lincoln Tunnel. Most girders are haunched. The roadway is enclosed by a metal railing. The bridge is an impressive and technologically significant application of deck plate girder technology to a complex engineering problem. It is individually eligible for listing in the National Register of Historic Places and would be a contributing element of the potential 495/ Lincoln Tunnel Approach Historic District under Criteria A and C.

INFOR MATION

Bibliography:
Ammann, O.H. "Planning the Lincoln Tunnel Under the Hudson," Civil Engineering, 7, June, 1937, pp. 387-391.
Port Authority of New York. Annual Report. 1956.

Physical Description: The 5-span built-up deck girder bridge is part of the continuous elevated structure that serves as the approach to the Helix. It is the uphill or western end of the Helix. The flared multi girder bridge is made up of haunched girders with an aesthetic geometric arrangement of the stiffeners on the outer face and plain built-up girders on the interior. The floor beams are also built up. The girders vary in length, owing to the flared shape of the span, and are supported on concrete columns, some of which are stone faced. The bridge appears to be unaltered.

Historical and Technological Significance: The deck girder bridge is an original element of an approximately 2.8-mile long major transportation artery built 1938-1939 to serve as the main approach to the recently completed Lincoln Tunnel (first tube). The road is technologically and historically significant as a major engineering solution to building a highway that was both limited access and local through a congested area with significant geological considerations. The problem was solved in an innovative and aesthetic manner that retains its integrity of design and setting. It was designated Route 3 when built, and it became the heaviest-used single commuter line into the city, by virtue of serving the vast majority of the bus lines into New York City from the west. The structure is not individually distinguished, but it is a contributing resource to the potential historic route and thus has been evaluated as significant (Criterion C). Twenty-one structures were identified as being contributing resources along the right-of-way that stretches from US 1 & 9 to the Lincoln Tunnel.

The Palisades (called Bergen Hill locally) forms a ridge parallel to and just west of the Hudson River for several miles. The rock ridge is a barrier that must be crossed in some fashion by every transportation artery approaching New York City from the west in Bergen and Hudson counties. The oldest crossing of Bergen Hill is that now occupied by the PATH system and built by a predecessor of the Pennsylvania RR 1830-1834. The approach to the Lincoln Tunnel was the last major crossing of the Palisades (unless one counts the upgrading of the George Washington Bridge approaches in the 1960s). The Port of New York Authority built both the tunnel and the Route 3 New Jersey approach to the tunnel in close cooperation with state, county, and local officials. O.H. Ammann was the Director of Engineering on the project, and J.C. Evans served as Chief Engineer.

To get past Bergen Hill an open cut was decided upon, partly because it would be cheaper than a tunnel (which would require expensive equipment to remove exhaust gases), and also because local officials wanted the approach highway to be usable also as an arterial route across the ridge for local traffic. This decision required structures to carry the approach highway from the low meadows west of Bergen Hill up to the level of the cut through the Hill, and then back down to the tunnel mouth east of Bergen Hill. Major bridges were required for both of these tasks (Ammann, 391). In addition numerous bridges had to be built to take pre-existing local streets over the cut, and for the crossing of Hudson Boulevard (now JFK Boulevard) a very special type of grade separation structure was designed. The cut itself was, however, quite conventional, and most of the bridges were also conventional, if highly refined in their details (cut stone coverings for parts of their abutments, haunched fascia deck girders with patterned stiffeners, Art Moderne railings, and the like). When viewed as a whole, the entire roadway is a remarkable engineering accomplishment with visual cohesiveness achieved by repetition of bridge type and uniform Moderne detailing along the length of the project.

Boundary Description and Justification: The structure is one element of road development that is historically and technologically noteworthy. Because of the commonality of design, type, setting, and history that the structures on the route share and the state of preservation of the resource, the right-of-way of NJ 495 from the intersection with US 1 & 9 and the Lincoln Tunnel is evaluated as a potential historic district. This structure is along that right-of-way, so it is a contributing resource. The significant boundary is limited to the actual right-of-way between the aforementioned points.

PHOTO: 201:6,8-12 (06/07/91) REVISED BY (DATE): QUAD: Weehawken

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 3800028 **CO** HUDSON **OWNER** PRIVATE **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED NORTH RAMP OF NJ 495 OVER NORTH MARGINAL STREET **FACILITY** NJ 495 NORTH RAMP

TOWNSHIP WEEHAWKEN TOWNSHIP

TYPE DECK GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 2 **LENGTH** 69 ft **WIDTH** 22 ft

CONSTRUCTION DT 1937 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT PORT OF NEW YORK AUTHORITY **BUILDER**

SETTING / CONTEXT The bridge carries an exit ramp from NJ 495, the divided six-lane highway approach to the Lincoln Tunnel, over the north service road for NJ 495. It is contiguous to 3800027, and it branches off the north side of that structure. The ramp is located in a densely developed residential area of largely of 1920s detached houses with infill post-1950 houses.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible. Rt 3 (I-495) Highway Approach to Lincoln Tunnel Historic District, Eligible. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95, Comments 11/17/99.

SUMMARY The skewed 2-span haunched built-up deck girder bridge with built-up floor beams of varying lengths is supported on concrete columns. It is a ramp leading from an elevated span of similar construction to a surface road. The concrete columns are faced in the same Moderne-style masonry as other spans on the historic 1938 approach to the Lincoln Tunnel. The span is not technologically significant, but it is a contributing element on a historically and technologically noteworthy route.

INFOR MATION

Bibliography:
Ammann, O.H. "Planning the Lincoln Tunnel Under the Hudson," Civil Engineering, 7, June, 1937, pp. 387-391.
Port of New York Authority. Annual Report. 1956.

Physical Description: The 2-span built-up deck plate girder bridge is part of the continuous elevated structure that serves as the approach to the Helix. It is the uphill or western end of the Helix, and it is best described as the north elevation of 3800027, the structure almost parallel to it on the south. The flared bridge is made up of haunched girders with an aesthetic geometric arrangement of the stiffeners on the outer face and plain built-up girders on the interior. The floor beams are also built up. The girders vary in length, owing to the flared shape of the span, and are supported on concrete columns, some of which are stone faced. The bridge appears to be unaltered.

Historical and Technological Significance: The deck girder bridge is an original element of an approximately 2.8-mile long major transportation artery built 1938-1939 to serve as the main approach to the recently completed Lincoln Tunnel (first tube). The road is technologically and historically significant as a major engineering solution to building a highway that was both limited access and local through a congested area with significant geological considerations. The problem was solved in an innovative and aesthetic manner that retains its integrity of design and setting. It was designated Route 3 when built, and it became the heaviest-used single commuter line into the city, by virtue of serving the vast majority of the bus lines into New York City from the west. The structure is not individually distinguished, but it is a contributing resource to the potential historic route and thus has been evaluated as significant (Criterion C). Twenty-one structures were identified as being contributing resources along the right-of-way that stretches from US 1 & 9 to the Lincoln Tunnel.

The Palisades (called Bergen Hill locally) forms a ridge parallel to and just west of the Hudson River for several miles. The rock ridge is a barrier that must be crossed in some fashion by every transportation artery approaching New York City from the west in Bergen and Hudson counties. The oldest crossing of Bergen Hill is that now occupied by the PATH system and built by a predecessor of the Pennsylvania RR 1830-1834. The approach to the Lincoln Tunnel was the last major crossing of the Palisades (unless one counts the upgrading of the George Washington Bridge approaches in the 1960s). The Port of New York Authority built both the tunnel and the Route 3 New Jersey approach to the tunnel in close cooperation with state, county, and local officials. O.H. Ammann was the Director of Engineering on the project, and J.C. Evans served as Chief Engineer.

To get past Bergen Hill an open cut was decided upon, partly because it would be cheaper than a tunnel (which would require expensive equipment to remove exhaust gases), and also because local officials wanted the approach highway to be usable also as an arterial route across the ridge for local traffic. This decision required structures to carry the approach highway from the low meadows west of Bergen Hill up to the level of the cut through the Hill, and then back down to the tunnel mouth east of Bergen Hill. Major bridges were required for both of these tasks (Ammann, 391). In addition numerous bridges had to be built to take pre-existing local streets over the cut, and for the crossing of Hudson Boulevard (now JFK Boulevard) a very special type of grade separation structure was designed. The cut itself was, however, quite conventional, and most of the bridges were also conventional, if highly refined in their details (cut stone coverings for parts of their abutments, haunched fascia deck girders with patterned stiffeners, Art Moderne railings, and the like). When viewed as a whole, the entire roadway is a remarkable engineering accomplishment with visual cohesiveness achieved by repetition of bridge type and uniform Moderne detailing along the length of the project.

Boundary Description and Justification: The structure is one element of road development that is historically and technologically noteworthy. Because of the commonality of design, type, setting, and history that the structures on the route share and the state of preservation of the resource, the right-of-way of NJ 495 from the intersection with US 1 & 9 and the Lincoln Tunnel is evaluated as a potential historic district. This structure is along that right-of-way, so it is a contributing resource. The significant boundary is limited to the actual right-of-way between the aforementioned points.

PHOTO: 201:4,5,13 (06/07/91) REVISED BY (DATE): QUAD: Weehawken

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 3800030 **CO** HUDSON **OWNER** PRIVATE **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED NJ 495 OVER JFK BOULEVARD EAST & EAST RAMP **FACILITY** NJ 495

TOWNSHIP WEEHAWKEN TOWNSHIP

TYPE MULTI GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 2 **LENGTH** 179 ft **WIDTH** 89 ft

CONSTRUCTION DT 1936 **ALTERATION DT** 1956 **SOURCE** NJDOT

DESIGNER/PATENT PORT OF NEW YORK AUTHORITY **BUILDER**

SETTING / CONTEXT The bridge is part of a long structure that carries NJ 495, the divided 6-lane approach to the Lincoln Tunnel, over a busy avenue. It is part of the "helix" and serves as the bottom section of that viaduct, carrying the road up from the tunnel to Bergen Hill. It is located next to the tunnel's toll plaza. It is part of the structure that includes 3800031 and concrete girder approach spans.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible. Rt 3 (I-495) Highway Approach to Lincoln Tunnel Historic District, Eligible. Contributing.

CONSULT DOCUMENTS SHPO Comments 11/17/99, Letter 03/12/01.

SUMMARY The 2-span bridge was originally composed of a series of 3 built-up haunched deck girders supported on stone-faced concrete columns. It was widened by enlarging the abutments/pier in the same style and adding an additional built up girder. Care was taken to match original detailing. The bridge is eligible as part of the engineering technology which functioned to collect traffic and funnel it into the Lincoln Tunnel. An especially notable feature is the helix which carries the highway from the plaza level up to the cut through Bergen Hill. The structure is individually eligible for listing in the National Register of Historic Places and would be a contributing element of the potential 495/ Lincoln Tunnel Approach Historic District under Criteria A and C.

INFOR MATION

Bibliography:
Ammann, O.H. "Planning the Lincoln Tunnel Under the Hudson," Civil Engineering, 7, June, 1937, pp. 387-391.
Port Authority of New York. Annual Report. 1956.

Physical Description: The structure is essentially the foot section or west/uphill end of the Helix viaduct that carries NJ 495 up from the Lincoln Tunnel plaza to the cut through Bergen Hill (3800031). This structure consists of two spans, each with four or five deck plate girders. The outer girders are haunched. The pier and abutments are of reinforced concrete partially faced with stone, with some geometric ornament in the areas not faced. These, plus the geometric decorative railings, and the pattern of the web stiffeners are consistent with the Moderne style found on almost all the original structures on the approach.

In connection with the addition of the third tube, the Port Authority added an additional westbound lane to the loop viaduct on the outside in 1956-57 (Port Authority, 1956, 22-23).. On this portion of the viaduct, great care was taken to preserve the original aesthetic appearance of the bridge. The piers and abutments were extended, using the same stone facing, - and the original outside deck girders, with their curved bottom webs, were moved outward. A new, plain girder was installed where the .original girder had been. Thus the original appearance of the bridge was maintained. In other respects the bridge has not been altered.

Historical and Technological Significance: The multi girder bridge is an original element of an approximately 2.8-mile long major transportation artery built 1938-1939 to serve as the main approach to the recently completed Lincoln Tunnel (first tube). The road is technologically and historically significant as a major engineering solution to building a highway that was both limited access and local through a congested area with significant geological considerations. The problem was solved in an innovative and aesthetic manner that retains its integrity of design and setting. It was designated Route 3 when built, and it became the heaviest-used single commuter line into the city, by virtue of serving the vast majority of the bus lines into New York City from the west. The structure is not individually distinguished, but it is a contributing resource to the potential historic route and thus has been evaluated as significant (Criterion C). Twenty-one structures were identified as being contributing resources along the right-of-way that stretches from US 1 & 9 to the Lincoln Tunnel.

The Palisades (called Bergen Hill locally) forms a ridge parallel to and just west of the Hudson River for several miles. The rock ridge is a barrier that must be crossed in some fashion by every transportation artery approaching New York City from the west in Bergen and Hudson counties. The oldest crossing of Bergen Hill is that now occupied by the PATH system and built by a predecessor of the Pennsylvania RR 1830-1834. The approach to the Lincoln Tunnel was the last major crossing of the Palisades (unless one counts the upgrading of the George Washington Bridge approaches in the 1960s). The Port of New York Authority built both the tunnel and the Route 3 New Jersey approach to the tunnel in close cooperation with state, county, and local officials. O.H. Ammann was the Director of Engineering on the project, and J.C. Evans served as Chief Engineer.

To get past Bergen Hill an open cut was decided upon, partly because it would be cheaper than a tunnel (which would require expensive equipment to remove exhaust gases), and also because local officials wanted the approach highway to be usable also as an arterial route across the ridge for local traffic. This decision required structures to carry the approach highway from the low meadows west of Bergen Hill up to the level of the cut through the Hill, and then back down to the tunnel mouth east of Bergen Hill. Major bridges were required for both of these tasks (Ammann, 391). In addition numerous bridges had to be built to take pre-existing local streets over the cut, and for the crossing of Hudson Boulevard (now JFK Boulevard) a very special type of grade separation structure was designed. The cut itself was, however, quite conventional, and most of the bridges were also conventional, if highly refined in their details (cut stone coverings for parts of their abutments, haunched fascia deck girders with patterned stiffeners, Art Moderne railings, and the like). When viewed as a whole, the entire roadway is a remarkable engineering accomplishment with visual cohesiveness achieved by repetition of bridge type and uniform Moderne detailing along the length of the project.

Boundary Description and Justification: The structure is one element of road development that is historically and technologically noteworthy. Because of the commonality of design, type, setting, and history that the structures on the route share and the state of

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preservation of the resource, the right-of-way of NJ 495 from the intersection with US 1 & 9 and the Lincoln Tunnel is evaluated as a potential historic district. This structure is along that right-of-way, so it is a contributing resource. The significant boundary is limited to the actual right-of-way between the aforementioned points.

PHOTO: 202:7-11,13-14 (06/07/91) REVISED BY (DATE): QUAD: Weehawken

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 3800031 **CO** HUDSON **OWNER** PRIVATE **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED NJ 495 VIADUCT OVER BALDWIN AVENUE AND CONRAIL **FACILITY** NJ 495

TOWNSHIP WEEHAWKEN TOWNSHIP

TYPE DECK TRUSS **DESIGN** WARREN **MATERIAL** Steel

 # SPANS 19 **LENGTH** 1278 ft **WIDTH** 81 ft

CONSTRUCTION DT 1937 **ALTERATION DT** 1957 **SOURCE** NJDOT

DESIGNER/PATENT PORT AUTHORITY OF NEW YORK **BUILDER** AMERICAN BRIDGE COMPANY

SETTING / CONTEXT The bridge is part of the helix that brings NJ 495, the six-lane highway approach to the Lincoln Tunnel, from the high level at which it crosses Bergen Hill down close to the level of the tunnel plaza. In so doing it crosses Baldwin Ave. and a rail line. Beneath the bridge is a large NJT bus parking lot, with new mixed use development to the southeast. The Lincoln Tunnel toll plaza is to the west.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible. Rt 3 (I-495) Highway Approach to Lincoln Tunnel Historic District, Eligible. Contributing.

CONSULT DOCUMENTS SHPO Comments 11/17/99, Letter 06/30/95.

SUMMARY The curved viaduct known as the helix is composed of a series of technologically significant concrete girders and 4 longer spans made up of deep Warren deck trusses on the outside matched with haunched deck girders on the inside. All are supported on concrete columns. The viaduct was widened in 1957. It is significant as a complex engineering structure carrying NJ 3, now NJ 495, or the Lincoln Tunnel approach road, up Bergen Hill. The road and tunnel were built by the Port of New York Authority.

INFOR MATION

Bibliography:
Ammann, O.H. "Planning the Lincoln Tunnel Under the Hudson," Civil Engineering, 7, June, 1937, pp. 387-391.
Port Authority of New York. Annual Report. 1956.

Physical Description: Four of 19 spans of the impressive, 1278'-long, helix-shaped bridge are composed of Warren deck trusses on the outer side and haunched deck girders on the shorter, inner side. The arrangement addresses the difference in length of the two sides of the spans which are located in the most curved portion of the helix-shaped bridge. These rest on concrete columns. The six approach spans at the lower end and nine at the higher end of the viaduct are concrete girders on concrete columns. The upper end of the viaduct bears on a rock abutment. Only a few aesthetic touches have been applied to the structure: the deck girders are detailed with a geometric pattern to the stiffeners and a secondary angle on the outside of the lower web. The columns are scored. In connection with the addition of the third tube, the Port Authority of New York, who has jurisdiction for the span, added an additional westbound lane on the outside face in 1956-57 (Port Authority, 1956, 22-23). New steel pipe columns support the new lane. The bridge spans from the portal of portal of the Lincoln Tunnel to the crest of Bergen Hill where it connects with 3800030.

Historical and Technological Significance: The long, curving viaduct known as the Helix is an original element of an approximately 2.8-mile long major transportation artery built 1938-1939 to serve as the main approach to the recently completed Lincoln Tunnel (first tube). The road is technologically and historically significant as a major engineering solution to building a highway that was both limited access and local through a congested area with significant geological considerations. The problem was solved in an innovative and aesthetic manner that retains its integrity of design and setting. It was designated Route 3 when built, and it became the heaviest-used single commuter line into the city, by virtue of serving the vast majority of the bus lines into New York City from the west. The Helix is individually distinguished for its technological significance, and it is also a contributing resource to the potential historic route and thus has been evaluated as significant (Criterion C). Twenty-one structures were identified as being contributing resources along the right-of-way that stretches from US 1 & 9 to the Lincoln Tunnel.

The Palisades (called Bergen Hill locally) forms a ridge parallel to and just west of the Hudson River for several miles. The rock ridge is a barrier that must be crossed in some fashion by every transportation artery approaching New York City from the west in Bergen and Hudson counties. The oldest crossing of Bergen Hill is that now occupied by the PATH system and built by a predecessor of the Pennsylvania RR 1830-1834. The approach to the Lincoln Tunnel was the last major crossing of the Palisades (unless one counts the upgrading of the George Washington Bridge approaches in the 1960s). The Port of New York Authority built both the tunnel and the Route 3 New Jersey approach to the tunnel in close cooperation with state, county, and local officials. O.H. Ammann was the Director of Engineering on the project, and J.C. Evans served as Chief Engineer.

To get past Bergen Hill an open cut was decided upon, partly because it would be cheaper than a tunnel (which would require expensive equipment to remove exhaust gases), and also because local officials wanted the approach highway to be usable also as an arterial route across the ridge for local traffic. This decision required structures to carry the approach highway from the low meadows west of Bergen Hill up to the level of the cut through the Hill, and then back down to the tunnel mouth east of Bergen Hill. Major bridges were required for both of these tasks (Ammann, 391). In addition numerous bridges had to be built to take pre-existing local streets over the cut, and for the crossing of Hudson Boulevard (now JFK Boulevard) a very special type of grade separation structure was designed. The cut itself was, however, quite conventional, and most of the bridges were also conventional, if highly refined in their details (cut stone coverings for parts of their abutments, haunched fascia deck girders with patterned stiffeners, Art Moderne railings, and the like). When viewed as a whole, the entire roadway is a remarkable engineering accomplishment with visual cohesiveness achieved by repetition of bridge type and uniform Moderne detailing along the length of the project.

Boundary Description and Justification: The structure is one element of road development that is historically and technologically noteworthy. Because of the commonality of design, type, setting, and history that the structures on the route share and the state of preservation of the resource, the right-of-way of NJ 495 from the intersection with US 1 & 9 and the Lincoln Tunnel is evaluated as a potential historic district. This structure is along that right-of-way, so it is a contributing resource. The significant boundary is limited to the actual right-of-way between the aforementioned points.

A. G. Lichtenstein & Associates, Inc. performed initial survery.
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PHOTO: 202:38-44,1-6 (06/07/91) REVISED BY (DATE): QUAD: Weehawken

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 3800072 **CO** UNION **OWNER** PRIVATE **MILEPOINT** 1.4

NAME & FEATURE INTERSECTED GOETHALS BRIDGE OVER CONRAIL, NJ TURNPIKE & RAMPS **FACILITY** GOETHALS BRIDGE WESTBOUND

TOWNSHIP ELIZABETH CITY

TYPE DECK AND THRU GIRDERS **DESIGN** **MATERIAL** Steel

 # SPANS 14 **LENGTH** 1184 ft **WIDTH** 25.8 ft

CONSTRUCTION DT 1928 **ALTERATION DT** 1969ca **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge is part of the western approach to the Goethals Bridge over the Newark Bay. The bridge carries westbound traffic off the bridge over the New Jersey Turnpike and Conrail tracks of the Sound Shore Branch. This line follows the Arthur Kill for less than three miles in Union County. It is a branch of the former New York and Long Branch Railroad.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 14-span approach viaduct to the Goethals Bridge is supported on a concrete substructure of columns with arched struts. The original deck girder bridge was widened ca. 1969 and is now supported on larger deck girders to the outside of the original beams. New floorbeams carry the load to the new girder where piers supported the old beams. A single-span thru-girder carries traffic over the train tracks. The structure has not retained its design integrity, and is not historically distinguished.

INFOR MATION

PHOTO: 152:21-31A (04/92) REVISED BY (DATE): QUAD: Elizabeth

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 3900001 **CO** CAPE MAY **OWNER** PRIVATE **MILEPOINT** 30.7

NAME & FEATURE INTERSECTED US 9 OVER GREAT EGG HARBOR BAY **FACILITY** US 9

TOWNSHIP UPPER TOWNSHIP

TYPE DOUBLE LEAF BASCULE **DESIGN** **MATERIAL** Steel

 # SPANS 120 **LENGTH** 4829 ft **WIDTH** 28 ft

CONSTRUCTION DT 1928 **ALTERATION DT** Unknown **SOURCE** NJDOT

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The bridge carries two lanes of traffic over the Great Egg Harbor River. The bridge, over 4800' in length, spans the river between Beesleys Point in Cape May County, and Somers Point in Atlantic County. The Cape May County side has several heavily altered 19th-century buildings converted to restaurants and a late-20th century electric power plant. The bridge is privately owned and operated by the Beesleys Point Bridge Company.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 120-span bridge has an 80' double-leaf bascule span and 119 steel stringer spans resting on steel jacketed piers with I-beam caps and cross bracing. The substructure has been heavily rebuilt and the steel stringers gunited. The bascule span has modern controls and new electrical systems. Because access to the mechanical rooms was denied, it was not possible to completely assess the span. However, topside inspection shows that the bascule appears heavily altered and is probably not eligible.

INFOR MATION

PHOTO: 185:4-8 (10/03/92) REVISED BY (DATE): QUAD: Marmora

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 4100001 **CO** SUSSEX **OWNER** PRIVATE **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED DINGMANS FERRY BRIDGE OVER DELAWARE RIVER **FACILITY** CR 521

TOWNSHIP SANDYSTON TOWNSHIP

TYPE THRU TRUSS **DESIGN** BALTIMORE **MATERIAL** Wrought Iron

 # SPANS 3 **LENGTH** 547 ft **WIDTH** 17.3 ft

CONSTRUCTION DT 1890ca **ALTERATION DT** 1900 **SOURCE** OWNERS RECORDS

DESIGNER/PATENT **BUILDER**

SETTING / CONTEXT The privately-owned bridge carries a 1-lane 2-way collector road over a major river forming the border between New Jersey and Pennsylvania. The area was settled by Andrew Dingman in 1735, and he operated a ferry here until the first bridge was constructed by the Dingman's Choice and Delaware Bridge Company, chartered in 1834. According to company sources, the present truss bridge was originally erected at Laceyville, PA (c.1890) and moved to the site in 1900.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 3-span Baltimore thru truss bridge supported on a masonry substructure has 2-rail metal railings. The bridge has minor alterations to the truss diagonal members. The span is technologically significant because it is a well-preserved example of an unusual truss design and for its use of patented Phoenix columns and connecting pieces. The span is located at an important crossing in an area settled in 1735. It is privately owned is operated under the original bridge company charter of 1834.

INFOR MATION

PHOTO: 1905:4-7,1906:20-27 (08/92) REVISED BY (DATE): QUAD: Culvers Gap

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 4320002 **CO** WARREN **OWNER** OTHER FEDERA **MILEPOINT** 0.04

NAME & FEATURE INTERSECTED DEPEW PICNIC AREA ACCESS ROAD OVER VANCAMPEN BROOK **FACILITY** DEPEW PICNIC AREA ACCESS ROAD

TOWNSHIP PAHAQUARRY TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 39 ft **WIDTH** 15.3 ft

CONSTRUCTION DT 1930ca **ALTERATION DT** 1970ca **SOURCE** STYLE

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge is located in the Delaware Water Gap National Recreation Area. It carries an isolated access road to a picnic area over a minor stream. The immediate surroundings are densely wooded and undeveloped.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one-span stringer bridge (c.1930) bears on concrete abutments. It was widened by the addition of stringers (c.1970) on the concrete substructure, with timber bracing placed between both old and new stringers. The bridge has a plank deck and a wand a wood railing on each side. The bridge is one of a common bridge type, and it is not technologically or historically distinguished.

INFOR MATION

PHOTO: 166:29-31 (07/92) REVISED BY (DATE): QUAD: Bushkill

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 4500010 **CO** CAMDEN **OWNER** PRIVATE **MILEPOINT** 4.57

NAME & FEATURE INTERSECTED BEN FRANKLIN BRIDGE OVER DELAWARE RIVER **FACILITY** I-676, US 30, PATCO

TOWNSHIP CAMDEN CITY

TYPE SUSPENSION **DESIGN** **MATERIAL** Steel

 # SPANS 3 **LENGTH** 7883 ft **WIDTH** 77.8 ft

CONSTRUCTION DT 1926 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT RALPH MODJESKI **BUILDER**

SETTING / CONTEXT Built in 1926 as the first bridge across the Delaware River at Philadelphia, the handsome suspension bridge connects downtown Camden with Center City Philadelphia. Neither approach is via modern, limited access highways. The bridge links the centers of both cities.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS DOE 03/29/83

SUMMARY When completed in 1926 the Camden-Philadelphia Bridge, as it was originally known, ranked as the longest suspension bridge in the world. The handsome structure, designed by Ralph Modjeski and architect Paul Certe, was the single most influential structure in the subsequent development of Camden and the surrounding area. The span remains as one of the finest and best preserved important suspension bridges in the country and is one of Modjeski's most significant works.

INFOR MATION

PHOTO: (07/01/91) REVISED BY (DATE): QUAD: Philadelphia

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 4700001 **CO** ATLANTIC **OWNER** PRIVATE **MILEPOINT** 0.88

NAME & FEATURE INTERSECTED MILL ROAD (CR 563) OVER BEACH THOROFARE **FACILITY** MILL ROAD (CR 563)

TOWNSHIP MARGATE CITY

TYPE DOUBLE LEAF BASCULE **DESIGN** STRAUSS UNDERNEATH **MATERIAL** Steel

 # SPANS 15 **LENGTH** 554 ft **WIDTH** 28 ft

CONSTRUCTION DT 1929-30 **ALTERATION DT** 1964 **SOURCE** PLAQUE

DESIGNER/PATENT STRAUSS BRIDGE COMPANY **BUILDER** SCHWEIRS CO. (NEW YORK)

SETTING / CONTEXT The bridge carries two lanes of traffic and a sidewalk over a navigable channel on the west side of Absecon Island. It is one of four bridges (4700001-4) connecting pumped-up islands on a causeway between Absecon Island and the mainland. The causeway was privately built, and it remains privately operated. The current owners acquired it in 1964. This is the only movable span on the causeway.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 88'-long double-leaf Strauss articulated underneath counterweight bridge is a well-preserved example of a popular early- and mid-20th century bridge type. It represents a patented design, and it is one of two double-leaf Strauss underneath counterweight bascules (01V0001) in Atlantic County. While the operating machinery has been updated and the east approach widened in 1964, the span retains integrity of design and ranks as a significant example of moveable bridge technology.

INFOR MATION

PHOTO: 132:2-10 (04/92) REVISED BY (DATE): QUAD: Ocean City

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 4700002 **CO** ATLANTIC **OWNER** PRIVATE **MILEPOINT** 1.45

NAME & FEATURE INTERSECTED MILL ROAD (CR 563) OVER RISLEY CHANNEL **FACILITY** MILL ROAD (CR 563)

TOWNSHIP EGG HARBOR TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 17 **LENGTH** 706 ft **WIDTH** 28 ft

CONSTRUCTION DT 1929-30 **ALTERATION DT** **SOURCE** NJDOT/R. HANSEN

DESIGNER/PATENT **BUILDER** SCHWEIRS CO. (NEW YORK)

SETTING / CONTEXT The bridge carries two lanes over a tidal channel in the shallow water and salt marsh between Absecon Island and the mainland. It is one of four bridges (4700001-4) that form part of a causeway between Northfield and Margate City on Absecon Island. When opened in 1930, it was the fifth bridge to connect the island with the mainland.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 17-span bridge with a slight vertical profile is composed of steel stringers supported on concrete abutments and concrete piles with rolled-steel section caps. The outside portions of the concrete road deck are cantilevered. Modern beam guide rails have been placed inside the original pipe railings. The current owners purchased the private bridge in 1964. A representative example of a common bridge type, the span is not historically or technologically distinguished.

INFOR MATION

PHOTO: 131:37 (04/92) REVISED BY (DATE): QUAD: Ocean City

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 4700003 **CO** ATLANTIC **OWNER** PRIVATE **MILEPOINT** 1.85

NAME & FEATURE INTERSECTED MILL ROAD (CR 563) OVER WHIRLPOOL CHANNEL **FACILITY** MILL ROAD (CR 563)

TOWNSHIP EGG HARBOR TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 22 **LENGTH** 811 ft **WIDTH** 28 ft

CONSTRUCTION DT 1929-30 **ALTERATION DT** **SOURCE** NJDOT/R. HANSEN

DESIGNER/PATENT **BUILDER** SCHWIERS CO. (NEW YORK)

SETTING / CONTEXT The bridge carries two lanes of traffic over a tidal channel between Absecon Island and the mainland. It is one of four bridges (4700001-4) that form a causeway between Northfield and Margate City. When opened in 1930, the bridge was the fifth bridge then serving to carry traffic over the tidal meadows to Absecon Island.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 22-span steel stringer bridge with a slight vertical profile is supported on concrete abutments and concrete piles with rolled I-beam caps. The edges of the roadway deck are cantilevered. Beam guide rails have been placed inside of original pipe railings. The bridge was built by the Schwiers Company for the Hill Dredging Company as a private toll bridge. The current owners purchased it in 1964. It is a common bridge type, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 131:35-36 (04/92) REVISED BY (DATE): QUAD: Ocean City

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 4700004 **CO** ATLANTIC **OWNER** PRIVATE **MILEPOINT** 2.58

NAME & FEATURE INTERSECTED MILL ROAD (CR 563) OVER DOCK THOROFARE **FACILITY** MILL ROAD (CR 563)

TOWNSHIP EGG HARBOR TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 10 **LENGTH** 350 ft **WIDTH** 28 ft

CONSTRUCTION DT 1929 **ALTERATION DT** **SOURCE** NJDOT/R. HANSEN

DESIGNER/PATENT **BUILDER** SCHWIERS CO. (NEW YORK)

SETTING / CONTEXT The bridge carries two lanes of traffic over a tidal channel. It is one of four bridges (4700001-4) that are part of a causeway that connects Northfield on the mainland with Margate City on Absecon Island. When opened in 1930, the causeway was then the fifth roadway bridge connecting Absecon Island with the mainland. Marinas are located on the west of mainland end of the bridge.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The steel stringer bridge with a vertical profile is supported on concrete abutments and concrete piles with I-beam caps. Part of the concrete deck is cantilevered. Beam guide rails have been placed to the inside of original pipe railings. The private toll causeway was built in 1929 by Schwiers Co. for the Hill Dredging Co. It was purchased by the present owners in 1964. A representative example of a common bridge type, the span is not historically or technologically distinguished.

INFOR MATION

PHOTO: 131:31-34 (04/92) REVISED BY (DATE): QUAD: Ocean City

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12, 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 9050001 **CO** MORRIS **OWNER** OTHER FEDERA **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PLEASANT PLAINS ROAD OVER GREAT BROOK **FACILITY** PLEASANT PLAINS ROAD

TOWNSHIP HARDING TOWNSHIP

TYPE PONY TRUSS **DESIGN** PRATT **MATERIAL** Steel

 # SPANS 1 **LENGTH** 75 ft **WIDTH** 15.5 ft

CONSTRUCTION DT 1887 **ALTERATION DT** 1922 **SOURCE** FREEHOLDERS MINUTES

DESIGNER/PATENT J.P. BARTLEY & SONS **BUILDER** J. P. BARTLEY & SONS

SETTING / CONTEXT Located within the Great Swamp Wildlife Refuge, a 7,200-acre natural area, the bridge is on a paved road that is closed to through traffic. Contiguous to the bridge is Swamp Fox Farm, a working farm with an 18th-century farmhouse and several outbuildings. The bridge carries park service vehicles over the slow-moving Great Brook, a major watercourse in the Great Swamp.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The pin-connected six-panel half-hip Pratt pony truss was built by the local fabricator, J. P. Bartley & Co. While the 1922 concrete abutments are more recent than the superstructure, county records indicate that the bridge was built for the site in 1887. The trusses are virtually unaltered and are among the best preserved example of their type within the county. It has no readily visible welded repairs. The steel was produced by Carnegie, and the eye bars are forged with loop eyes.

INFOR MATION

PHOTO: 517:43A-8A (12/91) REVISED BY (DATE): QUAD: Bernardsville

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # Unknown0 **CO** HUNTERDON **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WOODVILLE ROAD OVER STONY BROOK **FACILITY** WOODVILLE ROAD

TOWNSHIP WEST AMWELL TOWNSHIP

TYPE STONE ARCH **DESIGN** ELLIPTICAL **MATERIAL** Stone

 # SPANS 2 **LENGTH** No Data **WIDTH** No Data

CONSTRUCTION DT 1840 **ALTERATION DT** Unknown **SOURCE** PLAQUE

DESIGNER/PATENT UNKNOWN **BUILDER** "C.B."

SETTING / CONTEXT The bridge carries one lane of a lightly traveled road over a minor stream on the southern edge of the 19th-century village of Linvale. The village does not have historic district potential due to the alterations to most of the buildings. The bridge is about 100' south of NJ 31 which now serves as the main road through the village. Woodville Road has been bypassed by NJ 31.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 2-span stone arch with rubble-coursed spandrel walls and gauged ringstones was widened on the downstream side with a corresponding concrete arch addition at an unknown date. Although the earliest documented stone arch bridge in the county, the span has been altered by the addition, and the stone parapets on both sides have been rebuilt. More complete examples of 19th-century masonry arches survive like 1000111.

INFOR MATION

PHOTO: 611:21A-25A (09/92) REVISED BY (DATE): QUAD: Hopewell

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # Unknown0 **CO** WARREN **OWNER** UNKNOWN **MILEPOINT** 72.98

NAME & FEATURE INTERSECTED DL&W RR NEW JERSEY CUT-OFF OVER SIMPSON ROAD **FACILITY** DL&W RR NEW JERSEY CUT-OFF (MP 72.98)

TOWNSHIP KNOWLTON TOWNSHIP

TYPE ARCH **DESIGN** TUNNEL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 33 ft **WIDTH** 45 ft

CONSTRUCTION DT 1909 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT DL&W RR OFFICE OF ENGINEER **BUILDER**

SETTING / CONTEXT The bridge is located in an area of late-20th century commercial development. It carries the two-track right-of-way of the Delaware Lackawanna & Western Railroad's New Jersey Cutoff over a two-lane road. The structure is located very close to the Delaware River Viaduct of the same rail line. The development of this r-o-w was a major engineering accomplishment of its day. It is a significant engineering achievement constructed with major cuts and fills, which avoided creating any highway railroad grade crossings along its 28.45 mile length.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Not Individually Eligible. Delaware, Lackawanna & Western Railroad New Jersey Cutoff Historic District, Eligible. Contributing.

CONSULT DOCUMENTS SHPO Opinion 3/22/94, Letter 03/12/01.

SUMMARY The skewed reinforced concrete arch is flanked by sloping concrete wingwalls. No railings are present at the faces of the bridge, which has a ballasted deck. The structure, which resembles a tunnel, supports very little fill in comparison to other structures on the route. The DL&W's New Jersey Cut-Off is a technologically significant engineering achievement noted for its use of reinforced concrete for bridges and structures and for completely grade separating the railroad and highway crossings. The structure is not individually eligible for listing in the National Register of Historic Places, but is a contributing element of the Delaware, Lackawanna & Western Railroad New Jersey Cutoff Historic District under Criteria A and C.

INFORMATION

Simpson Road Tunnel

BIBLIOGRAPHY:

Wheaton, F.L., "The New Cut-off Line of the Lackawanna Railroad", Engineering News, Vol.60, No.7, August 13, 1908.
Short summary of DL&W Cut-off, Engineering News, Vol.60, No.3, July 16, 1908. pg.72.
"Some Concrete Culverts and Small Bridges on the Slateford-Hopatcong Cut-off of the Delaware, Lackawanna & Western R.R.", Engineering News, Vol.62, No.14, September 30, 1909.
Condit, Carl W., American Building Art The Twentieth Century, 1961.
Taber, Thomas Townsend, The Delaware, Lackawanna & Western Railroad in the Nineteenth Century. 1977.
Taber, T.T. and Taber, T.T. III, The Delaware, Lackawanna & Western Railroad in the Twentieth Century, Vols. I and II. 1980.
Lefferts, H. Leedom Jr., and Piefer, David R., Northwest New Jersey: An Inventory and History of Historic Engineering and Industry. 1979.

Physical Description: The reinforced concrete arch tunnel carries the railroad on a fill over a two-lane road. The span is a few hundred feet from the New Jersey end of the Delaware River Viaduct. The skewed barrel-arch tunnel is flanked by sloping, skewed wingwalls that retain the fill used to create the grade for the New Jersey Cut-Off. The deck is ballasted, but the right-of-way is overgrown with vegetation. The date of construction (1909) is inscribed in the spandrels at each end of the structure. The tunnel spans 33 feet and is 45 feet wide. A utility line runs under the bridge, but it is not physically tied to the structure.

Historical and Technological Significance: The New Jersey Cut-Off, of which this arched tunnel is a part, was built in 1908-1911 and is historically and technologically distinguished in the areas of engineering and transportation (Criteria A, C). The cut-off is an important engineering accomplishment of the early 20th century. The Delaware, Lackawanna & Western RR (DL&W) designed and built the line to improve the efficiency of train travel across the mountainous terrain of northwestern New Jersey in Warren, Sussex, and Morris counties. The design and construction of a railroad that rises and falls just eleven feet over its length of 28.45 miles while crossing the mountains and valleys of northwestern New Jersey is remarkable even today. The decision to use reinforced concrete exclusively for all structures along the route was a pioneering action that attracted the attention of the engineering profession. The railroad's use of reinforced concrete did much to prove the material to be as strong and durable as the engineers of the early-20th century had anticipated. The DL&W also made full use of the moldable qualities of the material, designing not just functional structures, but also aesthetically pleasing ones that enhance the beauty of the railroad.

Sixteen structures are included in the NJDOT Historic Bridge Survey, but other structures, including viaducts, tunnels, and stations, were observed within Warren and Sussex counties. The structures not included in this survey appear to have integrity consistent with those bridges and tunnels that are included.

The New Jersey Cutoff is the culmination of over 55 years of efforts by the company to improve its route across New Jersey to New York City. The Delaware, Lackawanna and Western Railroad (DL&W), composed of a network of smaller railroads in Pennsylvania, New York and New Jersey, was formed in 1853 for the purpose of moving anthracite coal from the mining regions of northeastern Pennsylvania to market locations. It started from the merger of the Liggett's Gap RR and the Delaware & Cobbs Gap RR, which had been chartered and developed around 1850 by parties interested in carrying the coal to the Erie RR to the west and to the Delaware River to the east.

As the anthracite coal mining industry grew, so did the desire to increase the access to markets. In reaching to the east the DL&W needed a connection in New Jersey. They incorporated the Warren Railroad in the 1851 to carry trains from the Delaware River at Columbia (Warren County, NJ) to Central Railroad of New Jersey tracks in Hampton (Hunterdon County, NJ). From there the coal could be moved eastward to Elizabethport (near Newark, NJ). Commuters also traveled this route to get to New York City. In the late 1860s the DL&W became dissatisfied with the CNJ connections and sought their own access to the New York markets. In 1868 they leased the

Morris & Essex RR, which was developed in the 1830s and 1840s in Morris, Essex and Hudson counties and the 1850s in Warren County. The M&E crossed New Jersey from Hoboken to Phillipsburg on the Delaware River.

Though the DL&W controlled several railroads (like the M&E, Warren, Valley, etc.), each was operated separately until 1899, when new DL&W president William Truesdale centralized control of the company. This move allowed for increased efficiency for the railroad as a whole. In addition to the reorganization, Truesdale undertook an ambitious plan to modernize the routes (All background information gathered from Taber, 1977).

In seeking a more efficient, less circuitous route to replace the 1860s Morris & Essex Railroad right-of-way, the DL&W considered three plans to build a completely new route (Taber and Taber, 1980:34-36). The plan chosen was a completely new line that would include massive cuts and fills to virtually eliminate grade changes. The existing line was nearly 40 miles long, had 57 curves comprising almost 13 miles of track, and a maximum grade of 60.2 feet per mile with a total rise and fall of 248 feet. The new layout, known as the New Jersey Cut-Off, limited the number and degree of curves and saved over 11 miles of track from the circuitous old line. This was the most expensive choice, costing $11,065,511.43 when completed (Taber and Taber, 1980:39), but the anticipated benefits for the railroad outweighed the cost.

Beginning in 1908 and under the direction of DL&W Chief Engineer George Ray, layout and design of the cut-off began. The line was to be 28.45 miles long, with a total rise and fall of just 11 feet and less than 5 miles of curved track. The new route would require 73 structures, including two massive viaducts, twelve overhead highway bridges and numerous crossings of roads and minor watercourses. Over 14 million cubic yards of both cut and fill were needed to create the relatively flat crossing of the hills and valleys of northwestern New Jersey (Taber and Taber, 1980:36).

Mr. Ray decided that reinforced concrete would be used for all structures along the route. This was the first time such a decision was made, causing the nickname of the "reinforced concrete railroad" to be used by the engineering profession when discussing the cut-off (Taber and Taber, 1980:36). Reinforced concrete was a state-of-the-art building material with yet unknown ultimate capabilities. It was thought to be as strong and durable as stone, and seemingly more permanent than wood or even steel.

Uncommon methods were used for the construction of the fills along the route. While the traditional method of building a wooden trestle to run dumping trains on was used for most fills, tracking was hung from suspended cables for the fills of greater magnitude. Dumping trains would carry fill onto the suspended tracks and dump the fill material from there. Most of the fill used on the cutoff was taken from the many cuts that were made, but even that was not enough. The DL&W bought 760 acres of farm land from which the contractors could dig additional fill. Five million pounds of dynamite was used to make the cuts. The Pequest Fill (Milepoint 55.85, Green Township, Sussex County) was the largest along the cut-off and in 1908 was claimed to be the "largest railway embankment ever made" (Engineering News, 1908:72). It was over 3 miles long and was up to 140 feet high. Over 6.5 million cubic yards of fill were necessary to reach the proper grade on this fill (Taber and Taber, 1980:36).

The DL&W chose to use similar structures for similar uses along the line. Where highway bridges were needed to cross their tracks, they designed reinforced concrete deck arch bridges, a bridge type that was capable of relatively long spans while providing dynamic and graceful forms. At least eleven deck arches were built in New Jersey, (1900G12, 1900G13, 1900K07, 1900C17, 2153166, 2153165, 2153164, 2153163, 2153162, 2153161, 2153160), all of them single span structures with one of two types of balustrades. Though design adjustments had to be made for roadway alignment and foundation conditions, the deck arch bridges are very similar structures.

Reinforced concrete arch tunnels were constructed where the cut-off crossed over roads or small waterways. These structures often supported high fill embankments as the cut-off crossed a valley. Over 35 of these structures were built along the line, and several of them are included in the Historic Bridge Survey (Wasigan and Simpson roads in Warren County, 2117152). Slab-roofed tunnels and box culverts were also built to carry the right-of-way over roads and streams.

The largest structures along the line were the two multi-span viaducts; the Delaware River Viaduct (2114159) and the Paulins Kill Viaduct (Milepoint 70.63, Knowlton Twp.). Both are open spandrel arch bridges that span valleys and larger water courses. The 9-span Delaware River Viaduct crosses the river as well as the highways that parallel it on both sides. It is 1,450 feet long and carries trains 65 feet above the river. The nine span structure has seven open spandrel arches and two deck arch approach spans on the Pennsylvania end. The 7-span Paulins Kill Viaduct in Hainesburg (Warren County) is 1100 feet long, but it is more graceful and magnificent as it rises 115 feet above the valley floor. It passes over the Paulins Kill River, the New York, Susquehanna and Western Railroad and the valley they run through. It was the most impressive structure on the DL&W main line prior to the building of the Tunkhannock Viaduct in Nicholson, Pennsylvania, completed in 1915.

Around the turn of the century, reinforced concrete arches were generally limited to relatively short and often single span bridges. The dead load carried by the arches was reduced with the introduction of open spandrel arches. The lighter structures were capable of longer spans and more aesthetically pleasing large bridges. The Walnut Lane bridge (1906-8) over Wissahickon Creek in Philadelphia was a forerunner of the type, though it used virtually no steel reinforcement in the two ribs (Condit, 1961:198). The use of reinforcement made the possibilities even greater. Under Ray's direction, the length and number of spans increased to create massive structures that dominated the landscape.

The New Jersey Cut-Off was divided into sections for bidding. Seven contractors were each awarded one section of the line, including contractors from as far away as Billings, Montana and Roanoke, Virginia. Each contract included all clearing, grading and masonry construction (Wheaton, 1908).

In addition to its engineering significance, the railroad right-of-way ranks historically as one of the most significant in the state, owing to the impact moving coal across the state had on the development of transportation systems within New Jersey. The Lehigh Valley Railroad played a significant role in the development of transportation and transportation-driven development in the northern half of the state, and the cut-off stands as one of the most ambitious remnants of the coal era in the state.

In summation, the viaducts, tunnels, overpasses, cuts, and fills on the New Jersey Cut-Off (1908-1911) form part of a unified design that was, and still is, one of the most remarkable engineering achievements of the early 20th century in the region. Furthermore, the New

Jersey Cut-Off is one of the most visible remnants of the DL&W, and is illustrative of the history of one of the largest movers of coal that contributed to the transportation-driven economic growth of the northern half of the state. The New Jersey Cut-Off is a significant part of the western New Jersey historic landscape and transportation systems.

Boundary Description and Justification: The significance of the structure is based, in part, on its historic association and physical connection with a right-of-way that is both historically and technologically important. In New Jersey, the potential historic corridor appears to be limited to the railroad right-of-way. The potential historic corridor is approximately 28 miles long stretching from the Delaware River to the eastern junction at Hopatcong, Morris County. The New Jersey Cut-Off's western junction is in Slateford, Pennsylvania on the west bank of the Delaware River. The entire route and all its related structures were not surveyed as part of this project, but those portions of the route that were surveyed or observed as part of the 1991-1993 Historic Bridge Survey have integrity of setting and original design and appear to representative of the overall state of preservation and completeness of the route in Sussex and Warren counties.

PHOTO: 165:19 (07/92) REVISED BY (DATE): QUAD: Knowlton

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # Unknown0 **CO** WARREN **OWNER** UNKNOWN **MILEPOINT** 63.81

NAME & FEATURE INTERSECTED DL&W RR NEW JERSEY CUT-OFF OVER WASIGAN ROAD **FACILITY** DL&W RR NEW JERSEY CUT-OFF (MP 63.81)

TOWNSHIP FRELINGHUYSEN TOWNSHIP

TYPE ARCH **DESIGN** TUNNEL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 240 ft **WIDTH** 187 ft

CONSTRUCTION DT 1909 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT DL&W RR OFFICE OF ENGINEER **BUILDER**

SETTING / CONTEXT The bridge is located in wooded area with sparse residential development. It carries the right-of-way of the Delaware Lackawanna & Western RR's New Jersey Cutoff over a winding two-lane road. The rail line development was a major engineering achievement for of its day, which was constructed with major cuts and fills and avoided creating any highway railroad grade crossings along its 28.45 mile length.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED** Yes

CONSULT STATUS Not Individually Eligible. Delaware, Lackawanna & Western Railroad New Jersey Cutoff Historic District, Eligible. Contributing.

CONSULT DOCUMENTS SHPO Opinion 3/22/94, Letter 03/12/01.

SUMMARY The reinforced concrete arch bridge has skewed, sloping wingwalls to retain the fill used to elevate the right-of-way above the existing grade. Two power lines are connected to the intrados of the arch, running along the crown to the other side of the tracks. The DL&W's New Jersey Cut-Off was the first major railroad line in the United States to make exclusive use of concrete structures. It is a technologically significant engineering achievement noted for its use of reinforced concrete for bridges and structures and for completely grade separating the railroad and highway crossings. The structure is not individually eligible for listing in the National Register of Historic Places, but is a contributing element of Delaware, Lackawanna & Western Railroad New Jersey Cutoff Historic District under Criteria A and C.

INFOR MATION

Wasigan Road Tunnel

BIBLIOGRAPHY:

Wheaton, F.L., "The New Cut-off Line of the Lackawanna Railroad", Engineering News, Vol.60, No.7, August 13, 1908.
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"Some Concrete Culverts and Small Bridges on the Slateford-Hopatcong Cut-off of the Delaware, Lackawanna & Western R.R.", Engineering News, Vol.62, No.14, September 30, 1909.
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Taber, T.T. and Taber, T.T. III, The Delaware, Lackawanna & Western Railroad in the Twentieth Century, Vols. I and II. 1980.
Lefferts, H. Leedom Jr., and Piefer, David R., Northwest New Jersey: An Inventory and History of Historic Engineering and Industry. 1979.

Physical Description: The reinforced concrete arch tunnel carries the railroad on a high fill over a two-lane road. The barrel-arch tunnel is flanked by sloping, skewed wingwalls that retain the fill used to create the grade for the New Jersey Cut-Off. The date of construction (1909) is inscribed in the spandrels at each end of the structure. The bridge spans 24 feet and is 187 feet wide. The fill slopes to just a few feet above the crown of the arch at each face. Several utility lines run under the bridge, supported by brackets attached to its faces and intrados.

Historical and Technological Significance: The New Jersey Cut-Off, of which this arched tunnel is a part, was built in 1908-1911 and is historically and technologically distinguished in the areas of engineering and transportation (Criteria A, C). The cut-off is an important engineering accomplishment of the early 20th century. The Delaware, Lackawanna & Western RR (DL&W) designed and built the line to improve the efficiency of train travel across the mountainous terrain of northwestern New Jersey in Warren, Sussex, and Morris counties. The design and construction of a railroad that rises and falls just eleven feet over its length of 28.45 miles while crossing the mountains and valleys of northwestern New Jersey is remarkable even today. The decision to use reinforced concrete exclusively for all structures along the route was a pioneering action that attracted the attention of the engineering profession. The railroad's use of reinforced concrete did much to prove the material to be as strong and durable as the engineers of the early-20th century had anticipated. The DL&W also made full use of the moldable qualities of the material, designing not just functional structures, but also aesthetically pleasing ones that enhance the beauty of the railroad.

Sixteen structures are included in the NJDOT Historic Bridge Survey, but other structures, including viaducts, tunnels, and stations, were observed within Warren and Sussex counties. The structures not included in this survey appear to have integrity consistent with those bridges and tunnels that are included.

The New Jersey Cutoff is the culmination of over 55 years of efforts by the company to improve its route across New Jersey to New York City. The Delaware, Lackawanna and Western Railroad (DL&W), composed of a network of smaller railroads in Pennsylvania, New York and New Jersey, was formed in 1853 for the purpose of moving anthracite coal from the mining regions of northeastern Pennsylvania to market locations. It started from the merger of the Liggett's Gap RR and the Delaware & Cobbs Gap RR, which had been chartered and developed around 1850 by parties interested in carrying the coal to the Erie RR to the west and to the Delaware River to the east.

As the anthracite coal mining industry grew, so did the desire to increase the access to markets. In reaching to the east the DL&W needed a connection in New Jersey. They incorporated the Warren Railroad in the 1851 to carry trains from the Delaware River at Columbia (Warren County, NJ) to Central Railroad of New Jersey tracks in Hampton (Hunterdon County, NJ). From there the coal could be moved eastward to Elizabethport (near Newark, NJ). Commuters also traveled this route to get to New York City. In the late 1860s the DL&W became dissatisfied with the CNJ connections and sought their own access to the New York markets. In 1868 they leased the Morris & Essex RR, which was developed in the 1830s and 1840s in Morris, Essex and Hudson counties and the 1850s in Warren

County. The M&E crossed New Jersey from Hoboken to Phillipsburg on the Delaware River.

Though the DL&W controlled several railroads (like the M&E, Warren, Valley, etc.), each was operated separately until 1899, when new DL&W president William Truesdale centralized control of the company. This move allowed for increased efficiency for the railroad as a whole. In addition to the reorganization, Truesdale undertook an ambitious plan to modernize the routes (All background information gathered from Taber, 1977).

In seeking a more efficient, less circuitous route to replace the 1860s Morris & Essex Railroad right-of-way, the DL&W considered three plans to build a completely new route (Taber and Taber, 1980:34-36). The plan chosen was a completely new line that would include massive cuts and fills to virtually eliminate grade changes. The existing line was nearly 40 miles long, had 57 curves comprising almost 13 miles of track, and a maximum grade of 60.2 feet per mile with a total rise and fall of 248 feet. The new layout, known as the New Jersey Cut-Off, limited the number and degree of curves and saved over 11 miles of track from the circuitous old line. This was the most expensive choice, costing $11,065,511.43 when completed (Taber and Taber, 1980:39), but the anticipated benefits for the railroad outweighed the cost.

Beginning in 1908 and under the direction of DL&W Chief Engineer George Ray, layout and design of the cut-off began. The line was to be 28.45 miles long, with a total rise and fall of just 11 feet and less than 5 miles of curved track. The new route would require 73 structures, including two massive viaducts, twelve overhead highway bridges and numerous crossings of roads and minor watercourses. Over 14 million cubic yards of both cut and fill were needed to create the relatively flat crossing of the hills and valleys of northwestern New Jersey (Taber and Taber, 1980:36).

Mr. Ray decided that reinforced concrete would be used for all structures along the route. This was the first time such a decision was made, causing the nickname of the "reinforced concrete railroad" to be used by the engineering profession when discussing the cut-off (Taber and Taber, 1980:36). Reinforced concrete was a state-of-the-art building material with yet unknown ultimate capabilities. It was thought to be as strong and durable as stone, and seemingly more permanent than wood or even steel.

Uncommon methods were used for the construction of the fills along the route. While the traditional method of building a wooden trestle to run dumping trains on was used for most fills, tracking was hung from suspended cables for the fills of greater magnitude. Dumping trains would carry fill onto the suspended tracks and dump the fill material from there. Most of the fill used on the cutoff was taken from the many cuts that were made, but even that was not enough. The DL&W bought 760 acres of farm land from which the contractors could dig additional fill. Five million pounds of dynamite was used to make the cuts. The Pequest Fill (Milepoint 55.85, Green Township, Sussex County) was the largest along the cut-off and in 1908 was claimed to be the "largest railway embankment ever made" (Engineering News, 1908:72). It was over 3 miles long and was up to 140 feet high. Over 6.5 million cubic yards of fill were necessary to reach the proper grade on this fill (Taber and Taber, 1980:36).

The DL&W chose to use similar structures for similar uses along the line. Where highway bridges were needed to cross their tracks, they designed reinforced concrete deck arch bridges, a bridge type that was capable of relatively long spans while providing dynamic and graceful forms. At least eleven deck arches were built in New Jersey, (1900G12, 1900G13, 1900K07, 1900C17, 2153166, 2153165, 2153164, 2153163, 2153162, 2153161, 2153160), all of them single span structures with one of two types of balustrades. Though design adjustments had to be made for roadway alignment and foundation conditions, the deck arch bridges are very similar structures.

Reinforced concrete arch tunnels were constructed where the cut-off crossed over roads or small waterways. These structures often supported high fill embankments as the cut-off crossed a valley. Over 35 of these structures were built along the line, and several of them are included in the Historic Bridge Survey (Wasigan and Simpson roads in Warren County, 2117152). Slab-roofed tunnels and box culverts were also built to carry the right-of-way over roads and streams.

The largest structures along the line were the two multi-span viaducts; the Delaware River Viaduct (2114159) and the Paulins Kill Viaduct (Milepoint 70.63, Knowlton Twp.). Both are open spandrel arch bridges that span valleys and larger water courses. The 9-span Delaware River Viaduct crosses the river as well as the highways that parallel it on both sides. It is 1,450 feet long and carries trains 65 feet above the river. The nine span structure has seven open spandrel arches and two deck arch approach spans on the Pennsylvania end. The 7-span Paulins Kill Viaduct in Hainesburg (Warren County) is 1100 feet long, but it is more graceful and magnificent as it rises 115 feet above the valley floor. It passes over the Paulins Kill River, the New York, Susquehanna and Western Railroad and the valley they run through. It was the most impressive structure on the DL&W main line prior to the building of the Tunkhannock Viaduct in Nicholson, Pennsylvania, completed in 1915.

Around the turn of the century, reinforced concrete arches were generally limited to relatively short and often single span bridges. The dead load carried by the arches was reduced with the introduction of open spandrel arches. The lighter structures were capable of longer spans and more aesthetically pleasing large bridges. The Walnut Lane bridge (1906-8) over Wissahickon Creek in Philadelphia was a forerunner of the type, though it used virtually no steel reinforcement in the two ribs (Condit, 1961:198). The use of reinforcement made the possibilities even greater. Under Ray's direction, the length and number of spans increased to create massive structures that dominated the landscape.

The New Jersey Cut-Off was divided into sections for bidding. Seven contractors were each awarded one section of the line, including contractors from as far away as Billings, Montana and Roanoke, Virginia. Each contract included all clearing, grading and masonry construction (Wheaton, 1908).

In addition to its engineering significance, the railroad right-of-way ranks historically as one of the most significant in the state, owing to the impact moving coal across the state had on the development of transportation systems within New Jersey. The Lehigh Valley Railroad played a significant role in the development of transportation and transportation-driven development in the northern half of the state, and the cut-off stands as one of the most ambitious remnants of the coal era in the state.

In summation, the viaducts, tunnels, overpasses, cuts, and fills on the New Jersey Cut-Off (1908-1911) form part of a unified design that was, and still is, one of the most remarkable engineering achievements of the early 20th century in the region. Furthermore, the New Jersey Cut-Off is one of the most visible remnants of the DL&W, and is illustrative of the history of one of the largest movers of coal that

contributed to the transportation-driven economic growth of the northern half of the state. The New Jersey Cut-Off is a significant part of the western New Jersey historic landscape and transportation systems.

Boundary Description and Justification: The significance of the structure is based, in part, on its historic association and physical connection with a right-of-way that is both historically and technologically important. In New Jersey, the potential historic corridor appears to be limited to the railroad right-of-way. The potential historic corridor is approximately 28 miles long stretching from the Delaware River to the eastern junction at Hopatcong, Morris County. The New Jersey Cut-Off's western junction is in Slateford, Pennsylvania on the west bank of the Delaware River. The entire route and all its related structures were not surveyed as part of this project, but those portions of the route that were surveyed or observed as part of the 1991-1993 Historic Bridge Survey have integrity of setting and original design and appear to representative of the overall state of preservation and completeness of the route in Sussex and Warren counties.

PHOTO: 167:12-13 (07/92) REVISED BY (DATE): QUAD: Blairstown