



**Historic Architectural Resources
Technical Environmental Study (Volume I)**

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**US Department of Transportation
Federal Highway Administration
New Jersey Department of Transportation**



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EXECUTIVE SUMMARY

The following report summarizes the results of a Historic Architectural Resources Survey conducted in association with the proposed improvements to the I-295/I-76/Route 42 Interchange in Bellmawr and Mount Ephraim boroughs, Camden County, New Jersey. The investigation included documentary research, field survey, and analysis. The purposes of the investigation were to identify and evaluate historic architectural resources located within the proposed Area of Potential Effects (APE) for National Register of Historic Places (National Register) eligibility and to assess the potential effects of the proposed project on historic properties (those listed in or eligible for listing in the National Register) within the APE.

Background research revealed that no historic resources within the APE are listed in the National Register. The following properties within the APE were recommended potentially eligible for listing in the National Register in “Sites and Structures: The Camden County Inventory of Historic Places” (Greenberg 1992): the Bell Farm, the Harrison House (Harrison-Glover House), and Bellmawr Park (also known as the Bellmawr Park Mutual Housing Historic District). No additional resources within the proposed APE were identified during previous cultural resources investigations.

An intensive-level historic architectural field survey was conducted within the proposed APE in May 2004. The survey revealed that one previously identified resource, the Bell Farm, is no longer extant. A total of 51 architectural resources aged 50 years or older were identified within the APE during the intensive-level survey, including two extant, previously documented resources (the Harrison-Glover House and Bellmawr Park). The resources identified include eight residential historic districts and 43 individual properties. As a result of the investigations, one resource, Bellmawr Park, was recommended eligible for listing in the National Register of Historic Places. The remaining 50 resources lacked historic or architectural significance and/or sufficient architectural integrity to qualify for National Register eligibility. A Draft Historic Architectural Resources Technical Environmental Study presenting these findings was submitted in May 2005.

The New Jersey State Historic Preservation Office (NJSHPO) issued an opinion of eligibility for Bellmawr Park (the Bellmawr Park Mutual Housing Historic District) in a letter dated July 6, 2005, stating that the district is eligible for listing in the National Register under Criteria A and C (Appendix A). It was originally recommended that the Bellmawr Park School be excluded from the National Register boundaries of the district due to a current lack of association with the Bellmawr Park Mutual Housing Corporation. However, the NJSHPO opinion letter states that the school should be included as a contributing element to the district because it was constructed during the period of significance and was historically associated with Bellmawr Park. The New Jersey Department of Transportation (NJDOT) and the Federal Highway Administration (FHWA) concurred with NJSHPO’s opinion.

Application of the Definition of Effect and the Criteria of Adverse Effect indicate that the project would have an *Adverse Effect* on the Bellmawr Park Mutual Housing Historic District under all alternatives because it would alter the characteristics that qualify the resource for inclusion in the National Register in a manner that would diminish the resource’s integrity.

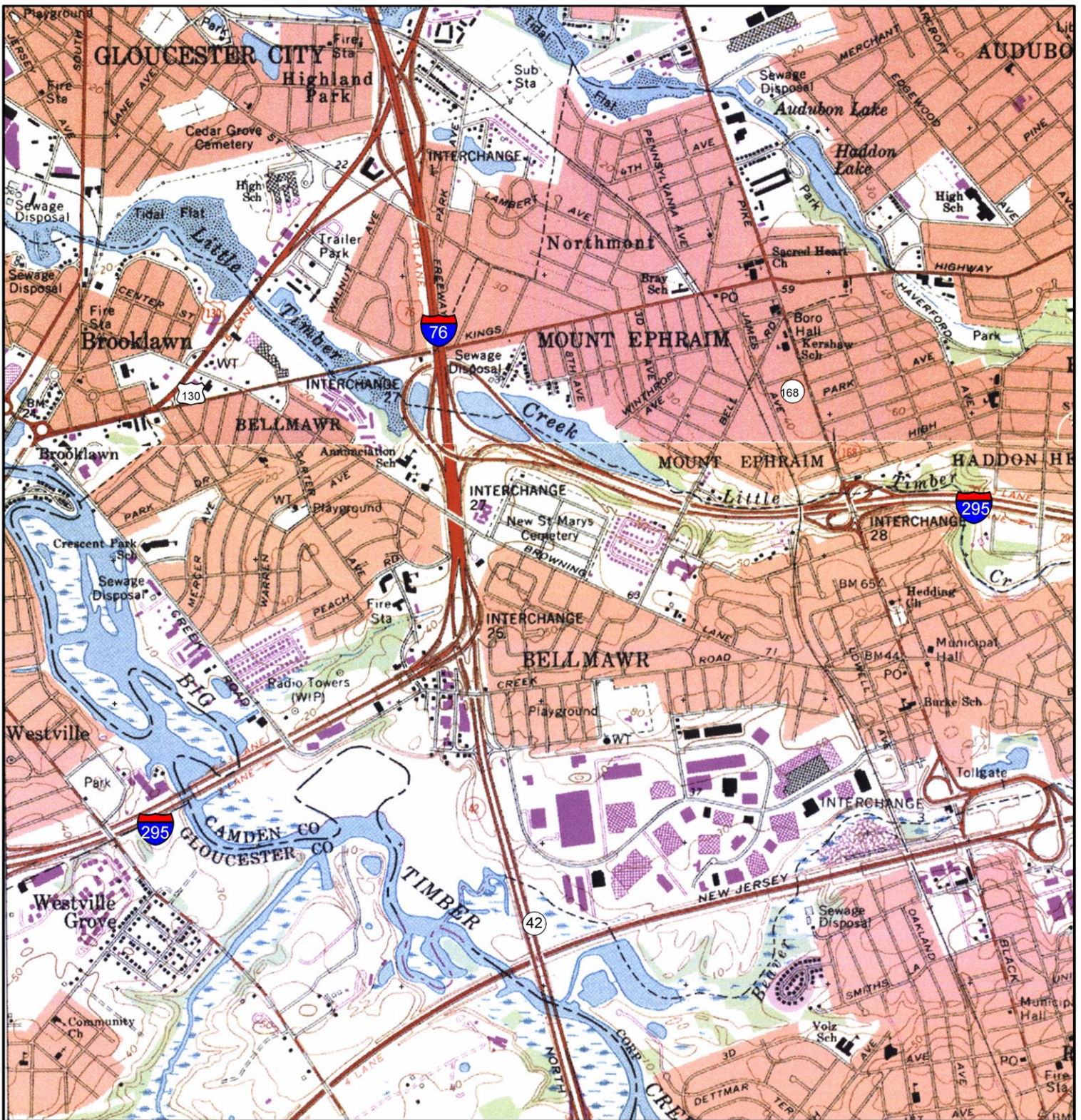
1.0 Introduction

1.0 INTRODUCTION

The following report summarizes the results of a Historic Architectural Resources Survey conducted in association with the proposed improvements to the I-295/I-76/Route 42 Interchange in Bellmawr and Mount Ephraim boroughs, Camden County, New Jersey (Figure 1). The investigation included documentary research, field survey, and analysis. The purpose of the architectural investigation was to assess the presence of historic buildings, structures, districts, sites, or objects within the Area of Potential Effects (APE), to evaluate the eligibility of resources for inclusion in the National Register, and to assess the potential effects of the proposed project on historic properties (those that are listed in or eligible for listing in the National Register) within the APE. The historical investigation was performed to provide an appropriate and accurate context in which to evaluate the historic significance of the historic architectural resources within the APE. The historic architectural APE constitutes a broad area to account for potential direct, visual, and audible impacts (Figure 2).

NJDOT submitted the Draft Historic Architectural Resources Technical Environmental Study, which included documentation of the APE, the results of architectural and historical investigations of the APE, and National Register evaluations to the NJSHPO and FHWA in June 2005. The NJSHPO issued an opinion of eligibility on July 6, 2005, and the FHWA concurred upon the findings on July 18, 2005 (Appendix A). This report expands upon the draft report with an assessment of the potential effects of the proposed project to historic properties within the APE.

The investigations were conducted in accordance with the NJSHPO *Guidelines for Architectural Survey*. In addition, all resource evaluations were conducted in accordance with Section 106 of the National Historic Preservation Act of 1966, as amended; the Procedures for the Protection of Historic and Cultural Properties set forth in 36 CFR 800, as amended; 23 CFR 771, as amended; guidance published by the Advisory Council on Historic Preservation (ACHP); Sections 1(3) and 2(b) of Executive Order 11593; and the National Environmental Policy Act of 1966. This legislation requires that the effect(s) of any federally assisted undertaking on historically significant buildings, structures, districts, objects, or sites be taken into account during the project



SOURCE:

- Camden, NJ-PA
USGS 7.5 Minute Quadrangle
1967, Revised 1994
- Runnemede, NJ
USGS 7.5 Minute Quadrangle
1964, Revised 1994

0 1,000 2,000 4,000
Feet

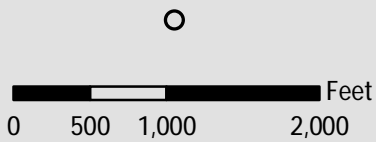


Q:\2652\technical\GIS\Alternatives-2005\PROJECT LOCATION MAP

NEW JERSEY DEPARTMENT OF TRANSPORTATION

I-295 / I-76/ ROUTE 42
Direct Connection
Camden County
Figure 1
Project Location Map

Figure 2
Historic Architectural APE
I-295/I-76/Route 42 Direct Connection
Camden County, New Jersey



planning process. Significant resources are those that are listed in or eligible for listing in the National Register.

A.D. Marble & Company of Mount Laurel, New Jersey, prepared this report in association with Dewberry-Goodkind, Inc. of Parsippany, New Jersey, on behalf of the NJDOT. Field investigations were conducted in July 2002 and May 2004 and research was conducted in November and December 2001, July and August 2002, October and November 2003, and April 2004. Elizabeth Amisson was the Architectural Historian for the historic architectural survey, and Paul W. Schopp was the Project Historian. Elizabeth Amisson and Paul W. Schopp authored the report.

2.0 Project Description

2.0 PROJECT DESCRIPTION

2.1 Project Area Overview

The I-295/I-76/Route 42 Direct Connection project involves the reconstruction of Interstate 295 (I-295), Interstate 76 (I-76), New Jersey State Route 42 (Route 42), and affected roadway segments traversing the Boroughs of Bellmawr and Mount Ephraim and Gloucester City, Camden County. The existing interchange, which was constructed between 1958 and 1961, is insufficient to accommodate current traffic volumes and travel speeds safely, resulting in an accident rate that is more than seven times the statewide average. Additionally, failing levels of service on the interchange ramps, combined with the congestion of local streets, adversely affects the quality of life in the surrounding communities.

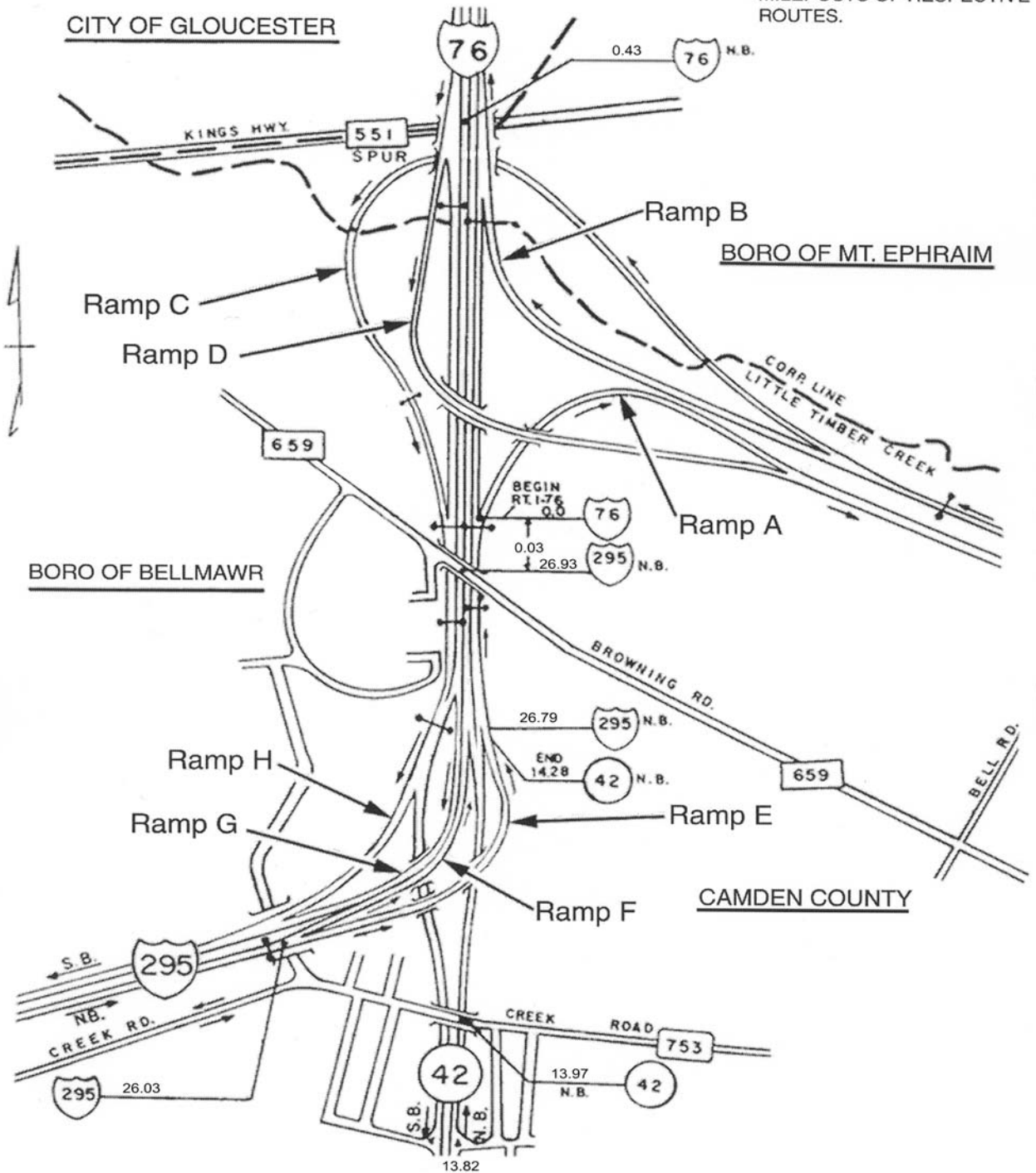
A Project Location Map is provided in Figure 1. The study area for the I-295/I-76/Route 42 Direct Connection project includes several residential, commercial, industrial, and public/recreational areas in Bellmawr, Mount Ephraim, and Gloucester City. The project limits for the I-295/I-76/Route 42 Direct Connection follow.

Along the Route 42/I-76 corridor, the study area extends from the southerly limit of Route 42 at Leaf Avenue, Mile Post (M.P.) 13.82, north to where Route 42 ends at M.P. 14.28 and merges with I-295 at M.P. 26.79. The I-295 corridor includes only a short section of I-295 roadway from M.P. 26.79 to M.P. 26.96 before I-295 continues north following Ramp A. Additionally, the I-76 section of the project begins at M.P. 0.00 and continues to the northerly limit just south of Crescent Boulevard (Route 130) over I-76 at M.P. 1.15. Along I-295, the study area extends from the southerly limit of Creek Road (CR 753) over I-295 (M.P. 26.03), to the merge with Route 42 (M.P. 26.79), and continues north to M.P. 28.16, where Black Horse Pike (Route 168) crosses over I-295.

2.2 Description of Existing Facilities

The following is a description of the existing roadways. Figure 3 is an excerpt from the NJDOT Straight Line Diagram, which provides an overview of the interchange configuration.

NOTE: DECIMAL NUMBERS SHOW MILEPOSTS OF RESPECTIVE ROUTES.



NEW JERSEY DEPARTMENT OF TRANSPORTATION

I-295 / I-76 / ROUTE 42

Direct Connection

Camden County

Figure 3

Overview of Existing Interchange Configuration

2.2.1 Ramps

Ramp A

Ramp A connects northbound Route 42 with northbound I-295.

Ramp B

Ramp B connects southbound I-295 with northbound I-76.

Ramp C

Ramp C connects southbound I-295 with southbound Route 42.

Ramp D

Ramp D connects southbound I-76 with northbound I-295.

Ramp E

Ramp E connects northbound I-295 with northbound I-76.

Ramp F

Ramp F connects northbound I-295 with the I-76 northbound express lanes.

Ramp G

Ramp G connects the I-76 southbound express traffic with southbound I-295.

Ramp H

Ramp H connects southbound I-76 with southbound I-295.

2.2.2 I-295/I-76/Route 42 from the Southern Project Limit

I-295 northbound consists of three 12-foot lanes with a 12-foot right shoulder. There is a 50-foot wide grass median separating the northbound and southbound lanes. The three lane section terminates in the vicinity of the bridge over Essex Avenue in Bellmawr, and forms Ramps E and F, which lead traffic to I-76 northbound local and express lanes, respectively. Ramp E becomes Ramp A, which is considered a continuation of I-295 northbound, and carries I-295

through-traffic northbound. Ramp A merges with Ramp D, carrying I-76 northbound traffic onto I-295, and together re-form the three lane section of I-295 northbound.

Route 42 northbound consists of four 12-foot lanes with a 12-foot right shoulder and a concrete median barrier curb. Route 42 ends at the merge of Ramp E carrying traffic from I-295 northbound. At this point, Route 42 becomes I-295 northbound which continues to the Ramp A gore. At the gore, I-76 northbound begins for through-traffic while traffic heading to I-295 must exit onto Ramp A. Traffic traveling from Route 42 northbound to I-295 northbound must merge across the lanes created by Ramp E to exit onto Ramp A to continue onto I-295, as the lanes of Ramp E form part of the express and local lanes of I-76 northbound.

2.2.3 I-295/I-76/Route 42 from the Northern Project Limit

I-295 southbound consists of three 12-foot lanes with a 12-foot right shoulder. Approximately 1,000 feet south of the Bell Road overpass in Mt. Ephraim, the travel lanes diverge into Ramps B and C. Ramp B carries traffic to I-76 northbound lanes. Ramp C, also known as “Al-Jo’s Curve,” carries I-295 southbound through-traffic via Ramp H, while traffic to Route 42 exits from the left lane. Ramp G, carrying I-76 and Route 42 southbound traffic merges with Ramp H, re-forming the 3-lane southbound section of I-295.

I-76 southbound consists of four 12-foot lanes with a 12-foot shoulder. Ramp D carries traffic from I-76 to I-295 northbound. At the Ramp C merge, I-76 ends, becoming I-295 southbound. Traffic continuing on I-295 southbound exits at Ramp G, while through-traffic continues onto Route 42 southbound past the Ramp G exit. Traffic traveling on I-76 to Route 42 must stay in the right lane after the Ramp C merge, then move to the left lane across merging traffic from I-295 southbound to continue onto Route 42. Traffic continuing to I-295 southbound exits right onto Ramp H.

2.3 Purpose and Need

2.3.1 Purpose

The purpose of this project is to improve traffic safety, reduce traffic congestion, and meet driver expectations by improving the direct connection of the I-295 mainline and the interchange of I-295/I-76/Route 42.

2.3.2 Need

There is a significant accident history at the interchange. The interchange's existing roadways include a number of geometric deficiencies that can be considered contributing factors to the high number of accidents. The deficiencies were identified from NJDOT record construction drawings and Structural Inventory and Appraisal (SI&A) Sheets.

Improve Safety

Accident data for the years 1995 through 2000 were reviewed. Since statewide accident rates were available for 1995, 1996, and 1999, a comparison of the accident rates on I-295, I-76, and Route 42 for these years was made with the statewide average.

During the 1995 to 1999 period, the I-295 roadway segments from M.P. 26.4 to M.P. 28.2 had accident rates over seven times the statewide average. Of these segments, M.P. 26.4 and 27.6 and M.P. 28 to 28.2, lengths that encompass the area of the interchange with Route 42 and I-76, had a substantially higher number of accidents than sections of I-295 immediately north and south of the interchange. For example, in 1995, M.P. 26.4 to 27.0 had almost seven times more accidents than the statewide average, while M.P. 26.8 to M.P. 27.1 had the most accidents in each of the analyzed years.

All six segments of Route 42 (from M.P. 13.2 to M.P. 14.28) had accident rates in excess of the statewide average. In 1996, four segments (from M.P. 13.45 to M.P. 14.28) had accident rates, per million vehicle miles, greater than the statewide average. In 1999, four segments (from M.P. 13.44 to M.P. 14.28) had accident rates, per million vehicle miles, greater than the statewide average. In the years 1995, 1996, and 1999, one segment had an accident rate four times the statewide average.

I-76 accident rates were similar to those of I-295 and Route 42 in the 1995 to 1999 time frame. For 1995, four segments (from M.P. 0.0 to M.P. 0.8) had accident rates that exceed the statewide average. One segment had an accident rate twice the statewide average. In 1996 five segments (from M.P. 0.0 to M.P. 0.8) had accident rates greater than the statewide average, with one segment being three times the statewide average. On I-76 in 1999, three segments (from M.P. 0.0 to M.P. 0.53) had accident rates in excess of the statewide average. In 1999, one segment had an accident history four times greater than the statewide average. Segments that were over-represented, in all three years that were compared with statewide averages, were M.P. 0.0 to 0.3 and 0.3 to 0.5. These segments mainly encompass the area in which I-76 is combined with I-295.

Geometric and Structural Deficiencies

The existing interchange has numerous substandard geometric design elements. These include horizontal curvature, stopping sight distance, superelevation, shoulder widths and acceleration and deceleration lane lengths. These are present along I-295, I-76, Route 42, and ramps at various locations. Since a majority of the improvements will be on new alignments, these substandard features will be addressed as part of the project.

In addition to the geometric deficiencies noted above, several bridges within the interchange have been identified as structurally deficient or functionally obsolete due to substandard vertical and horizontal clearances. Once again, since a majority of the improvements will be on new alignments, these structures will be replaced as part of the project.

Driver Expectations

While there is a definite need to correct the geometric deficiencies in existing ramps and structures, driver expectations also play a large role in the high accident rates at the interchange and necessitate improved safety. The posted speed limits on the existing ramps that serve the through-traffic on I-295 are inconsistent with typical operating speeds on an interstate highway. The posted speed limit on all of the highway approaches to the interchange is 55 miles per hour (MPH). The 20 MPH discrepancy between the posted speed limits (and higher operating speeds)

on the approach highways and the 35 MPH speed on the ramps can be considered as a contributing factor in the interchange's overall poor accident record.

Operational Deficiencies

The lack of a direct connection for through movement on I-295, significant weaving problems, deficient connecting ramps, and high volumes of traffic all result in operational deficiencies (or congestion) within and near the interchange. The operational deficiencies on I-295, I-76, and Route 42, particularly the queuing of traffic and poor Levels of Service (LOS) that cause excessive delays, impact not only regional traffic and commuters using the highways, but local arterials and neighborhood streets as well. Excessive delays at the interchange result in highway traffic exiting onto surrounding local arterials, thereby further adding to congestion in the region. The diverted traffic, in turn, causes congestion on local roads, compromises traffic and pedestrian safety, increases noise levels, and lowers air quality in the community, which disproportionately tax the capacity and life of local roadways.

The effective operation of any roadway network, be it highway, local arterial, or street intersection, is measured by the LOS categories ranging from A to F. LOS A represents the most favorable operating conditions with little or no delay. LOS F is the worst operating condition occurring when demand volume exceeds the capacity of the roadway resulting in severe congestion. Specific sections of the interchange that experience a poor LOS (LOS E or F) are highlighted in Table 1. Of the eight ramps studied in detail, five operate at a LOS E or worse for at least one of the two peak hours (AM and PM).

In addition, a weaving condition exists on I-76/Route 42 between Ramp E and Ramp A. Traffic on Ramp E wishing to proceed north on I-76 must weave with traffic from northbound Route 42 proceeding north on I-295. Due to the volumes of traffic involved in this section of the interchange (specifically the high volume of traffic from Ramp E proceeding to Ramp A) this section of the roadway experiences failure. It should be noted that the traffic exiting Ramp E and proceeding on Ramp A is “through” traffic that could be expected to stay on mainline I-295 if a mainline section of the highway were available.

Table 1. Existing Level of Service.

Roadway/Ramp	Peak Hour Level of Service	
	AM	PM
I-295 - Northbound		
South of Interchange	D	C
North of Interchange	D	E
I-295 - Southbound		
South of Interchange	E	E
North of Interchange	C	C
I-76 - Northbound		
South of Interchange	n/a ¹	n/a ¹
North of Interchange	E	C
Express Lanes	D	B
I-76 - Southbound		
South of Interchange	n/a ¹	n/a ¹
North of Interchange	C	E
Route 42 - Northbound		
South of Interchange	D	C
North of Interchange	n/a ¹	n/a ¹
Route 42 - Southbound		
South of Interchange	B	D
North of Interchange	n/a ¹	n/a ¹
Ramp A	F	F
Ramp B	E	B
Ramp C	F	F
Ramp D	B	C
Ramp E	E	E
Ramp F	E	E
Ramp G	B	C
Ramp H	C	B

¹Section of roadway does not exist (see Figure 1).

2.3.3 Goals and Objectives

A set of project goals and objectives has been developed based on the project's purpose and needs described above, findings from previous studies, and goals developed during the partnering meetings on December 11-12, 2001. The goals and objectives are a compendium of statements made by the NJDOT, Federal Highway Administration (FHWA), agencies, local elected officials, residents, and other stakeholders in the project. As such, the goals and objectives are wide-ranging and represent different levels of priority for each stakeholder.

While the project may not be able to satisfy all goals and objectives listed herein, the preferred alternative seeks to address as many as possible. The project's goals and objectives are as follows:

- Improve safety by constructing a roadway system that meets interstate standards for geometric design.
- Provide a direct connection for through-traffic on I-295 with a design speed consistent with that of the interchange's approach roadways.
- Reduce congestion on local arterials such as Route 168 and US 130 and decrease commuter traffic on neighborhood streets, thereby improving local traffic mobility, pedestrian safety, and the level of service on I-295. In addition, noise levels would decrease and air quality would improve.
- Enhance regional economic development by increasing overall mobility. In addition, the improved roadway network conforms to State and local development plans.
- Reduce the financial burden on State and local police and emergency services by decreasing the number of vehicle accidents.
- Avoid, minimize, or mitigate environmental and cultural resource impacts.
- Preserve the quality of life of communities by minimizing relocations and acquisitions of private and public property.
- Enhance opportunities for other modes of transportation, including bicycle and pedestrian, within the project area.
- Provide opportunities for intermodal use within the project area.

2.4 Description of Alternatives

The following section provides a description of the alternatives selected for further study. The alternatives were developed through a collaborative effort between stakeholder groups and were based on the objectives set forth in the project Purpose and Need statement. Graphics illustrating each alternative follow the narrative.

2.4.1 Alternative D

Alternative D, shown in Figure 4, begins in the vicinity of the Grenloch Secondary Railroad Bridge over I-295. Mainline I-295 shifts slightly south and elevates to a third level viaduct over Browning Road and Route 42 and a second level viaduct over Ramp C. The roadway meets existing I-295 pavement north of the Creek Road overpass. The I-295 Alternative D alignment crosses I-76/Route 42 at a skew through an unused area of New St. Mary's Cemetery.

Vehicles on northbound Route 42, whose destination is I-295 northbound, exit on Ramp A. This ramp configuration, in conjunction with the new I-295 mainline alignment, eliminates the current substandard weaving condition with Ramp E at this location. Ramp A crosses under Ramp E and then crosses over Route 42 northbound before joining the elevated I-295 northbound alignment just north of Browning Road.

Ramp B provides the movement from southbound I-295 to northbound I-76. Ramp C provides the movement from southbound I-295 to southbound I-76/Route 42. Ramp B and Ramp C exit I-295 from the right. Ramp B follows a similar alignment to its existing one to meet I-76 northbound. Ramp C splits from Ramp B and crosses under Ramp D, I-76, Browning Road, and I-295 to connect with Route 42 north of the Creek Road Bridge.

Ramp D is the move from I-76 southbound to I-295 northbound. Ramp D exits I-76 in much the same way that it does now. The Ramp D alignment crosses over I-76, over Ramp C, and under I-295 before merging with I-295 northbound south of Bell Road.

Northbound I-295 traffic heading north to I-76 uses Ramp E which follows essentially the same alignment as it does now.

Southbound I-76 traffic heading to I-295 southbound uses Ramp F. Ramp F diverts from I-76 from the right (existing exit is from the left), and then passes under Browning Road. Ramp F first runs parallel to Ramp C and then runs adjacent to I-295 southbound. Ramp F rises from a depressed section at Browning Road to an elevated section as it ties into I-295 southbound prior to Essex Avenue.

A summary of design features of this alternative are:

- Northbound and Southbound I-295 are side-by-side
- I-295 crosses over Route 42/I-76 on a viaduct on a skew
- I-295 on viaduct over Ramp C and Browning Road
- Ramp D on viaduct over I-76/Route 42, Ramp C and under I-295
- Two lane ramps except for Ramp F
- Removes express/local lanes on I-76 Westbound
- I-295 posted speed limit: 55 mph (design speed: 60 mph)
- Ramp speed limits: 40 mph (design speed: 45 mph)

2.4.2 Alternative D1

Alternative D1, shown in Figure 5, is almost identical to Alternative D. The primary difference is the configuration of Ramps B and C. Ramp C exits I-295 southbound from the tangent section of I-295 southbound. Ramp B exits from the right approximately 1,000 feet later. Ramp B is on a new alignment south of its present location, but ties into I-76 at a similar location. Ramp C generally follows (within 150 feet±) the existing Ramp C alignment (Al Jo's curve) and passes under I-76 and Ramp F before merging with Route 42 southbound. The substandard radius on the existing Ramp C is replaced with a larger radius. Ramp D follows the same alignment as in Alternative D.

A summary of design features of this alternative are:

- Northbound and Southbound I-295 are side-by-side
- I-295 crosses over Route 42/I-76 on a viaduct on a skew
- I-295 on viaduct over Ramp C and Browning Road
- Ramp D on viaduct over I-76/Route 42 and under I-295
- Two lane ramps except for Ramp F
- Removes express/local lanes on I-76 Westbound
- I-295 posted speed limit: 55 mph (design speed: 60 mph)
- Ramp speed limits: 40 mph (design speed: 45 mph)

2.4.3 *Alternative G2*

Alternative G2, shown in Figure 6, also begins in the vicinity of the Grenloch Secondary Railroad Bridge over I-295. The southbound and northbound lanes of I-295 align over top of each other as an over-and-under viaduct and shift south. The I-295 viaduct alignment is elevated to cross over all of the ramps as well as I-76 and Browning Road. I-295 crosses over I-76 on a skewed alignment and then diverges and lowers in elevation to meet the existing I-295 pavement following the same alignment as in Alternative D to a point just north of the Creek Road Bridge. I-295 southbound is a fourth level viaduct and northbound is a third level viaduct at the Route 42 and Browning Road crossings. I-295 southbound passes over Bell Road, whereas I-295 northbound passes under Bell Road.

Vehicles on Route 42, whose destination is I-295 northbound, exit on Ramp A. Ramp A crosses under Ramp E and then crosses over Route 42 northbound before joining the elevated I-295 northbound alignment just north of Browning Road, similar to Alternative D.

Ramp B provides the movement from southbound I-295 to northbound I-76. Ramp C provides the movement from southbound I-295 to southbound Route 42. Ramps B and C exit I-295 from the right. Ramp B follows a similar alignment to its existing alignment to meet I-76 northbound. Ramp C crosses under Ramp D, I-76, Browning Road, and I-295 to connect with Route 42 north of the Creek Road Bridge.

Ramp D is the move from I-76 southbound to I-295 northbound. Ramp D exits I-76 in much the same way that it does now. The Ramp D alignment crosses over I-76, over Ramp C, and under I-295 before merging with I-295 northbound south of Bell Road.

Northbound I-295 traffic heading north on I-76 uses Ramp E which follows essentially the same alignment as it does now.

Southbound I-76 traffic heading to I-295 southbound uses Ramp F. Ramp F diverts from I-76 from the right (existing exit is from the left), and then passes under Browning Road. Ramp F first runs parallel to Ramp C and then runs adjacent to I-295 southbound. Ramp F rises from a

depressed section at Browning Road to an elevated structure as it ties into I-295 southbound prior to Essex Avenue.

A summary of design features of this alternative are:

- Southbound I-295 placed above Northbound I-295 using a double-decker configuration
- I-295 crosses over Route 42/I-76 on a viaduct on a skew
- I-295 on viaduct over Ramp C and Browning Road
- I-295 on viaduct over Ramp D
- Ramp D on viaduct over I-76/Route 42 and Ramp C
- Two lane ramps except for Ramp F
- Removes express/local lanes on I-76 Westbound
- I-295 posted speed limit: 55 mph (design speed: 60 mph)
- Ramp speed limits: 40 mph (design speed: 45 mph)

2.4.4 Alternative H1

Alternative H1, shown in Figure 7, is almost identical to Alternative G2. The primary difference is the configuration of Ramps B and C. Ramps B and C exit from I-295 from the right. Ramp C generally follows (within 150'±) the existing Ramp C alignment (Al Jo's curve) and passes under I-76 and Ramp F before merging with Route 42 southbound. The substandard radius on the existing Ramp C is replaced with a larger radius. Ramp B splits from Ramp C to meet I-76 northbound.

A summary of design features of this alternative are:

- Southbound I-295 placed above Northbound I-295 using a double-decker configuration
- I-295 crosses over Route 42/I-76 on a viaduct on a skew
- I-295 on viaduct over Ramp C and Browning Road
- I-295 on viaduct over Ramp D
- Ramp D on viaduct over I-76/Route 42

- Two lane ramps except for Ramp F
- Removes express/local lanes on I-76 Westbound
- I-295 Posted speed limit: 55 mph (design speed: 60 mph)
- Ramp speed limits: 40 mph (design speed: 45 mph)

2.4.5 *Alternative K*

Alternative K makes I-295 a continuous direct-through alignment in the form of a tunnel beneath I-76/Route 42, as shown in Figure 8. Alternative K begins in the vicinity of the Grenloch Secondary Railroad Bridge over I-295. Mainline I-295 shifts slightly south and begins to descend at a 3.5%± grade close to New St. Mary's Cemetery. The road reaches a depth of 60 feet in the northwestern corner of New St. Mary's Cemetery, and a depth of 35 feet below the I-76/Route 42 pavement. The roadway begins to ascend at a 4% grade beside the baseball fields and is at grade to meet the I-295 pavement north of the Creek Road overpass.

Vehicles on northbound Route 42, whose destination is I-295 northbound, exit on Ramp A, which would be separated from but parallel with Route 42. This ramp configuration, in conjunction with the new I-295 mainline alignment, eliminates the current substandard weaving condition with Ramp E at this location. Ramp A then crosses under Ramp E before joining the depressed I-295 alignment north of Browning Road.

Ramp B provides the movement from southbound I-295 to northbound I-76. Ramp C provides the movement from southbound I-295 to southbound Route 42. Ramp C exits I-295 from the right and Ramp B exits from the right approximately 1,000 feet further. Ramp B follows a similar path but to the south of its existing location to meet I-76 northbound. Ramp C crosses over Ramps B and D, and I-76. Then Ramp C passes over Browning Road and I-295 to connect with Route 42 north of the Creek Road Bridge.

Ramp D is the move from I-76 southbound to I-295 northbound. Ramp D exits I-76 in much the same way that it does now. The Ramp D alignment crosses over I-76, under Ramp C, and over I-295 before merging with I-295 northbound south of Bell Road.

Northbound I-295 traffic heading north on I-76 uses Ramp E, which follows essentially the same alignment as it does now.

Southbound I-76 traffic heading to I-295 southbound uses Ramp F. Ramp F diverts from I-76 from the right (existing exit is from the left) and then passes under Browning Road. Ramp F first runs parallel to Ramp C and then runs adjacent to I-295 southbound. Ramp F rises from a depressed section at Browning Road to tie into I-295 southbound prior to Essex Avenue.

A summary of design features of this alternative are:

- Northbound and Southbound I-295 are side-by-side
- Mainline I-295 is a tunnel under I-76/Route 42 on a skew
- Ramp C on viaduct over Ramps B and D and I-76/Route 42
- Two lane ramps except for Ramp F
- Removes express/local lanes on I-76 Westbound
- I-295 Posted speed limit: 55 mph, (design speed: 60 mph)
- Ramp speed limits: 40 mph, (design speed: 45 mph)

Three local bridges are impacted by each of the alternatives. The Bell Road, Browning Road, and Creek Road bridges will be raised to provide proper vertical clearance and lengthened to accommodate the wider typical section of I-295 or I-76/Route 42. In addition, King's Highway will be lowered by approximately one foot under each alternative and Alternative K may require Essex Avenue to be lowered by approximately two feet.

2.4.6 No Build Alternative

This alternative proposes no changes to the existing interchange. Impacts to the project area will be evaluated in the same way as the other proposed alternatives, with the assessment of current conditions projected to the design year serving as the impact assessment for the no-build alternative. The no-build alternative serves as the benchmark to measure the costs and benefits of each build alternative evaluated.



- Ramp Designation
- Roadway
- Bridge
- Ramps for Missing Moves
- Roadway to be Removed



NEW JERSEY DEPARTMENT OF TRANSPORTATION

I-295 / I-76/ ROUTE 42
 Direct Connection
 Camden County
 Figure 4
 Alternative D



- Ramp Designation
- Roadway
- Bridge
- Ramps for Missing Moves
- Roadway to be Removed



0 750 1,500 3,000
Feet

NEW JERSEY DEPARTMENT OF TRANSPORTATION

I-295 / I-76/ ROUTE 42
Direct Connection
Camden County
Figure 5
Alternative D1



NEW JERSEY DEPARTMENT OF TRANSPORTATION

I-295 / I-76/ ROUTE 42
 Direct Connection
 Camden County
 Figure 6
 Alternative G2



-  - Ramp Designation
-  - Roadway
-  - Bridge
-  - Ramps for Missing Moves
-  - Roadway to be Removed



0 750 1,500 3,000
Feet

NEW JERSEY DEPARTMENT OF TRANSPORTATION

I-295 / I-76/ ROUTE 42
Direct Connection
Camden County
Figure 7
Alternative H1



- Ramp Designation
- Roadway
- Bridge
- Ramps for Missing Moves
- Roadway to be Removed



0 750 1,500 3,000
Feet

NEW JERSEY DEPARTMENT OF TRANSPORTATION

I-295 / I-76/ ROUTE 42
Direct Connection
Camden County
Figure 8
Alternative K

3.0 Methodology

3.0 METHODOLOGY

3.1 Definition of the Area of Potential Effects

This study utilizes historic contexts to identify and evaluate cultural resources within the APE, in accordance with the regulations of the ACHP [36 CFR 800.4(a) (1) and 36 CFR 800.4(b) (1)] as amended August 5, 2004, and guidelines outlined in the Secretary of the Interior's *Standards and Guidelines for Preservation Planning, Identification and Evaluation* (36 CFR 44716-44729). The APE is defined as “the geographic area within which an undertaking may cause changes in the character of or use of historic properties, if any such properties exist.” The APE includes “resources that may be directly or indirectly impacted by project activities, including acquisition of property, property easements, and/or audible and visual effects” (36 CFR Part 800: Protection of Historic Properties 1986, revised 2004).

In accordance with 36 CFR Part 800.4(a) (1) and 36 CFR 800.4(b) (1), the proposed APE associated with this project has been defined as the geographic area within which the proposed improvements to the I-295/I-76/Route 42 Interchange may directly or indirectly cause changes in the character or use of identified National Register-listed or eligible resources, if any such properties exist. The proposed historic architectural APE (Figure 2) takes into consideration the potential visual and audible effects that the proposed undertaking may have on the character and setting of any National Register-listed, eligible, or potentially eligible resources in the area.

3.2 National Register of Historic Places Eligibility Criteria

The primary goal of the historic architectural resources investigation is the identification of known or previously unknown, significant or potentially significant architectural resources. Determinations of significance or potential significance are based on the National Register of Historic Places criteria of historic significance. Potentially significant historic properties include districts, buildings, structures, objects, or sites that are at least 50 years old and meet at least one National Register criterion. Criteria used in the evaluation process are specified in the Code of Federal Regulations, Title 36, Part 60, National Register of Historic Places (36 CFR 60.4). To be eligible for inclusion in the National Register of Historic Places, a historic property(s) must possess:

the quality of significance in American History, architecture, archeology, engineering, and culture [that] is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association and:

- (a) that are associated with events that have made a significant contribution to the broad patterns of our history, or
- (b) that are associated with the lives of persons significant in our past, or
- (c) that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components lack individual distinction, or
- (d) that have yielded, or may be likely to yield, information important in prehistory or history (36 CFR 60.4).

There are several criteria considerations. Ordinarily, cemeteries, birthplaces, or graves of historical figures, properties owned by religious institutions or used for religious purposes, structures that have been moved from their original locations, reconstructed historic buildings, properties primarily commemorative in nature, and properties that have achieved significance within the past 50 years shall not be considered eligible for the National Register. However, such properties will qualify if they are integral parts of districts that do meet the criteria or if they fall within the following categories:

- (a) a religious property deriving primary significance from architectural or artistic distinction or historical importance, or
- (b) a building or structure removed from its original location but which is significant primarily for architectural value, or which is the surviving structure most importantly associated with a historic person or event, or
- (c) a birthplace or grave of a historical figure of outstanding importance if there is no other appropriate site or building directly associated with his/her productive life, or
- (d) a cemetery which derives its primary significance from graves of persons of transcendent importance, from age, from distinctive design features, or from association with historic events, or
- (e) a reconstructed building when accurately executed in a suitable environment and presented in a dignified manner as part of a restoration master plan, and when no other building or structure with the same association has survived, or

- (f) a property primarily commemorative in intent if design, age, tradition, or symbolic value has invested it with its own historic significance, or
- (g) a property achieving significance within the past 50 years if it is of exceptional importance (36 CFR 60.4).

The physical characteristics and historic significance of the overall property are examined when conducting National Register evaluations. While a property in its entirety may be considered eligible based on Criteria A, B, C, and/or D, specific data is also required for individual components therein based on date, function, history, and physical characteristics, and other information. Resources that do not significantly relate to the overall property may contribute if they independently meet the National Register criteria.

A contributing building, site, structure, or object adds to the historic architectural qualities, historic associations, or archaeological values for which a property is significant because: a) it was present during the period of significance, and possesses historic integrity reflecting its character at that time or is capable of yielding important information about the period; or b) it independently meets the National Register criteria. A noncontributing building, site, structure, or object does not add to the historic architectural qualities, historic associations, or archaeological values for which a property is significant because: a) it was not present during the period of significance; b) due to alterations, disturbances, additions, or other changes, it no longer possesses historic integrity reflecting its character at that time or is incapable of yielding important information about the period; or c) it does not independently meet the National Register criteria.

3.3 Definition of Effect

An *Effect* is defined as an alteration to the characteristics of a historic property that qualify it for inclusion in or eligibility for the National Register. The two possible results of identification and evaluation are explained below.

3.3.1 No Historic Properties Affected

If the agency official finds that either there are no historic properties present, or that there are historic properties present but the undertaking will have no effect upon them as defined in

Section 800.16(i)¹, the agency official shall provide documentation of this finding, as set forth in Section 800.11(d)², to the State Historic Preservation Office/Tribal Historic Preservation Office (SHPO/THPO). The agency official shall notify all consulting parties, including Native American tribes and Native Hawaiian organizations, and make the documentation available for public inspection prior to approving the undertaking. If the SHPO/THPO or the ACHP (if it has entered the Section 106 process) does not object within 30 days of receipt of an adequately documented finding, the agency official's responsibilities under Section 106 are fulfilled.

3.3.2 *Historic Properties Affected*

If the agency official finds that there are historic properties that might be affected by the undertaking, or the SHPO/THPO or the ACHP objects to the agency official's finding under paragraph (d)(1) of this section, the agency official shall notify all consulting parties, including Native American tribes or Native Hawaiian organizations, and invite their views on the effects and assess adverse effects, if any, in accordance with Section 800.5³.

3.4 **Criteria of Adverse Effect**

An *Adverse Effect* is found when an undertaking may alter, directly or indirectly, the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Consideration shall be given to all qualifying characteristics of a historic property, including those that may have been identified subsequent to the original evaluation of the property's eligibility for inclusion in the National Register. Adverse Effects may include reasonably foreseeable impacts that could be caused by the undertaking and that may be cumulative, may occur later in time, or may occur farther removed in distance. Adverse Effects on historic properties include, but are not limited to:

- (i) Physical destruction of or damage to all or part of the property;
- (ii) Alteration of a property, including restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation, and provision of handicapped access,

¹ As found in 36 CFR Part 800.

² As found in 36 CFR Part 800.

³ As found in 36 CFR Part 800.

that is not consistent with the Secretary's Standards for the Treatment of Historic Properties (36 CFR part 68) and applicable guidelines;

- (iii) Removal of the property from its historic location;
- (iv) Change of the character of the property's use or of physical features within the property's setting that contributes to its historic significance;
- (v) Introduction of visual, atmospheric, or audible elements that diminish the integrity of the property's significant historic features;
- (vii) Transfer, lease, or sale of property out of federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property's historic significance. (Section 800.5(a)⁴)

3.5 Results of Assessment of Adverse Effect

3.5.1 No Adverse Effect

The agency official shall maintain a record of the finding and provide information on the finding to the public on request, consistent with the confidentiality provisions of Section 800.11(c). Implementation of the undertaking in accordance with the finding as documented fulfills the agency official's responsibilities under Section 106 and 36 CFR Part 800, Section 800.11⁵. If the agency official will not conduct the undertaking as proposed in the finding, the agency official shall reopen consultation under Section 800.5(a).

3.5.2 Adverse Effect

If an Adverse Effect is found, the agency official shall consult further to resolve the Adverse Effect pursuant to Section 800.6⁶. Section 800.6 of the regulations implementing the National Historic Preservation Act describes the resolution of Adverse Effect. The procedures for resolution include continuing consultation with the agency and the SHPO, resolving Adverse Effects, and preparing a Memorandum of Agreement (MOA).

3.6 Existing Data Review

Research was conducted at several state and local repositories. National Register files, survey reports, survey forms, and maps related to the New Jersey Register of Historic Places and the National Register of Historic Places were examined at the NJSHPO. In order to provide contextual information, histories and historic maps of the project area, as well as property-

⁴ As found in 36 CFR Part 800.

⁵ As found in 36 CFR Part 800.

⁶ As found in 36 CFR Part 800.

specific tax records were also examined. Repositories visited include the New Jersey State Library and the New Jersey State Archives in Trenton; the Bellmawr Borough Tax Assessor's Office in Bellmawr; the Camden County Historical Society and the Camden County Clerk's Office in Camden; the David C. Munn Collection in Gloucester City; the Mount Ephraim Borough Tax Assessor's Office in Mount Ephraim; and Paul W. Schopp's library and archives in Riverton, New Jersey.

3.7 Historic Architectural Investigation

The objectives of the historic architectural resources investigation were 1) to locate and identify all previously documented and undocumented historic architectural resources aged 50 years or older within the proposed APE; and 2) to evaluate the potential eligibility of the resources for listing in the New Jersey Register of Historic Places and the National Register of Historic Places. The historic architectural APE is defined as the area in which the introduction of elements, most often direct or visual, but also atmospheric, could produce effects that are likely to impact historic resources (Figure 2).

3.7.1 Previously Identified Historic Resources

National Register files, survey reports, survey forms, and maps related to the New Jersey Register of Historic Places and the National Register of Historic Places were examined at the NJSHPO in July and August 2002 to identify previously surveyed resources within the proposed APE. No historic resources within the APE are listed in the National Register. The following properties within the APE were recommended potentially eligible for listing in the National Register in "Sites and Structures: The Camden County Inventory of Historic Places" (Greenberg 1992): the Bell Farm, the Harrison House (Harrison-Glover House), and Bellmawr Park (also known as the Bellmawr Park Mutual Housing Historic District). No additional resources within the APE were identified during previous cultural resources investigations.

3.7.2 Field Survey

Windshield surveys were conducted within the project area in July 2002 and April 2004. The purposes of the windshield surveys were to verify the existence of previously recorded historic architectural resources within the proposed APE, and to identify any additional resources within

the proposed APE. An intensive-level historic architectural survey was conducted in May 2004. The goals of the intensive-level field survey were to identify and document all resources aged 50 years or older within the APE. Identified resources were documented using a combination of digital photography, written notes, and sketches. Field data were then used to prepare NJSHPO survey forms for all resources.

4.0 Summary of Findings/Existing Conditions

4.0 SUMMARY OF FINDINGS/EXISTING CONDITIONS

4.1 Historic Cultural Context

Early Delaware Valley History

Henry Hudson was the first European explorer credited with the discovery of the Delaware Bay in 1609 (Pomfret 1956:4). The Dutch retained Hudson, an Englishman, to explore the New World and stake a claim for territory in the name of Holland. Other Dutch explorers soon followed, causing “the opportunistic Amsterdam and Hoorn merchants” to form the New Netherland Company in 1614 (Weslager 1961:44). In 1616, Cornelis Hendricksen explored the Delaware River using his yacht ONRUST. Cornelis Jacobsen May also sailed in American waters contemporaneous to Hendricksen. May returned in 1620 to make further explorations and obtain trade goods from the natives. His explorations of Delaware waters caused the southern tip of New Jersey to be named in his honor—Cape May (ibid.:43-48). His reports of the lands found provided the impetus for finalizing the charter for the West India Company in 1621. Weslager indicates the power this company held when he wrote:

Cornelis Jacobsen May returned to Holland in the fall of 1620 with tales of “new and fruitful lands” he had discovered, and he was soon engaged by the West India Company to take a party of colonists to New Netherland. Chartered on June 3, 1621, the Company was given a monopoly for twenty-four years to trade in certain specified foreign waters.... The Company was also delegated power to make alliances with native rulers, appoint governors and other officers, administer justice, and lay down colonies. (ibid.:48)

May departed Holland in March 1624 on the NEW NETHERLAND with a company of 30 families, mostly Walloons, to establish a colony. His first landfall in America was the mouth of the Hudson River. During the same year, May sailed south to Delaware Bay and continued up the river to Matiniconck (Burlington) Island, where he oversaw the construction of an outpost to house the Walloons and their families (ibid.:63-81). Upon discharging his passengers, Cornelis May returned to Holland in October 1624 (ibid.:58). Within two years, the Walloons abandoned this island stronghold when Peter Minuit ordered all New Netherland colonists to converge at Manhattan and strengthen the colony there (ibid.:74-75).

The founders established the West India Company to promote commerce in the Dutch New World. With the withdrawal of the Walloons from Burlington Island in 1626, Holland lost its ability to trade effectively with the natives on the Delaware River. Responding to this problem, Isaack de Rasière, first secretary of the New Netherland province, wrote to Holland in September 1626, asking:

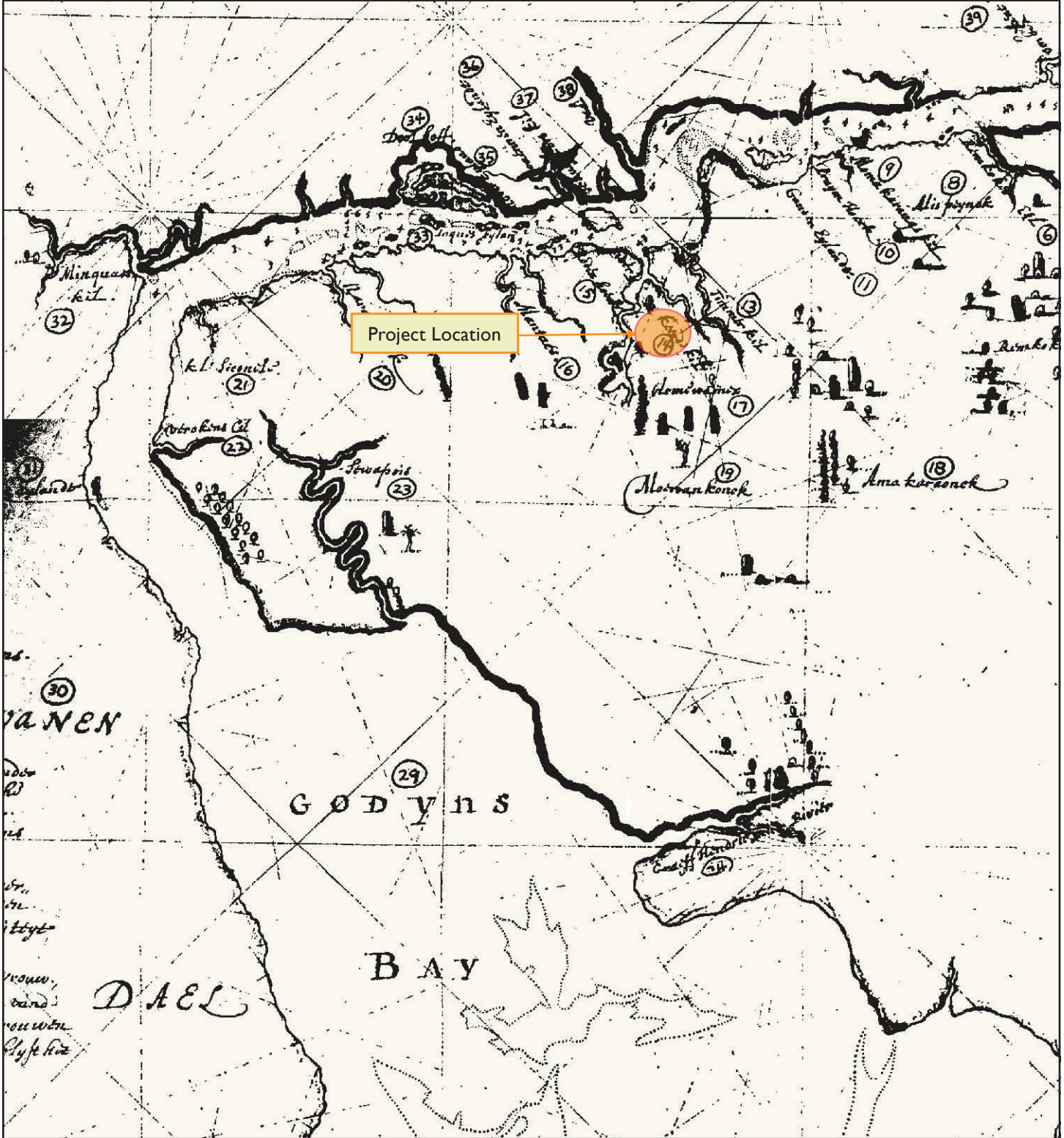
Whether it would not be advisable to erect a small fort on the South River. This, according to my judgment, is not only advisable, but necessary for the following reasons: First, to keep possession of the river, in order that others may not precede us there and erect a fort themselves.

Secondly, because, having a fort there, one could control all the trade in the river. Thirdly, because the native say that they are afraid to hunt in winter, being constantly harassed by war with the Minquaes, whereas if a fort were there, an effort could be made to reconcile them (ibid.:58-59).

Evidently approval was swift in coming, for workers completed the trading post called Fort Nassau, constructed on a small rise at the extreme southerly end of today's Gloucester City, before the end of 1626 (ibid.:122). Regarding the fort's location, Isaac Mickle, writing in his seminal 1845 work, *Reminiscences of Old Gloucester County*, stated, "We are told it was at Gloucester Point, and that, from the elevation of the land and the narrowness of the river, is certainly the most likely place in the vicinity..." (1845[1968]:4). After completing Fort Nassau, the Dutch only occupied it continually during the winter hunting season. Weslager states "Instead of maintaining permanent employees there, it was less expensive for the Company to send sloops from Manhattan at designated times to meet the Indians when they returned from hunting and were ready to barter their winter haul" (1961:122). Reportedly, only one vessel was used during this period for Delaware River trade (ibid.) (Figure 9).

By 1638, Dutch control of the Delaware River had greatly diminished due to the arrival of the Swedes, led by former Dutch Governor of New Netherland Peter Minuit, who transformed the Zuydt (South or Delaware) River portion of New Netherlands into New Sweden, or *Nya Sverige*. Under Swedish control, the boundaries of New Sweden were enlarged from the Schuylkill River to the falls or rocks at today's Trenton. During the 1640s, English interlopers from New Haven attempted two separate settlements—one on the Schuylkill River and one near today's Salem,

Figure 9
Undated Anonymous Map Showing Dutch Occupation
in the Vicinity of Fort Nassau
 I-295 / I-76 / Route 42 Direct Connection
 Camden County, New Jersey



Project Location

Map Document X: Graphics\Projects\P-593\Fig4 - AnonymousMap.ai



Not to Scale



Project Location

New Jersey—but each time Dutch and Swede forces drove off the invaders (Weslager 1961:12; Hoffecker et al. 1995:73). The Swedes forced the English from the Schuylkill in 1642. In 1643, Johan Printz arrived as the new governor of New Sweden, succeeding Peter Minuit. An experienced military leader, Printz assessed the weak Dutch presence on the Delaware and proceeded to erect Fort Elfsborgh near today’s Salem, New Jersey, to control all access to the river (Figure 10).

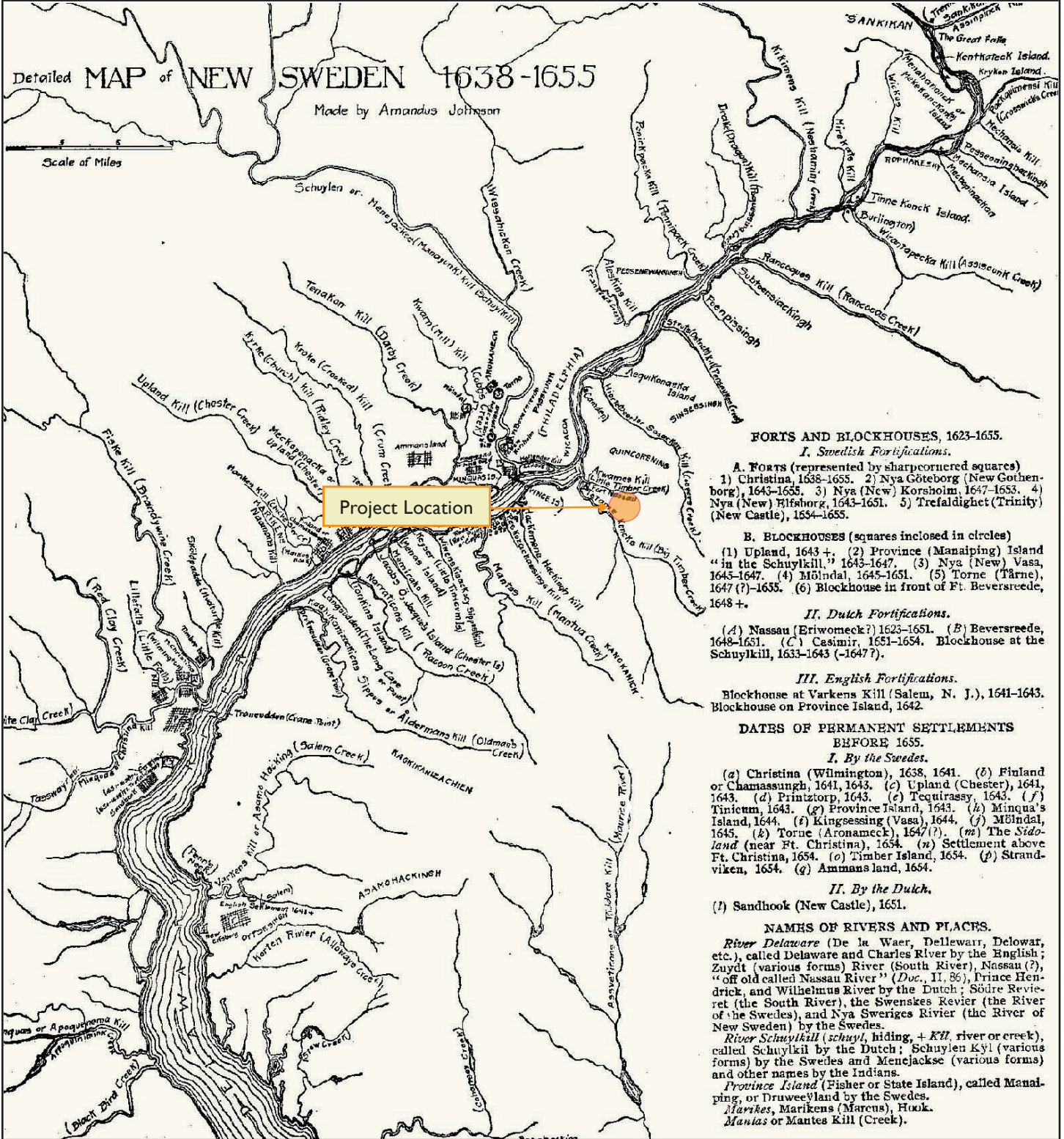
Competition in the fur trade between the Swedes and Dutch heated up when the Swedes constructed a series of three trading posts or forts on the Delaware’s western shore: Nya Korsholm, on Province Island at the Schuylkill-Delaware River confluence; Vasa or Wasa, up the Schuylkill River at Kingsessing; and a blockhouse called Molndall, erected on Cobbs Creek. All of these sites are located in today’s Pennsylvania. At the latter location, known to the indigenous people as Kakarikonk, Printz also erected a water-powered mill. Through these trading centers, the Swedes intended to obtain beaver pelts from the Minquas before they ever reached the Delaware River and crossed the river to the Dutch traders (ibid.:141-142). In April 1648, reacting to the almost total fur trade usurpation by the Swedes, the Dutch erected the palisaded Fort Beeversreede on the Schuylkill in Passyunk on the opposite shore from the Swedish outposts (ibid.:146-147). The Swedes countered by placing a new fortified trading post directly in front of Beeversreede, blocking Dutch access to its own facility (ibid.:150). Finally, the Dutch gave up in its dealings with the Swedes and acquired land from the Natives in today’s Delaware State, dismantled forts Nassau and Beeversreede and sailed down river to erect Fort Casimir in 1651 (ibid.:152-158).

The Dutch and the Swedes vied over the territory until the Dutch once again gained control of the Delaware River in 1655 (ibid.:12). Swedish influence and settlers remained in the area; however, they settled in the area called Wicaco, centered around Old Swedes Church in today’s Philadelphia. They also settled along many of the small tributary streams to the Delaware River in Pennsylvania and New Jersey on land that the natives granted them (Weigley et al. 1982:3-4). Both the Dutch and the Swedes lost their control of the region by 1664, when England took New Netherland, thereby “Making England masters of the Delaware” (Cunningham 1953:196). The

Figure 10 1915 Johnson Map of New Sweden, 1638-1655

I-295 / I-76 / Route 42 Direct Connection

Camden County, New Jersey



FORTS AND BLOCKHOUSES, 1623-1655.

I. Swedish Fortifications.

A. FORTS (represented by sharp-cornered squares)

- 1) Christina, 1638-1655.
- 2) Nya Göteborg (New Gothenburg), 1643-1655.
- 3) Nya (New) Korsholm, 1647-1655.
- 4) Nya (New) Blifshorg, 1643-1651.
- 5) Trefaldighet (Trinity) (New Castle), 1654-1655.

B. BLOCKHOUSES (squares inclosed in circles)

- (1) Upland, 1643+.
- (2) Province (Manalping) Island "in the Schuylkill," 1643-1647.
- (3) Nya (New) Vasa, 1643-1647.
- (4) Mölndal, 1645-1651.
- (5) Torne (Tärne), 1647(?) - 1655.
- (6) Blockhouse in front of Ft. Beversreede, 1648+.

II. Dutch Fortifications.

(A) Nassau (Eriwomeck?) 1623-1651. (B) Beversreede, 1648-1651. (C) Casimir, 1651-1654. Blockhouse at the Schuylkill, 1633-1643 (-1647?).

III. English Fortifications.

Blockhouse at Varkens Kill (Salem, N. J.), 1641-1643. Blockhouse on Province Island, 1642.

DATES OF PERMANENT SETTLEMENTS BEFORE 1655.

I. By the Swedes.

(a) Christina (Wilmington), 1638, 1641. (b) Finland or Chamassungh, 1641, 1643. (c) Upland (Chester), 1641, 1643. (d) Prinztorp, 1643. (e) Tequirassy, 1643. (f) Tinicum, 1643. (g) Province Island, 1643. (h) Minqua's Island, 1644. (i) Kingsessing (Vasa), 1644. (j) Mölndal, 1645. (k) Torne (Aronameck), 1647(?). (m) The Sidoland (near Ft. Christina), 1654. (n) Settlement above Ft. Christina, 1654. (o) Timber Island, 1654. (p) Strandviken, 1654. (q) Ammans land, 1654.

II. By the Dutch.

(1) Sandhook (New Castle), 1651.

NAMES OF RIVERS AND PLACES.

River Delaware (De la Waer, Dellewarr, Delowar, etc.) called Delaware and Charles River by the English; Zuydt (various forms) River (South River), Nassau (?), "off old called Nassau River" (Doc., II, 86), Prince Hendrick, and Wilhelmus River by the Dutch; Södre Revieret (the South River), the Swenskes Revier (the River of the Swedes), and Nya Sweriges Rivier (the River of New Sweden) by the Swedes.

River Schuylkill (schuyt, hiding, + Kill river or creek), called Schuykil by the Dutch; Schuylen Kÿl (various forms) by the Swedes and Menckjackse (various forms) and other names by the Indians.

Province Island (Fisher or State Island), called Manalping, or Druwecyland by the Swedes.

Marikes, Marikens (Marcus), Hook.

Mantus or Mantes Kill (Creek).

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Dutch temporarily regained control of this territory in August 1673; however, six months later, Holland finally and forever surrendered all claims to their Delaware River lands to the English under the Treaty of Westminster (Weslager 1961:13).

The English Take Control

In 1664, after winning the Delaware River from the Dutch, James, the Duke of York, gifted the land that comprises New Jersey to Lord Berkeley and Sir George Carteret. The name “New Jersey” was derived from Carteret’s governorship of the Isle of Jersey in 1649, a location he successfully defended for the Royalists (Prowell 1886:22). The English wasted no time in developing settlements along the eastern shore of the Delaware River. By February 1665 to 1666, New Jersey Governor Philip Carteret wrote from New York to “Mr. W^m. Jones and the rest of the undertakers of the Plantation upon Delaware bay or River” (Whitehead 1880:51-54). No further records have been found regarding this “plantation,” and it is unknown whether settlement actually occurred. However, the proposed plan does demonstrate an English determination to quickly establish farms and communities within its new territory won from the Dutch. As stated above, in July 1673 the Dutch reclaimed New York, but by February 1674, the Dutch surrendered all of its land in finality to the English under the Treaty of Ghent. With the territory back in British control, King Charles II issued a new patent to his brother, the Duke of York. James, in turn, executed a new deed of conveyance to Carteret (Prowell 1886:23).

With the Dutch governmental presence permanently removed from the territory, English settlers began arriving along the Delaware River seven years prior to William Penn establishing Pennsylvania. These English settlers occupied settlements taken from the Dutch, Finns, and Swedes, beginning with John Fenwick’s colony in Salem, New Jersey during 1675 to 1676. Fenwick, acting as a partner of Edward Byllynge, a bankrupt London merchant and brewmaster, acquired title to one-half of New Jersey from Lord Berkeley in 1674 under Berkeley’s original deed of 1664. Byllynge’s creditors protested Fenwick’s acquisition of this large expanse of land, suspecting that Byllynge paid for it with money that rightfully belonged to them. Most of the creditors were members of the Society of Friends or Quakers, so to resolve the disagreement, they collectively prevailed upon William Penn, Gawen Laurie, and Nicholas Lucas to act as mediators in deference to formal court action. After due consideration and some rancorous

negotiations, Penn granted one-tenth of the one-half of New Jersey to Fenwick in a tripartite deed and viewed him as a partner or tenant in common in the yet undivided land. However, Fenwick, always desirous of establishing his own colony, wasted no time gathering a band of settlers to settle Salem, Fenwick's Colony. The group of "adventurers" sailed for the New World in June 1675, an action that incensed Penn, Laurie, and Lucas, as Fenwick had signed an agreement to participate in the division of the entire landmass, receiving one-tenth of the each 10,000.0-acre block. Instead, Fenwick chose to take his land in one block, selling 148,000.0 acres to 50 investors and settlers (Pomfret 1956:62-75).

In August 1676, William Penn dispatched James Wasse, a London surgeon, to New Jersey with the West Jersey Concessions and Agreements in his possession. Penn also designated Wasse to negotiate with John Fenwick concerning land title issues and his disregard of the signed agreement. William Penn and company deputized Richard Hartshorne and Richard Guy to go with Wasse as agents. A document outlining the duties of the agents accompanied Wasse from England. The first two paragraphs describe how to deal with Fenwick and his settlers, as did various other sections in the instructions. The document directed Wasse to meet with Fenwick and as many of his followers as possible, and inform them that the title to their land might be unfounded. Fenwick's continuing capricious actions finally led to his arrest and imprisonment in New York under Governor Andros. He returned to Salem under probation in October 1677 and continued to create problems for Penn and the other trustees (Whitehead 1880:220-224; Pomfret 1956:76-79).

British Settlement of Lands Above Fenwick's Colony

Dealing with the Fenwick problem was not Wasse's only assignment. In an effort to leapfrog around the issues in Salem, paragraph three of the commissioning document orders Wasse to locate land for a town:

...thereupon some Creek or bay in some halthy Ground find out a Place fitt to make a Setlment for a Towne and then goe to the Indians and agree wth Them for a Track of Land about the said place of Tuenty or Therty myles long more or less as yee see met, and as broad as yow see meet.... (Dunn and Dunn 1981:412).

In paragraph four, it appears Penn commissions Wasse to acquire a site for a second town:

...Then Lay out four—or five Thousand Akers for a Towne and if Agustine will undertake to doe it reasonably lett him doe it for He is the fittest Man and if He think he cannot Survey soe much being in the winter time then let him lay out the less for a Towne at present If it be but two Thousand Akers and let him devide it in a hundred parts.... (ibid.).

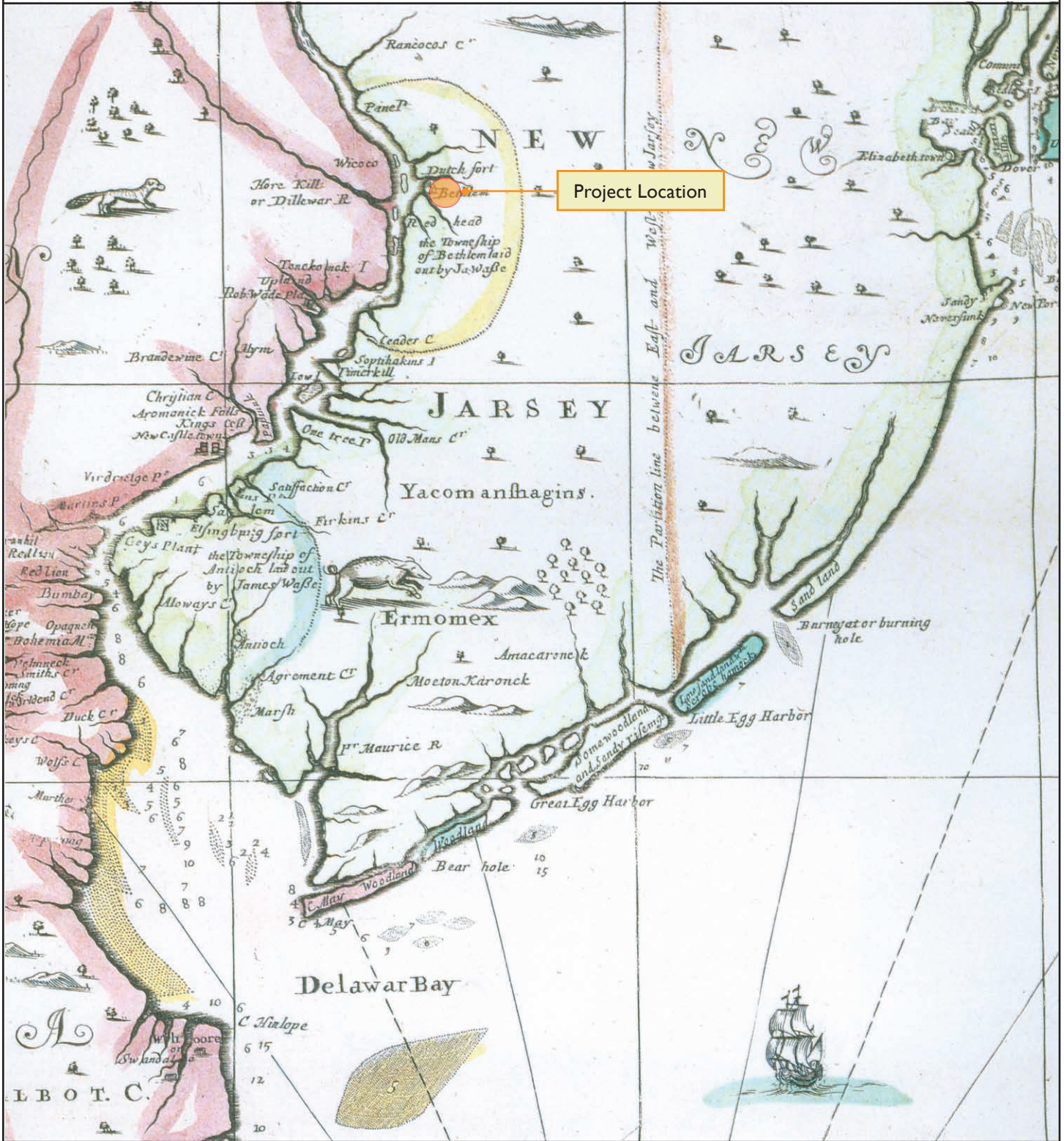
As illustrated on a map published in London by Robert Thornton and Robert Greene, it appears that Wasse carried out his commission with great success (Figure 11). Based on Thornton and Greene's map, initial settlers who arrived on the Delaware from London were slated to settle at Wasse's Bethlem Town within Bethlem Township, aka Arwames, an old aboriginal name for what would become Gloucestertown. Historian Samuel Smith writes, "To begin a settlement there, [Thomas] Olive sent up servants to cut hay for cattle he had bought..." (Smith 1765 [1877]:98). Those who emigrated from Yorkshire were designated to develop their community at the Falls of the Delaware—the present site of Trenton—where Wasse had set aside a 5,000.0-acre reserve. When the Yorkshire pioneers realized the distance that separated the two settlements, they wrote to the London transplants and proposed settling a previously unplanned community together in 1677 with the proprietary boundary line running right down the middle of High Street—the main east-west street in the proposed City of Burlington (ibid.). When the London settlers abandoned Arwames and most of the Yorkshire pioneers left the falls and relocated to Burlington, Wasse's proposed and surveyed settlements quietly evaporated and remain missing in much of the historical documentary record.

Following Burlington, the next English settlement along the Delaware River occurred in 1682 when the Newton Colony began on the main branch of Newton Creek in what, today, is West Collingswood, Camden County. The Quakers who came to settle Newton emigrated from Ireland, hence the so-called "Third Tenth" of Proprietary lands became known as the "Irish Tenth" (Smith 1765[1877]:150-152; Prowell 1886:29-30) (Figure 12). The English superimposed their own location names over pre-existing ones (e.g., Gloucester). The Swedes acted as interpreters for the English Quakers when they purchased land in Gloucester County from the aborigines. The natives welcomed the new purchasers, for they had previously

Figure 11 Circa-1678 Thornton & Greene Map Showing Bethlem Town

I-295 / I-76 / Route 42 Direct Connection

Camden County, New Jersey



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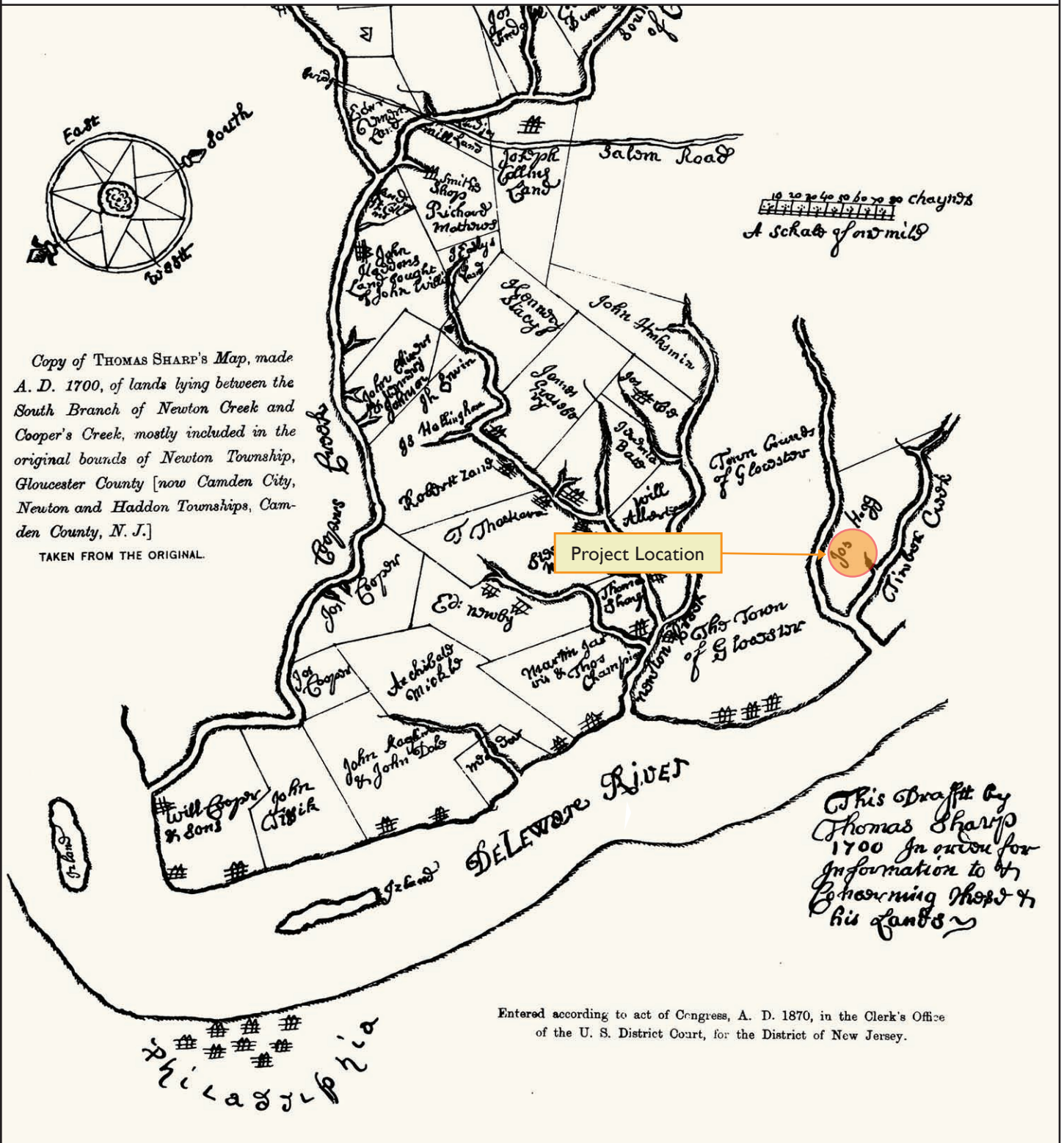


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Figure 12 1700 Sharp Map Showing the Newton Colony

I-295 / I-76 / Route 42 Direct Connection

Camden County, New Jersey



Copy of THOMAS SHARP'S Map, made A. D. 1700, of lands lying between the South Branch of Newton Creek and Cooper's Creek, mostly included in the original bounds of Newton Township, Gloucester County [now Camden City, Newton and Haddon Townships, Camden County, N. J.]

TAKEN FROM THE ORIGINAL.

This Draft by Thomas Sharp 1700 In order for Information to the Governoring Board & his Land

Entered according to act of Congress, A. D. 1870, in the Clerk's Office of the U. S. District Court, for the District of New Jersey.

Map Document X: Graphics\Projects\I-295\Historic Maps\Fig_1700SharpMap.ai



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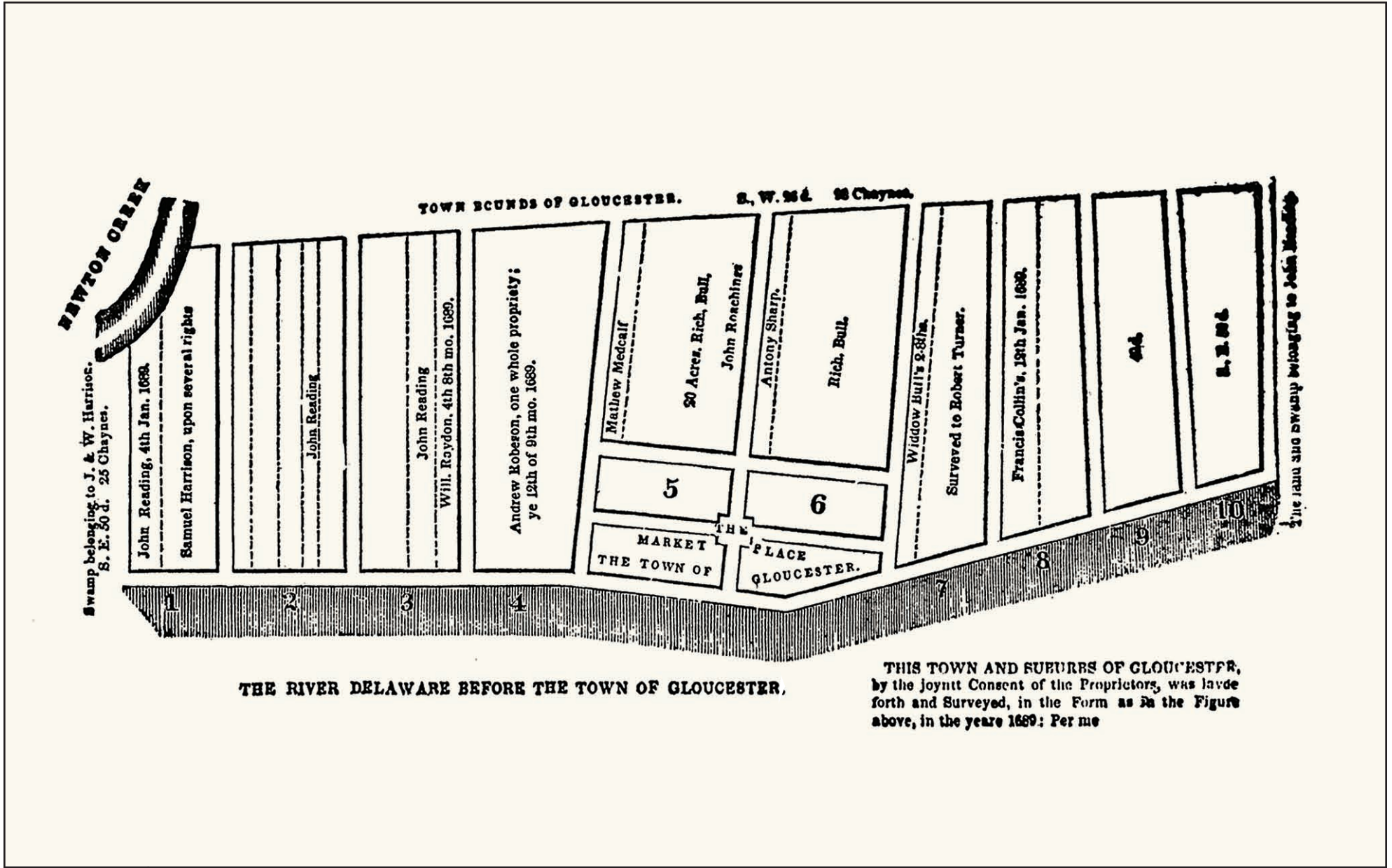
Project Location

sold most of the land to the Dutch and the Swedes. Reportedly, in 1681, William Penn “seriously considered the present site of Paulsboro as the place where he might build the center of his vast holdings” (Cunningham 1953:197). William Penn initially showed great interest in this large English colony, but later decided the land was too low and turned his attention to the higher banks on the Delaware River’s western shore, where he founded Philadelphia (ibid.).

As a result of the London émigrés joining with their fellow countrymen from Yorkshire to create Burlington, settlement at what would become Gloucestertown did not actually occur until 1684 and the inhabitants did not apply the name “Gloucester” to the town or the county until 1687. Most sources indicate that Gloucester was laid out in 1677, at least on paper, which coincides with Wasse’s preliminary survey work and the arrival of the London settlers (Smith 1765[1877]:496; Mickle 1845[1968]:45-51). As laid out, Gloucestertown consisted of town lots, lands within the town bounds, and the surrounding land outside of town (Figure 13). Prominent early surnames in the Gloucestertown area include Hugg and Harrison. Both families acquired vast tracts of land through purchases in the early years of settlement and retained their holdings within each family for successive generations (Clement 1877:283-291; Prowell 1886:584).

The Hugg Family

In April 1677, Robert Turner, Robert Zane, Thomas Thackara, William Bates, and Joseph Sleigh, all Quakers and residents of Ireland, purchased one whole share of proprietary (one-tenth of West Jersey) from Edward Byllynge and his trustees. These proprietors chose to locate their settlement in the third tenth, located between Pennsauken and Big Timber Creek—today’s Camden County—which became known early as the Irish Tenth (Prowell 1886:30). This group of Quakers had originally fled from England to Ireland to escape religious persecution, but nonetheless they soon became known as Irish Quakers. During 1681, the group arranged to sail to West Jersey on board YE OWNERS ADVENTURE, arriving at John Fenwick’s Salem Colony late in 1681, where they spent the winter. The following spring, the settlers moved north along the Delaware River until they arrived at the mouth of Newton Creek. Moving up the stream, the Quakers chose a site on the north shore of the rivulet and founded Newton Colony (Leap 1981:6).



Not to Scale

Figure 13
1845 Mickle Map Showing Early Layout of Gloucestertown
 I-295 / I-76 / Route 42 Direct Connection
 Camden County, New Jersey

As part of his proprietary holding, Newton colonist Robert Zane took up 500.0 acres of land in the fork between Little Timber and Big Timber creeks, and then sold the same land to newly arrived John Hugg, the emigrant, in 1683, recorded in February 1686 (Clement 1877:284; West Jersey Colonial Deeds B:103; Surveyor General's Office [SGO] Survey Book, 55). This transaction represents John Hugg's first land purchase in the New World and his plantation extended more than a mile up Big Timber and Little Timber Creek (Clement 1877:284-285). He continued adding to his property holdings until he possessed more than 1,300.0 acres (SGO Survey Book H:261). Eventually, the Hugg family possessed all the land between Big and Little Timber creeks for a distance of 3.0 miles up both streams (Prowell 1886:704). With this designated distance (3.0 miles) interpolated using a modern U.S. Geological Survey (USGS) quad map, the Hugg property extended along Little Timber Creek from its confluence with Big Timber Creek all the way to the Grenloch Branch railroad right-of-way situated about halfway between Bell Road and the Black Horse Pike (Route 168). A dwelling stood near the confluence of the two streams. John Hugg established a landing on Big Timber Creek, which quickly became a place of public and commercial intercourse. John Hugg remained tenured at his farm until his death in 1706 (SGO H:261; New Jersey Wills 6H).

In his will, John devised the homestead plantation to his sons, John Jr. and Elias, who had already attained adulthood when John Sr. arrived in America. They located on lands close to their father's plantation. When John Sr. died in 1706, he devised his plantation to his two sons to be equally divided between them, with the "lane" (the Irish Road or Sandy Lane; now known as Browning Road) serving as the division line. The Big Timber Creek side of the farm went to John Jr. while the lands fronting on Little Timber Creek descended to Elias (SGO H:261; New Jersey Wills 6H). The Harrison-Glover house was eventually constructed on land located within Elias's portion of the plantation. There is no available information related to the dwelling that stood at the homestead during the Huggs' ownership (near the confluence of the two creeks), nor is there direct evidence that Elias's property consisted of any portion of the dwelling now known as the Harrison-Glover House during his ownership. At his father's old homestead, Elias maintained a store for the watermen who navigated Big Timber Creek in flatboats and scows. Whiskey and tobacco dominated the store's sales, and many unseemly events occurred here as the rough and tumble clientele waited for the wind and tide to change (Clement 1877:289-290).

Secondary genealogical sources indicate that Elias's birth occurred in 1668 and that he married Margaret Collins, daughter of pioneer settler Francis Collins, sometime prior to 1695 (Hugg Family Genealogy website 2003; Clement 1877:76). Elias and Margaret's children include three daughters: Sarah, Mary, and Rebecca; and a son, John. Margaret died in 1723, perhaps in childbirth with John or Rebecca (New Jersey Wills 6H; West Jersey Colonial Deeds EF:145).

Article 18 of the proprietary memorandum that established Gloucestertown directed that a road be laid out from High or Market Street in Gloucester to an intersection with the Salem Road in today's Laurel Springs even before the surveying of lots in town. Settlers completed this road in 1686 (Prowell 1886:585; Leap 1981:23-24). It evidently fell into great disrepair, for in December 1712, Richard Bull and Thomas Sharp, two of the Highway Commissioners for Gloucester County, received petitions for an official road between the head of Timber Creek and Gloucestertown (Stewart 1917:15-16). Stewart writes:

Commonly called the Irish Road, the thoroughfare began at "...Porter's Mill [near the head of navigation on Big Timber Creek—present-day Laurel Springs] and from thence falling into the Old Road that went to Burlington and along the same over Sheeyanees Run from thence to other [Otter] branch and thence over the hills to Beaver Branch by John Huggs land thence to the brick kills [kilns] upon Elias Huggs land and from thence upon a straight course to the little Bridge [bridge over Little Timber Creek] and thence along the Kings Road to Gloucester...." (*ibid.*)

The blazing of this road followed, in part, the lane leading to Hugg's plantation and now known as Browning Lane, changing the already extant Hugg's Lane into one course of an official public road. Little is known about the brick kilns located on Elias's land, other than the fact that one of his brother's sons, Gabriel Hugg, was a bricklayer, and a 1984 Gloucester City archaeological report lists a wide array of ceramics, including redware, raising the concept that the brick kilns may have also been used for primitive pottery production (New Jersey Wills 205H; MAAR Associates, Inc. 1984:II-34).

Elias Hugg retained all of his inherited property for 35 years before he and his son, John, finally disposed of the Little Timber Creek side of the old Hugg plantation during January 1741, selling it to Bristol, Pennsylvania, merchant, William Buckley (West Jersey Colonial Deeds EF:145). It is unclear why Buckley purchased the property other than perhaps as an investment. It seems

certain that Buckley did not reside on the property, as he had a solid record of serving Bristol Borough in Pennsylvania as a burgess between 1742 and 1758 (Battle 1887:434). The sale proceeds amounted to £100, and the deed described the property as:

...a Certain Massuage Plantation or Tract of Land thereunto belonging situate in Gloucester County aforesaid Bounded Northward with little Timber Creek and on the other Sides with the Land late of John Hugg deceased, brother of the said Elias and Lands of some other person or persons It being the moyaty of the Land late of John Hugg y^e father of y^e S^d Elias which he devised until him by his last Will and Testament of the Twentieth day of December in the year 1706 and containing be Estimation four hundred Acres.... (West Jersey Colonial Deeds EF:145).

It seems unusual and perhaps significant that Elias Hugg's son John is listed as a party of this transaction, since Elias alone held the property through his father's will. At some point subsequent to Elias's moving into his deceased father's house after 1706, Elias's son, John, became of age and may have resided there until he and his father sold the plantation to Buckley. Elias included his son in the transaction presumably because John was the *de facto* possessor of the house and farm.

William Buckley received less than the estimated 400.0 acres in Elias's share of his father's plantation because the Huggs sold 100.0 acres to John Jones, 30.0 acres to William Crowes, and 12.0 acres to Enoch Allison (West Jersey Colonial Deeds EF:246). After the sale, Elias Hugg reportedly relocated across the Delaware River and took up residence in Philadelphia, ending Hugg tenure on the land (Hugg Family Genealogy website 2003).

The Harrison Family

The Harrison family of Gloucestertown began its West Jersey experience with Samuel Harrison, a mariner, and his wife, Sarah. Children of this union included Samuel, Joseph, and William, along with at least two daughters who married a Clement and a Hinchman respectively (Harrison Family Genealogy website 2004). Samuel the mariner died intestate sometime during the month of February 1703/1704. The courts granted Sarah, Samuel's wife, letters of administration for the estate on March 1, 1703/04 (Nelson 1901:213-214). Subsequent to becoming Samuel Harrison's widow, Sarah Harrison married Richard Bull of Gloucestertown, son of Thomas Bull. She outlived her second husband and the courts granted her administration of Richard's intestate

estate in November 1723. Richard's brother, Thomas (Jr.), assented to her administration (Nelson 1901:72). She retained much of Richard's land after his death and passed it on to her Harrison children through her will, dated January 6, 1742 and probated August 20, 1744. William Harrison, the son of Samuel the mariner and Sarah Harrison Bull, established a plantation between Little Timber Creek and King's Highway (which did not include the property that would later include the Harrison-Glover house) after receiving the land through his mother's will, which read in part, "Son, William Harrison, to have the rest of lands, meadows and buildings" (Honeyman 1918:74).

At some point following his mother's death and being devised land according to her will, he erected a milldam above the tide on Little Timber Creek and constructed a gristmill. The dam was certainly extant by November 1760, when the colonial legislature passed an act that permitted a dam to be erected, thereby preventing tidal flow and allowing landowners adjacent to the creek to cultivate meadowlands. The act in part reads:

Be it enacted by the Governor, Council and General Assembly, and it is hereby Enacted by the Authority of the same, That from and after the Publication hereof, the said Bank, Dam, and all other Water-Works already erected, or that shall or may at any Time or Times hereafter, be found necessary to be erected, for the more effectual preventing the Tide from overflowing the Meadow lying on the aforesaid Creek, shall be erected, supported and maintained at the equal Expence [*sic*] of all the Owners and Possessors of the same, in Proportion to the Quantity of Meadow that each of the said Owners or possessors now or hereafter may hold on the said Creek, between the aforesaid Dam, and a Dam called **William Harrison's** Dam, near the Head of the aforesaid Creek (Bush 1982:56 [underlining and bolding added for emphasis]).

This portion of the act indicates that Harrison's milldam had already been constructed. At some point after he built this mill, William Harrison relocated to Greenwich Township, Gloucester County, where he established a new plantation, and constructed another gristmill along with a sawmill. Sometime prior to November 1, 1762, William Harrison died and devised to his son William (Jr.) the "plantation where I formerly lived, and where he now lives, to him and his heirs..." (New Jersey Wills 795H). The plantation included the gristmill.

In November 1776, William Harrison Jr. heard the call of his revolutionary countrymen and mortgaged his land and gristmill to raise a company of New Jersey militia. According to the

written testimony of his grandson, Philadelphia locomotive builder Joseph Harrison, William clothed and armed the men who served in his company. For more information on Harrison's Revolutionary War activity, see the section below. The mortgage that Harrison presented to mortgagee Joseph Fox had a term of three years and a penalty of twice the document's face value. However, with Harrison constantly on the go with military action, he greatly neglected his personal affairs. The mortgage due date in 1779 came and went with no payment. Fox died, and the executors of his estate foreclosed on the mortgage in September 1783, as reflected in the sheriff's advertisement. Placed in the *Independent Gazetteer*, published in Philadelphia, the sheriff's advertisement read:

Thomas Denny, Sheriff of Gloucester County, adv. For sale a tract of land within the bounds of the town of Gloucester, the property of William Harrison seized at the suit of William Smith, the executors of Joseph Fox, deceased, Thomas Leaman and others. It is bounded by lands of Samuel Hugg Esq., Daniel Smith, John Glover, Jacob Albertson, lands late of Joseph Harrison, deceased, and others. It lies on the main branch of Little Timber Creek, which runs through the tract, and contains 613 acres and three-quarters, being divided as follows: a plantation of 155 acres and three-quarters with a brick house; a plantation adjoining containing 287 acres and one quarter with a brick house; a plantation of 70 acres and three quarters with a frame house and a grist mill built with stone; and three tenements adjoining the latter of 35 acres each. To view the premises and to see a map of the whole, apply to Mr. William Eldridge living on the first mentioned farm. Sale will be by vendue on 22^d September at the house of William Hugg, innkeeper, in the town of Gloucester (Wilson 1988:417-418).

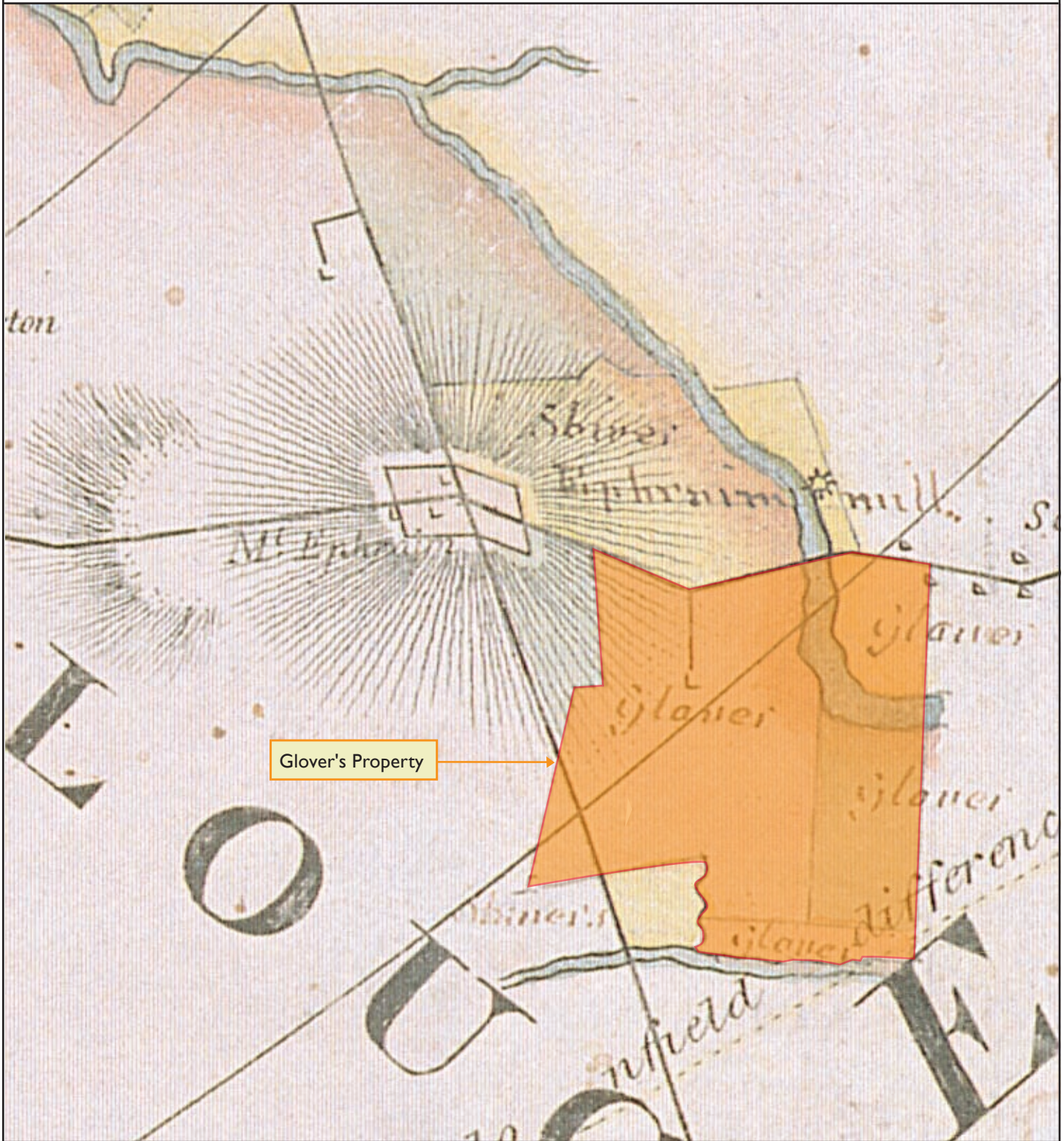
No buyers came forward at the time of the sale, but in April 1784, William Eldridge purchased the 155.0-acre tract where he resided at the time of the sale (Gloucester County Deeds C:424). Ephraim Tomlinson acquired the larger 287.0-acre plantation, located on the south side of Little Timber Creek in April 1785 (Gloucester County Deeds L:504). A review of extant tax ratable lists revealed no tax was levied for the mill in 1790, indicating that no one was leasing or operating the mill. However, prior tax years, including 1773, 1780, 1781, 1782, 1783, 1784, 1786 and 1788, William Harrison paid a tax for owning or operating a gristmill (New Jersey Tax Ratables). Harrison continued to operate and pay taxes on the mill because it did not sell at the sheriff's sale.

In August 1792, William Eldridge finally purchased the gristmill and 76 acres of land from Sheriff Joseph Ellis, ending William Harrison's tenure at the mill (Gloucester County Deeds

K:473). It appears that Eldridge leased out the mill to a number of operators, based on the tax ratable lists available between 1791 and 1802 (New Jersey Tax Ratables). Meanwhile, at some point subsequent to his purchase of the gristmill, Eldridge constructed a fulling mill on the south side of Little Timber Creek, opposite the gristmill. He used the same millpond and dam and probably excavated only a new millrace for the fulling mill (Clement, Maps and Draughts, Vol. 6:81). Based on an inference in the road return for what today is the Black Horse Pike, it appears Eldridge constructed the fulling mill prior to 1795 (Gloucester County Road Return, Book A:190). In March 1805, Eldridge sold the gristmill and possibly the fulling mill to Abraham Fenimore, along with 115.0 acres on both sides of Little Timber Creek, with a right to enlarge the millpond by overflowing other Eldridge land (Gloucester County Deeds I:267). Fenimore retained the mills and millpond for three years before selling the complex, along with 46.0 acres of land to John T. Glover in March 1808 (ibid. Y:441). Since Glover already owned a fulling mill he had inherited from his father, located on Kings Run in Haddon Heights, he reportedly discontinued operations at the former Eldridge fulling mill (Boyer 1962:44). Although it is unknown when the gristmill ceased operations, it is probable this occurred simultaneously with the fulling mill discontinuance, thereby allowing the millpond to be drained and the cessation of maintenance on the milldam. It is unclear when Glover drained the millpond, but it appears that the John Hills's 1808 map, *A Plan of the City of Philadelphia and Environs*, corrected through December 1814, shows only a stream flowing under what, today, is the Black Horse Pike and the map does not indicate a millpond (Hills 1808/1814) (Figure 14). Based on a recent visual observation, Conrail's Grenloch Industrial Track (formerly the Camden County Railroad) apparently uses a small section of the milldam on the Mount Ephraim side of Little Timber Creek for its right-of-way, but the remainder of the dam is gone.

Another part of William Harrison's property that the sheriff advertised was the former Elias and John Hugg plantation, which would become known as the Harrison-Glover plantation. As documented above, after purchasing the farmstead from the Huggs during January 1741, William Buckley retained the property for ten years before selling it to Samuel Harrison, William Harrison Jr.'s uncle, in November 1751 for £300, making himself a tidy £200 profit (West Jersey Colonial Deeds O:103). It is uncertain why the value of the property tripled during Buckley's ownership; however, it is possible that he made improvements to the farmstead. Samuel Harrison

Figure 14
1808 Hills Map Showing John T. Glover's Property
 I-295 / I-76 / Route 42 Direct Connection
 Camden County, New Jersey



Map Document X:\Graphics\Projects\593\Fig9_1808HillsMap.ai



Glover's Property

and his wife Abigail held the plantation until December 1756, when they sold it to Samuel's brother, Joseph Harrison, for a mere 5 shillings and "...the kind love and natural affection which they have to bear unto the said Joseph Harrison..." (West Jersey Colonial Deeds N:475). In 1759, Joseph Harrison and William Hugg applied to the West Jersey Proprietors for a resurvey of the original John Hugg Plantation as it was devised to John and Elias Hugg in 1706. The resurvey verified the chain of title for the property, the boundary lines, and the acreage contained within those boundaries. The written record of the resurvey reveals small parcels that were added to and subtracted from the plantation over the years. The deputy surveyors also confirmed that the land contained an overplus of 31 acres and 11 perches or 31.069 acres, which Joseph Harrison dealt with by subtracting the same amount from another untitled proprietary land grant given to him in November 1755 (SGO Survey Book H:261).

Joseph Harrison retained ownership of this plantation until his death in November 1761. In his will, written during the same month and year as his death, he left the property to his two daughters, Mary and Rebecca, to be equally divided between them when they reached their majority age. Apparently Joseph's wife predeceased him. He directed his brother Samuel to provide care for the two girls until they reach maturity and, as a reward, Joseph granted his brother the right to "...possess my Little Place untill [*sic*] my Daughter Rebecca arrives to age (which lies on y^e Little Creek)..." (New Jersey Wills 747H). It is unknown who rented Joseph Harrison's "Little Plantation" after Joseph's death. However, acting in his role of possessor and caretaker of the Little Plantation, in 1764 Samuel presumably contracted for the construction of the extant 1764 section of the dwelling now known as the Harrison-Glover House.

Rebecca Harrison, Joseph's daughter, was born in February 1757. In January 1780, after reaching her majority, she married Robert Blackwell, an Episcopal minister from Philadelphia (Wallace Papers, Vol. 4). Her sister Mary married Israel Morris Jr. in May 1774, but died before reaching her majority (Gloucester County Deeds H:492). Unfortunately, Rebecca met a similar fate as her sister, dying quite young in February 1782, two days after giving birth to Rebecca Harrison Blackwell (Wallace Papers, Vol. 4). As a result of her death, Robert Blackwell gained title to her father's former lands. Blackwell continued his ownership of Joseph Harrison's homestead as a rental property. In July 1800, he advertised the property for rent and indicates in

the advertisement that John Burrough resided there (*Pennsylvania Gazette* 16 July 1800). Five years later, Blackwell and his daughter and their respective spouses sold the former Joseph Harrison homestead to Benjamin B. Cooper and John Gill for \$6,600 (Gloucester County Deeds H:492).

At some point in time, William Harrison Jr., owner of the adjacent gristmill and plantation located easterly along Little Timber Creek, acquired the “Little Plantation” from either Samuel or Rebecca. If Samuel served as the seller, he fulfilled his role as guardian for an underage Rebecca during the sale; but if not, then this sale occurred sometime after Rebecca reached a majority but probably before she married Robert Blackwell. No probated will granted the property to William, and the deed for his acquisition is unrecorded and evidently nonexistent today, as a thorough search for the document at numerous repositories has proven futile. However, it is documented that William Harrison held the property in 1782 when the Gloucester County sheriff received a writ from the New Jersey Supreme Court to attach all of William’s property after a number of creditors successfully won suits against Harrison for unpaid indebtedness.

The sale occurred at the time and place stated in the advertisement, but Sheriff Denny did not draft two deeds of sale for a portion of Harrison’s property until April 1784. One deed acknowledged Samuel Hugg’s purchase of a 35.0-acre tenement parcel for £126 (Gloucester County Deeds D:182). The second deed transferred title of the 155.8-acre plantation to William Eldridge in exchange for a winning bid of £935. The Hugg and Eldridge bids represent the only two successful partial purchases of William Harrison’s land, so Sheriff Denny scheduled a second Sheriff’s Sale, which occurred March 26, 1785, presumably at Hugg’s Tavern (Gloucester County Deeds L:504). Ephraim Tomlinson placed the winning bid of £960 for the 287.3-acre plantation described in the advertisement (above) as possessing a brick house. Denny drafted the deed for this sale during April 1785 and Ephraim Tomlinson became the titleholder for Joseph Harrison’s former “Little Plantation” (*ibid.*). Of the three remaining parcels—two 35.0-acre tenement lots and the 70.8-acre plantation containing a gristmill and a frame house—only a deed for the gristmill property could be located; William Eldridge acquired this tract in August 1792 (Gloucester County Deeds K:473).

Ephraim Tomlinson retained the former “Little Plantation” property and used it as his homestead farm. He died sometime prior to March 22, 1810, the date his heirs proved Ephraim’s will, drafted during November 1808. In his will, Tomlinson divided his plantation, the former Elias Hugg property, into two pieces, with the upper portion devised to his grandson Warner Tomlinson and the lower section, including the Harrison-Glover House, to his other grandson, Joseph Tomlinson, both sons of Ephraim’s deceased son, Joseph Tomlinson. Ephraim’s estate inventory value exceeded \$6,300, indicating Tomlinson was a man of some wealth during his lifetime (New Jersey Wills 2790H). Joseph Tomlinson presumably worked and resided on the plantation his grandfather devised to him. His tenure ended in October 1835, when he sold the property, containing 119.7 acres, to Chalkley Glover, a resident of Deptford Township, probably as an investment and rental property (Gloucester County Deeds N3-484). Chalkley Glover died intestate sometime during late 1873 or early in 1874; his daughter, Sarah, applied for an estate administration bond in January 1874 (Camden County Estate Index). Since Sarah applied to the Camden County Surrogate’s Office for the Estate Administration Bond, it may indicate that Chalkley lived at the “Little Plantation” at the time of his death.

Sarah Glover and her brother Theodore retained the “Little Plantation” for another 40 years. In January 1914, the siblings struck an agreement with John G. Scofield, a resident of Centre Township, to purchase their late father’s former property, including the Harrison-Glover House (Camden County Deeds 383:621). The agreement dictated a series of payments to be made monthly. Finally in August 1918, Theodore and Sarah issued a deed of purchase for the land and house; Scofield paid \$15,000 to them (Camden County Deeds 434:168). At this point in time, Theodore Glover and his sister, Sarah B. Glover, resided in Deptford Township, Gloucester County, perhaps in their father’s old house. Three years later, during August 1921, Scofield sold 63.0 acres of the former Chalkley Glover farm and the old Harrison-Glover House to Saint Mary’s Roman Catholic Church of Gloucester City for \$41,300 (Camden County Deeds 490:599). Today, the former Harrison-Glover House continues to serve as the cemetery’s offices, as it did when the burial ground first opened in 1923 (Giglio 1987:233).

Initial Transportation Developments

The region's waterways provided the earliest transportation routes for settlers entering the region and for exporting farm and forest products to market, primarily in Philadelphia. All forms of boats plied the Delaware River, Pennsauken Creek, Cooper's Creek, Newton Creek, and Big Timber Creek, carrying people and goods to and from the dispersed farmsteads and towns in the county's interior. The first important roads established in the area included the Salem Road (1681), connecting Salem with Burlington; the Irish Road (1696); and the Gloucester-Egg Harbor Road (1698), connecting the county with communities on the New Jersey coast. Early roads served as the first engines of change, as stated in Cushing & Sheppard:

Here, as in other regions, roads were constructed to supply the immediate apparent wants of the people at the time, rather than to meet possible or even probable future exigencies, and when once these highways were established, their influence in directing the subsequent development of the region was potent (1883:112).

Some of the early roads followed existing Indian trails, just wide enough for one man to walk. Over time, these trails or paths were widened to permit the passage of mounted horses, and eventually, horse-drawn wheeled vehicles. As early as 1704, the colonial New Jersey General Assembly passed laws concerning roads and highways (Bush 1977:23-26). During the eighteenth and early nineteenth centuries, little maintenance occurred on roads. Even the principal thoroughfares were often unfit for travel. Local taxpayers provided all the funds used to construct or maintain roads, sometimes placing a huge burden on the citizenry (Parsons 1928:201).

Highway users would often complain bitterly about road conditions. Early roads in the project area include the Irish Road, described above, and a later version of the Salem Road, aka the King's Highway. The New Jersey Colonial Assembly first authorized the Salem Road in 1681 and its first surveyed route took the road from Burlington out to the east and over the Rancocas Creek at Eayrestown. The roadway passed through present-day Mount Laurel Township and into Old Gloucester County, where it forded the South Branch of Cooper's Creek at Uxbridge. Surveyors then took the road down a route approximating current Warwick Road and on down to a crossing at Upton, near present-day Chews Landing. With the establishment of Hollinshead Ferry in 1689 between Willingboro and current-day Moorestown Township, the route changed to more closely follow today's route, allowing the roadway to pass through settlements like

Colestown and Haddonfield. At some point in time during the early eighteenth century, yet another rerouting occurred using the Irish Road, which allowed the Salem Road to gain access to the bridges over the Little and Big Timber creeks. Finally, a new route appeared between Haddonfield and Gloucester via Mount Ephraim (Fox n.d.). According to an undated manuscript map in the collection of the Gloucester County Historical Society drafted by twentieth-century South Jersey road historian Harry Marvin, this new route between Haddonfield and Gloucester first appeared on the landscape in 1748, although no road return has been found for it (Gloucester County Historical Society n.d.:Map J-12). It is unclear from where Marvin derived his date. The Haddonfield-Gloucester Road does appear on the 1778 road map as part of the route that the Hessians took on their march to attack the fort at Red Bank, described below. Today’s King’s Highway route is just slightly north of the eighteenth-century roadway.

The Pre-Revolutionary Period

Permanent and sizeable settlement of Gloucester County occurred after the English possessed West Jersey. Agriculturists took up the best land for raising crops and propagating livestock. With Philadelphia’s birth and rapid rise in prominence, it became the primary marketplace for Gloucester County agrarian production. The Quaker City’s demand for quality mutton led South Jersey farmers to produce a superior grade of sheep. Carl Woodward, writing in his history of New Jersey agriculture, stated, “It is doubtful if in the eighteenth century the mutton of Gloucester, Burlington, and Salem Counties could be equaled anywhere in the colonies nor could it be greatly surpassed in England” (as quoted in Wacker and Clemens 1995:193). As farming intensified in Gloucester County, population grew. Below is a table that provides an indication of county population growth between 1726 and the American Revolution. The numbers include both male and female white and black inhabitants:

Table 2. Gloucester County’s Pre-Revolutionary Population.

Year	Population
1726	2,229
1738	3,267
1745	3,506
1772	8,752

Source: Wacker 1975:413-415

Samuel Smith described Gloucester County in his 1765 history of New Jersey by writing:

Its situation opposite and contiguous to Philadelphia, gives great opportunities to make the most of the productions of the county at that market; tho' their uplands as to the general are poor, the meadows are good and improve fast : they raise beef, pork, mutton, butter, cheese, &c. (1765 [1877]:496-497)

Although primarily settled by Quakers, Gloucester County freeholders maintained a population of slaves and servants. In 1751, tax enumerators tallied 161 slaves and servants within the county and that number rose to 173 by 1769 (Wacker and Clemens 1995:101). Gradual emancipation took place among Gloucester County's tidewater planters. The Hugg family provided their former slaves with a small amount of land in the sand hills located at the extreme east end of their holdings (southeast of the Black Horse Pike/Browning Road intersection) around the year 1800, which grew into the "considerable black" settlement of Guineatown (Boyer 1933:10).

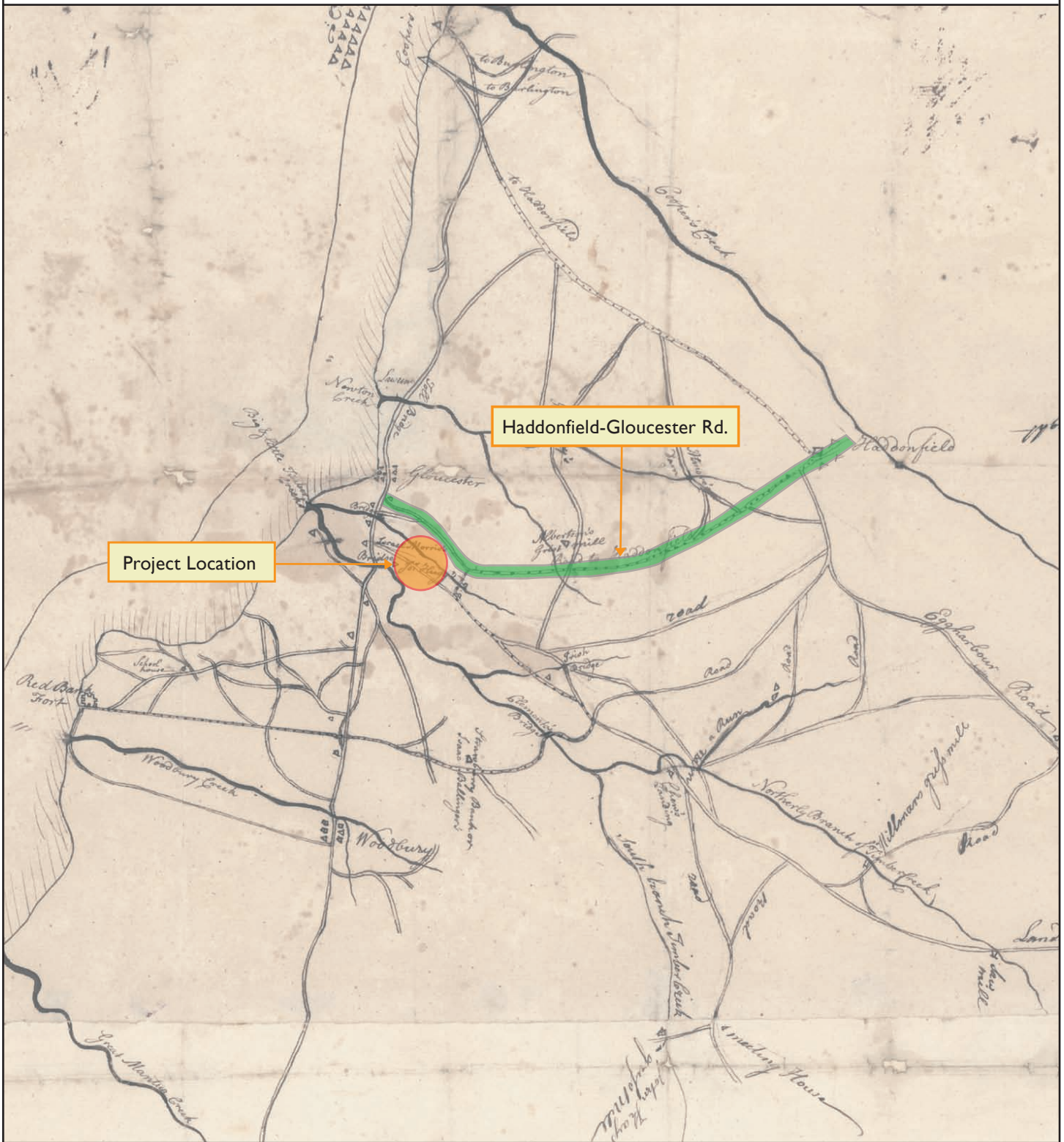
Revolutionary War Activity

As America entered the second year of its rebellion against the Crown, the British sailed south from New York. General William Howe and his army landed on the shores of the Chesapeake Bay at Elkton, Maryland, after rejecting a more dangerous landing on the lower Delaware River. The army marched north toward Philadelphia, initiating the Battle of Brandywine along the way. Meanwhile, sailors of the Pennsylvania Navy prepared themselves for the upcoming river battle. The river bottom already bristled with clusters of *chevaux-de-frise*, iron-tipped wooden spears anchored in stone cribs, ready to impale any British vessel which dared to sail up the Delaware. Only a handful of colonial river pilots knew the safe passage route through these river obstacles. American laborers worked on the New Jersey side to finish defensive forts at Billingsport and Red Bank, and other workers made final preparations to the fort on Mud Island (Fort Mifflin), located on the Philadelphia side of the Delaware River. First designed by British military engineer John Montross, the Pennsylvania colonial legislature sought the construction of what would become Fort Mifflin as a defensive position for Philadelphia against Privateers. Work began on this fortification in 1772, but the workmen, lacking clear supervision, had not yet completed the facility in 1775. About the time colonial delegates signed the Declaration of Independence, American colonists gained possession of the fort (Jackson 1977:1-15; Jackson 1986:1-127). After partially completing the Billingsport fortification, the continentals determined

the location to be indefensible, and relocated 4.0 miles upstream to concentrate on completing a much smaller fortification within the rather large Red Bank defensive position. Only a small garrison remained at Billingsport to guard the lower set of *chevaux-de-frise*. After thoroughly routing Washington's troops at the Battle of Brandywine, the British army departed from the battlefield and continued its march towards Philadelphia. On the city's outskirts, Washington launched a surprise attack at Germantown, which proved disastrous for the American troops and Howe's forces moved in to Philadelphia during the second part of October (Jackson 1977:1-15).

Upon achieving his primary objective, conquering and occupying Philadelphia, General Howe ordered his military commanders to vanquish the American troops, destroy the Pennsylvania Navy, and open the Delaware River to British shipping under the control of Howe's brother, Lord Admiral Richard Howe. Hessian mercenary officer Colonel Carl Emil Kurt von Donop requested the honor to crush the continental forces at Red Bank and capture the fort (Smith 1970:18). The Hessians crossed the Delaware River at Cooper's Ferry, located at today's Coopers Point, Camden, and marched out today's Haddon Avenue to Haddonfield where they bivouacked for the night. The next morning, October 22, 1777, the German soldiers began their march to the fort. According to an anonymous map, presumably drawn in 1777 or 1778, the Hessians moved southwest out of Haddonfield along the old King's Highway into Mount Ephraim, where they turned more southerly and crossed William Harrison Jr.'s milldam (Anon. ca. 1778) (Figure 15). Old Gloucester County never established the shortcut across Harrison's dam between King's Highway and today's Browning Road as an official highway, but it provided a very convenient crossing point over Little Timber Creek. The Hessians originally intended to cross Big Timber Creek on the bridge between present-day Brooklawn and Westville, but an advance scout party evidently found that the Americans had rendered the bridge impassable. Hence, von Donop's army turned south off of King's Highway, crossed William Harrison Jr.'s dam, and traveled east along Browning Road (aka the Irish Road or Sandy Lane) to its junction with the "Good and Convenient Road of 1768," whereupon the Hessians turned and traveled over that road until they reached Clement's Bridge Road, which provided the force with access to the next crossing over Big Timber Creek (Figure 16). After moving across the bridge, von

Figure 15
Circa-1778 Anonymous Map Showing the Haddonfield-Gloucester Road
 I-295 / I-76 / Route 42 Direct Connection
 Camden County, New Jersey



Project Location

Haddonfield-Gloucester Rd.

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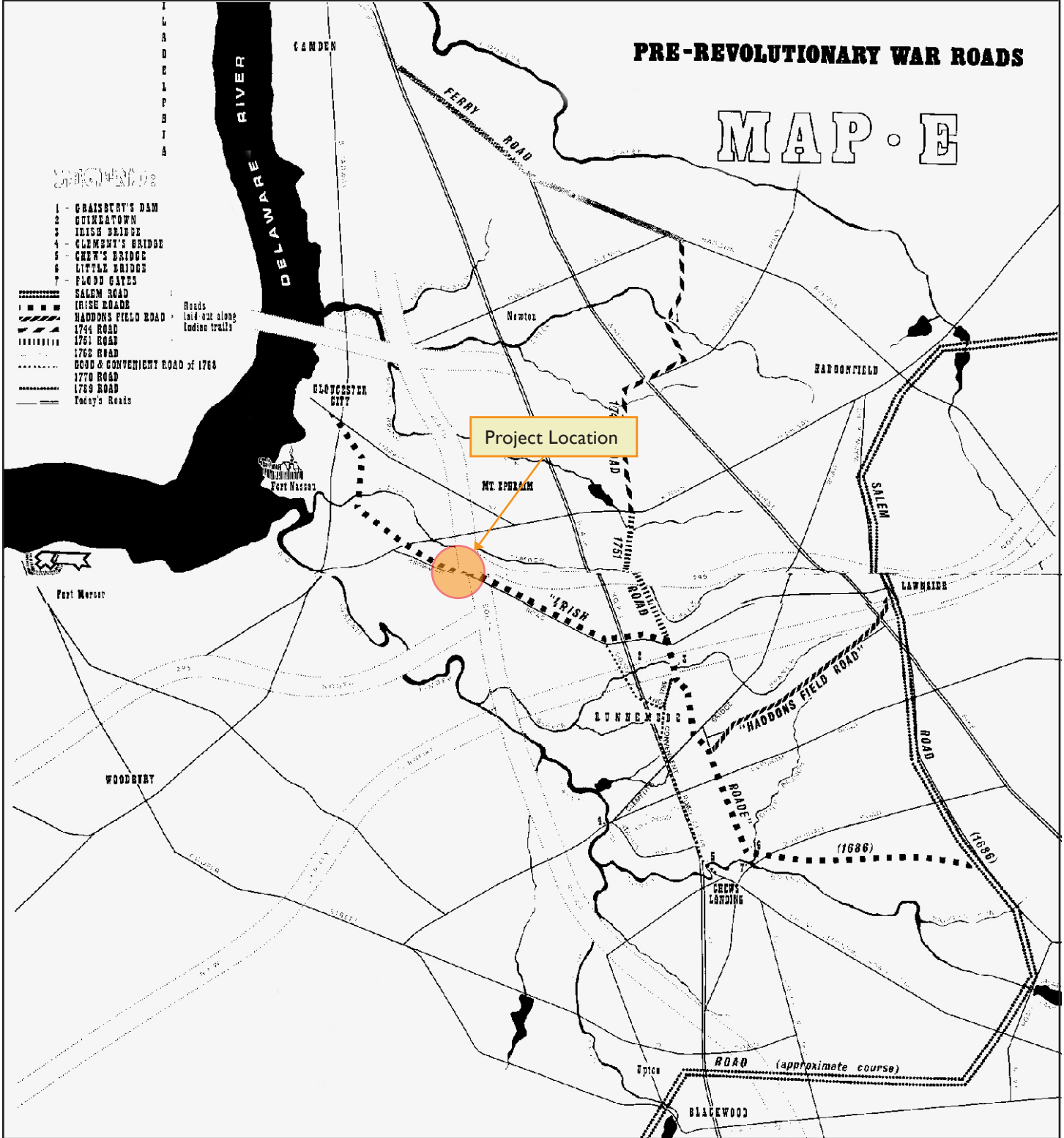


Project Location



Haddonfield-Gloucester Road

Figure 16
1981 Leap Map Showing Historic Roads in the Vicinity of the Project Area
 I-295 / I-76 / Route 42 Direct Connection
 Camden County, New Jersey



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Project Location

Donop marched his large army of mercenaries to attack the fort, where a small and inferior force of Americans waited within the fortifications (Leap 1981:53-55). The Hessians suffered a resounding defeat, losing many soldiers on the battlefield, including von Donop himself. The British dispatched warships to provide artillery support for the Hessians, but in maneuvering around the shallow water in front of the fort, the 64-gun ship AUGUSTA and the sloop-of-war MERLIN ran aground, representing a great military loss to the British, since both exploded and burned. Those Hessians who survived the battle uninjured assisted the wounded and dying back to Philadelphia, staying overnight in Glendora at Ashbrook's Burial Ground, where those who had expired during the return trip were buried (Smith 1970:20-25).

During the entire British invasion period, from October 2 to November 9, Commodore John Hazelwood's Pennsylvania Navy patrolled the Delaware River. His small fleet of row galleys, floating batteries, and fire boats harassed the British naval fleet, provided protective fire for the forts, and defended the *chevaux-de-frise* from removal. The British had already established shore batteries on Carpenter and Province islands to cannonade Fort Mifflin, but von Donop's defeat at Red Bank temporarily thwarted Howe's plans for river domination. Howe ordered a large detachment of his troops stationed at the Province Island wharf to be staged for the invasion of Fort Mifflin, but withdrew the force upon the Hessian rout (Jackson 1977:15-18).

Howe became increasingly alarmed about the onset of winter and the lack of navigation on the Delaware. He knew that he must quickly eliminate Fort Mifflin as a threat to his combined naval and land forces. On 9 November 1777, Howe prepared his land batteries for saturation cannonading of the fort, particularly hammering the weak western palisade. Lord Richard Howe commanded his large warships to pound the eastern fort wall. Bombardment began on 10 November and continued for five days. The Pennsylvania Navy did what it could to harass the British, but the Americans failed to close off the fort's back channel, allowing the enemy to move floating batteries into position for additional salvos against Mifflin. The British breached the wall and continued firing, leveling the fort in places. In its harassment campaign, the Americans broke the dikes along Carpenter and Province islands, allowing waist-deep water to encompass the enemy as it loaded and reloaded its artillery. Finally, during the night of 15 November, the continentals abandoned the fort and fled in the darkness to the shelter of the

fort at Red Bank, setting fire to what remained of Mifflin. The Pennsylvania Navy sailed upriver in an attempt to save its vessels, but the British destroyed virtually all of them. British shipping could, at last, reach Philadelphia and replenish the waning foodstuff of the Crown's half-starved army (Jackson 1977:19-23).

Beginning on 18 November 1777, a major British force numbering some 7,000 soldiers under the command of Lieutenant General Lord Cornwallis landed at Billingsport with the intent of capturing the fort at Red Bank. Intelligence about the landing rippled through the American military and the garrison at Red Bank prepared for evacuation by spreading gunpowder across the fort grounds. The British remained close to their initial position in Billingsport on 19 November as they assembled a wagon train for the march north towards Red Bank. The Americans abandoned the fort at Red Bank on the nineteenth, based on rumors about British troop movements, but the garrison returned the following day with wagons to take away supplies. However, on 21 November, with the British closing in, the Americans, under orders from General Washington to officially abandon their position, touched off explosions at the fort as they withdrew (Smith 1970:38-40). Cornwallis and his forces descended upon the fort expecting a battle, but found it deserted and on fire. The British and Hessians completed the destruction, tearing down the walls and leveling all emplacements. On 22 November, the combined forces departed from the fort and marched to Woodbury, where they began foraging for food and livestock, including horses, from farms along their route. They broke camp on the twenty-fourth and moved towards Timber Creek until the Crown's forces arrived at the bridge that the Americans had destroyed before von Donop marched to the fort at Red Bank. In one of wagons, the British had a portable bridge fabricated from hinged copper plates that folded when not in use. Using ropes and tackle, the English military engineers placed the bridge across the creek, allowing the entire army, wagon train and foraged livestock to cross (Döhla 1913[1990]:59-60; Stewart, ed. 1937:80).

By the morning of November 25, Cornwallis had entered Gloucestertown, where he set-up his headquarters in the home of American militia Colonel Joseph Ellis while Hessian pickets guarded the approaches to Gloucestertown. During almost the entire day, the Marquis de Lafayette reconnoitered the British and Hessian forces in Gloucestertown as they loaded the

cattle, horses, and soldiers for transport back to Philadelphia. Lafayette's forces included ten light horsemen, 150 riflemen from Morgan's rifles, and some militiamen, including men under Colonel Ellis, containing Captain Harrison's company—a total force of less than 300. During the late afternoon, Lafayette and his escort entered upon the Gloucester Road (today's King's Highway) and rode towards Gloucestertown. At about 2.5 miles from Gloucestertown (about where King's Highway crosses King's Run on the border between Haddon Heights and Mount Ephraim), the Americans encountered a Hessian outpost containing 350 soldiers and several field pieces (Figure 17). Lafayette led a charge against the mercenaries, driving the Germans back more than 0.5 mile, making them run quickly to avoid being attacked. British reinforcements arrived twice, all the while the Americans, under Lafayette, drove them further back towards Gloucestertown. Only the descent of darkness prevented the Americans from pushing closer to Cornwallis and his shipments (Idzerda 1977:156-57). Lafayette's gallantry at the Battle of Gloucester directly resulted in the Continental Congress commissioning the Marquis as a Major General, and he was given command of an entire army division, a decision crucial to the war's ultimate outcome (ibid.:158-165). When the Congress ordered a ceremonial presentation sword in 1779 for Lafayette, the guard featuring engraved scenes of four critical battles in which the Marquis participated, one of these four was Gloucester (Idzerda 1979:201). During this action, William Harrison's Gloucestertown Company of the New Jersey militia engaged the enemy near Harrison's own farmland. John Zane, a member of Harrison's Company, testified that the battle:

...was a smart skirmish on Little Timber Creek at Gloucester Town at Brick's Old Field. The Battle was between Colonel Ellis's Regiment and the British and close by Captain Harrison's farm. Captain Harrison had about that time a House in Gloucester burnt by the British for the part he took against them (National Archives and Records Administration Record Group 15).

The loss of Harrison's house is echoed in Döhla's diary, when he writes, "This same evening the sailors set fire to a house" (Döhla 1990:60). Harrison's company had gained combat experience through action in December 1776 at Petticoat Bridge (near today's Jacksonville, Burlington County) and in Mount Holly at Iron Mill Hill. In August 1777, under orders from George Washington, Harrison led his company in removing ferry boats and flats along the Delaware River after the British landed at Head of Elk to begin its Philadelphia campaign (National Archives and Records Administration Record Group 15). Not knowing the true size of the force that attacked his outer guards, Lafayette's action unnerved Cornwallis, forcing him to accelerate



Not to Scale

Figure 17
1778 Du Chesnoy Map of the Battle of Gloucester
 I-295 / I-76 / Route 42 Direct Connection
 Camden County, New Jersey

loading the livestock and other baggage and moving back across the river to Philadelphia. The journal of His Majesty's Armed Schooner VIPER confirms Cornwallis's sudden haste after the attack when Lieutenant Edward Pakenham wrote:

November 1777 Red Bank SSE 1 mile
Tuesd^y: 25

AM Empd. Assisting the Flat Boats bringing Troops from the Jerseys.
Off Gloucester
...½ p^t 5 Weigh'd & ran over to Gloucester to Cover the Retreat of our
Troops from the Jerseys (Crawford 1996:595).

With Cornwallis's retreat, the British largely withdrew from New Jersey to Philadelphia for the winter, although foraging and interdiction patrols traveled fairly regularly between Salem, Haddonfield, and points north. Often these British patrols, along with American foraging units, would drive livestock and other baggage through the current project area (Stewart 1929). The Americans wintered at Valley Forge and British General Clinton relieved General Howe in Philadelphia during the spring of 1778. In a move to consolidate the British and Hessian armies back in New York, Clinton ordered the evacuation of Philadelphia and marched his forces overland through New Jersey to Sandy Hook and the waiting marine transport, fighting the Battle of Monmouth on the way (Jackson 1977:22).

The Nineteenth Century

In the opening years of the nineteenth century, the northern portion of Gloucester County (modern Camden County) still featured its original or early settlement points, i.e., Coopers Ferry or Camden, Haddonfield, Gloucestertown, Chews Landing, and Blackwood. Smaller enclaves included Colestown, Longacoming (Berlin), Blue Anchor, and Mount Ephraim. In and around the current project constraints, the Glover family had become the primary landholder in the Bellmawr-Mount Ephraim area. Farmland proliferated throughout the region with a scattering of homes across the landscape. John Hills's 1808 *A Plan of the City of Philadelphia and Environs* reveals a rather bucolic setting in the Little Timber Creek region (Figure 14). This map shows farm lines, some structures, and dates of settlement for portions of the land. Roads and even proposed roads are illustrated. In a unique presentation, Hills only drew what he had actually viewed or surveyed in person, hence, portions of streams, roads, houses, and plantations are

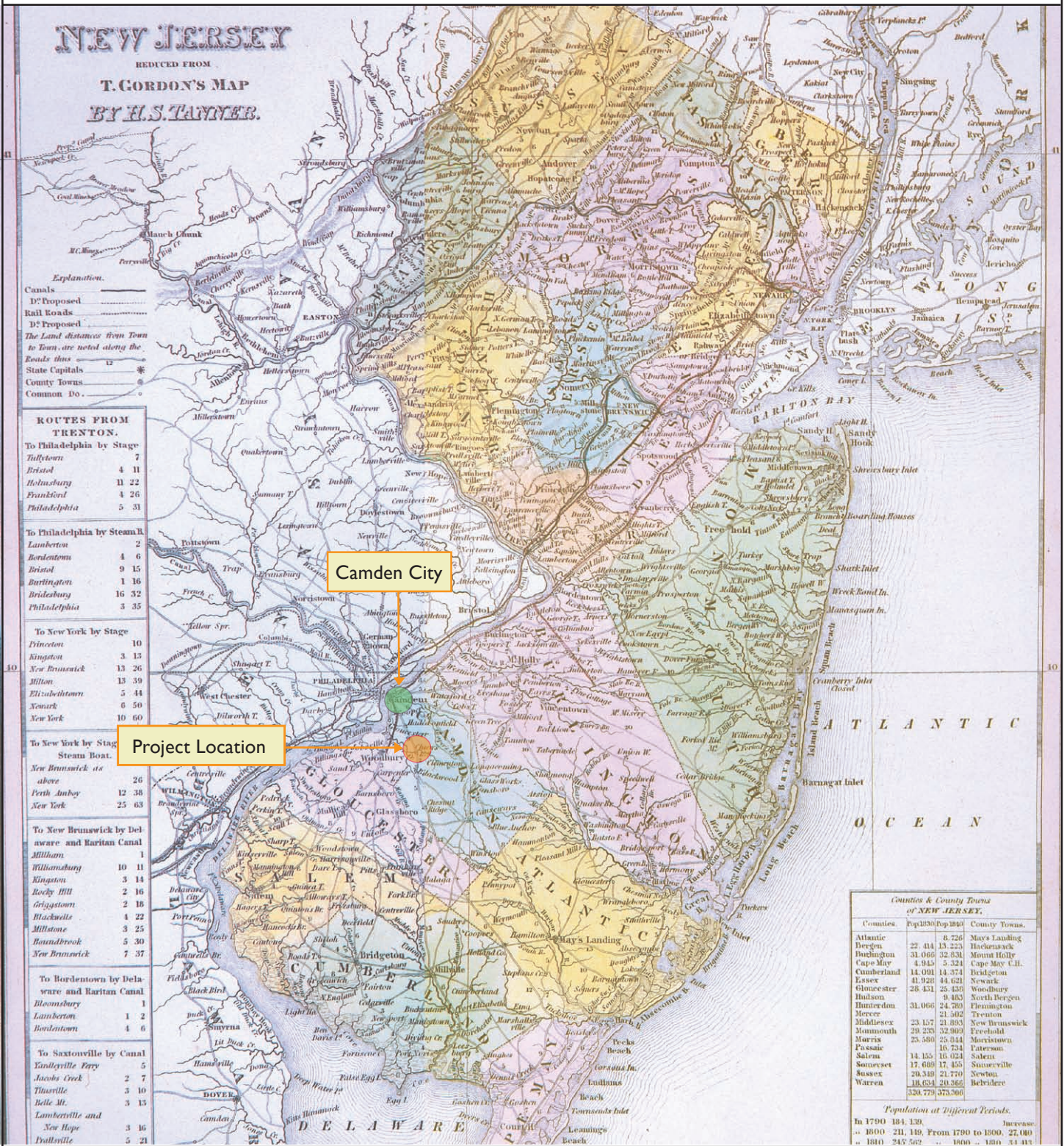
missing from the map. In November 1831, the former Gloucestertown Township became part of the larger Union Township. This change included today's Brooklawn, Bellmawr, and Mount Ephraim, with the latter location becoming the new township's seat of government (Prowell 1886:707).

After increasing agitation between the progressive Democrats in Camden City and the agrarian-minded Whigs living in Woodbury and lower Gloucester County, the powerful Camdenites sought and narrowly obtained a legislative act splitting Gloucester County. In March 1844, state lawmakers voted to erect Camden County out of Gloucester County, with Big Timber Creek serving as the southern boundary line between the old and the new county. A dispute arose over where to place the new county's seat of government, with both Haddonfield and Longcoming (today's Berlin) battling Camden City interests for the right and privilege of hosting the county courthouse. Even smaller settlements like Mount Ephraim, White Horse, and Chew's Landing outgunned Camden City voters in the seven-year battle over the shire town location. Finally, after voiding elections and some state-level gerrymandering, Camden City became the power base for Camden County (Dorwart 2001:48-58) (Figure 18).

The Arrival of the Railroads

The early nineteenth century 'transportation revolution' of canal, turnpike and railroad building did not greatly affect established means of transportation in Gloucester County; it was not until the growth of railroads after the Civil War that traditional patterns of water-borne transportation were broken (Cushing & Sheppard 1883:112-114; A.G. Lichtenstein & Associates 1994:149-150). When the Camden & Amboy Railroad reached its southern terminus (Camden) in January 1835, local citizens suggested that the rails be extended farther in Gloucester County. The following year, the New Jersey state legislature chartered the Camden & Woodbury Railroad and Transportation Company. The line was completed in January 1838, and at first, was a great success. However, the Panic of 1837 had a deleterious long-term effect on the railroad company and it soon became insolvent. Within a few years, the rail line sold off its two steam locomotives and operated its cars between Woodbury and Camden with horses. The railroad went out of business in 1846. Plans were made to revive the rail service, but it was not until the completion of the West Jersey Railroad in 1857 that rail service resumed between Camden and Woodbury.

Figure 18
Circa-1845 Tanner Map Showing Camden City as the County Seat
 I-295 / I-76 / Route 42 Direct Connection
 Camden County, New Jersey



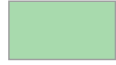
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Not to Scale



Project Location



Camden City

Backed by the powerful Camden & Amboy Railroad, the West Jersey Railroad eventually pushed its rail service to Bridgeton, Cape May, and Atlantic City (Schopp unpublished manuscript). The proliferation of railroads throughout southern New Jersey played a significant role in the economic and population growth of the area during the second half of the nineteenth and early twentieth centuries (Figure 19).

Conrail's Grenloch Industrial Track (formerly the Camden County Railroad)

The history of the Grenloch Industrial Track can be traced to the early 1870s, when Gloucester City Industrialist David S. Brown needed a method to move his textile products to the ferry service at Kaighn's Point, south Camden and into Philadelphia. With the passage of New Jersey's General Railroad Law in April 1873, Brown and his associates gained the necessary mechanism to construct a railroad between the ferry and Gloucester City. The resultant Camden, Gloucester & Mount Ephraim Railway, incorporated in June 1873, constructed its line between the first two points in its name during the ensuing year. The company's board of directors chose to build their railroad as a 3.0-foot narrow-gauge line, the only 3.0-foot gauge common carrier in New Jersey (Cook and Coxey 1980:26). Narrow gauge railroads became very popular in the United States during the early 1870s, after an Englishman named Robert F. Fairlie published his 1872 work, *Railways or No Railways*. In this book, Fairlie advocated the economical aspects of narrow gauge railroad construction, versus the "costliness" and the "extravagance" of so-called broad (standard) gauge. He argued that curves could be sharper, grading lighter, equipment less expensive, etc., due to its diminutive size (Fairlie 1872). However, there were decided detriments to building narrow gauge lines, the most apparent being the inability to interchange freight and passenger cars with standard gauge railroads, requiring all freight to be manually transferred. The "standard" narrow gauge was 3.0 feet between the rails, while regular railroads maintained a gauge of approximately 4.0 feet, 8.5 inches. Standard gauge proponents argued that the cost savings were actually minimal and the construction of narrow gauge railroads actually represented a large step rearward in railroad engineering standards (Hilton 1990:48-74). In the end, those who argued for standard-gauge railroads won the debate, and most narrow gauge lines were either re-gauged to the standard measurement or abandoned altogether.

Figure 19
1932 West Jersey and Seashore Railroad Map
Showing Southern New Jersey Railroads
 I-295 / I-76 / Route 42 Direct Connection
 Camden County, New Jersey



Map Document X: Graphics\Projects\I-295\Fig 15 - 1932 Railroad Map.apr



Not to Scale



Project Location

The Camden, Gloucester, & Mount Ephraim Railway began train service in February 1874, and the company extended its tracks to Mount Ephraim by June 1876 (Cook and Coxey 1980:28). Railroad management had begun planning to push the tracks beyond Mount Ephraim to Blackwoodtown as early as June 1874, when the directors chartered the Mount Ephraim & Blackwoodtown Railway Company (ibid.; New Jersey Secretary of State 1914:448). Residents along that portion of the line eagerly pledged their support, seeking both the ease of rail travel and the prospects of suburban development. During May 1876, the Camden, Gloucester, & Mount Ephraim Railway board obtained a second charter for the Mount Ephraim & Blackwoodtown Railway. By September of the same year, a formal groundbreaking occurred for the line to Blackwoodtown, but no construction activity ensued, and in July 1877, David S. Brown died, casting a shadow of doubt over any future track extensions. Moving into the 1880s, freight shipments over the railroad shriveled and the line primarily served a growing passenger business. In September 1883, the Philadelphia & Reading Railroad (P&R) purchased the Philadelphia & Atlantic City Railway (P&AC), another narrow gauge line with a gauge of 3.0 feet, 6.0 inches between the rails built in 1877, at a Master's Sale, putting the P&R in a position to compete with the Pennsylvania Railroad (PRR) and its recently acquired Camden & Atlantic Railroad. By October 1884, the P&R had standard-gauged the P&AC Railway and sought to discontinue the line's long ferry trip from Bulson Street, Camden, to a shorter ferry service further upriver. P&R management eyed with great envy the Camden, Gloucester & Mount Ephraim Railway's exclusive franchise for service to the Kaighn's Point Ferry. The P&R purchased a controlling interest in the Camden, Gloucester, & Mount Ephraim Railway in November 1884 and standard-gauged the single-track shortline by June 1885. In logical corporate progression, the P&R Railroad moved to consolidate all of its rail lines in South Jersey to form the unified Atlantic City Railroad (Cook and Coxey 1980:28-31).

During the first half of 1887, yet another discussion arose about extending the rails beyond Mount Ephraim, this time precipitated by the firm of E.S. & F. Bateman, a farm implement manufacturer located below Blackwoodtown in the small community of Spring Mills. The Bateman firm and other people continued writing to officials in Camden and Philadelphia concerning the extension throughout 1887 and 1888. Local citizens informally organized the Camden County Railroad Company and began paying subscription money to the proposed

railroad’s appointed treasurer, again hoping to subdivide their land for development. Realizing the seriousness of these citizens, senior P&R management finally agreed to construct the line. Surveying occurred in the first months of 1889, and in September 1889, the P&R formally filed incorporation papers and survey map with the New Jersey Secretary of State. Right-of-way acquisition occurred quickly and construction commenced in 1890. By the end of that year, contractors had laid over 5.0 miles of a single track, with the remaining 2.0 miles completed in the spring of 1891. The first train entered Spring Mills during March, and Bateman shipped their first freight in April (Figure 20). The P&R management required a name change for the community of Spring Mills, indicating that the company already had two other stations by the name on the railroad system. Frank Bateman, CEO of Bateman Manufacturing Company, chose the name Grenloch—Scottish for Green Lake. It appears that Bateman played a role in selecting other station names for the line, since the vast majority of them had a British basis (Hagley Library: Acc. 1451). The following table provides a complete list of the station stops along the Camden County Railroad over the line’s lifetime.

Table 3. Station Stops along the Camden County Railroad.

Station	Mileage from Camden Terminal
Mount Ephraim	5.02
Bellmawr (named for the Bell family)	6.09
Prospect	6.76
Third Avenue	7.20
Runnemede	7.45
Glendora	8.18
Chew’s Landing	8.60
Hilltop	8.93
Blenheim (formerly Mechanicsville)	10.04
Blackwood (formerly Blackwoodtown)	10.71
Asyla (station for county poor farm)	11.82
Grenloch (formerly Spring Mills)	12.11

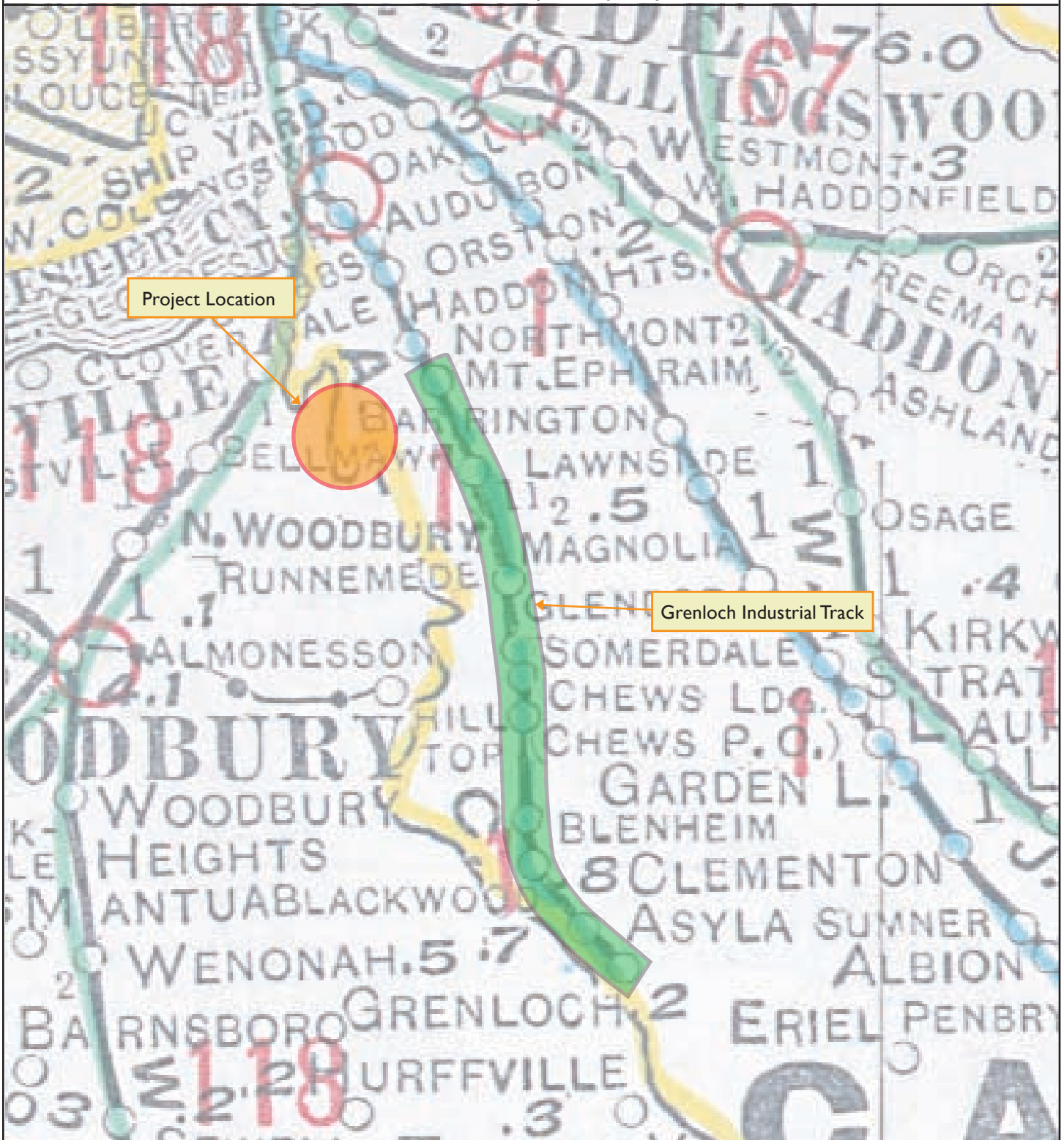
Source: Cook and Coxey 1980:165

Most of these stops represent new planned communities directly resulting from the line’s construction. Enclosed stations on this list include Mount Ephraim, Bellmawr, Runnemede,

Figure 20
1907 Cram Map Showing the Camden County Railroad
(Currently Conrail's Grenloch Industrial Track)

I-295 / I-76 / Route 42 Direct Connection

Camden County, New Jersey



Project Location

Grenloch Industrial Track

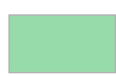
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Not to Scale



Project Location



Grenloch Industrial Track

Glendora, Hilltop (station building owned by a development company), Blackwood, and Grenloch. At Bellmawr, the station looked more like a small, two-story house sided with board and batten. The building was two bays wide and one deep, with a small lean-to shed attached to the rear; a track maintenance foreman resided in this station and the first floor served as a waiting room and ticket office. Bellmawr's railroad facilities also featured a stub-end siding for public deliveries (Schopp, photographic collection). The railroad did not erect the Bellmawr station when the line first began operations. But a caveat in the deed from Levi I. Bell for the right-of-way through his land required the railroad to "build erect construct and complete a suitable passenger and freight station or stations on the lands hereby granted at the Public Road known as Browning's Lane" and furthermore that the railroad "will and shall before May 5th A.D. one thousand eight hundred and ninety one (1891)" erect this station building (Hagley Library: Acc. 1520, Atlantic City Railroad folders). The railroad failed to act on the caveat so in 1894, Bell threatened a legal ejection action against the railroad. The P&R reacted by reluctantly requesting proposals from Camden-based contractors for building a station. The company received two bids, but considered both too high in cost. A second round of bids resulted in only one builder, John Corbett, placing a bid of \$997.50 for a building on a stone foundation with a cellar, a well and pump, and a 30.0-foot station platform. The railroad accepted the proposal and Corbett completed the building in August 1894 (ibid.).

With the P&R Railroad adding still more lines to their South Jersey holdings during the 1890s, the company moved again to consolidate its holdings and incorporated yet another Atlantic City Railroad Company in June 1901, placing all lines under that corporate umbrella (Cook and Coxey 1980:75). Atlantic City Railroad operations continued through the 1920s on what was by now called the Grenloch Branch with ever-increasing deficits. The automobile and state-funded road improvements had a tremendous impact on the line's passenger traffic, and to a lesser extent, freight business (Cook and Coxey 1980:133-153). The Grenloch Branch paralleled today's Black Horse Pike. While state-funded improvements of the Black Horse Pike accelerated suburban development in the portion of Camden County that the road penetrated, it was actually the Camden County Railroad that initiated this process. In addition, the railroad provided an opportunity for Camden's urban dwellers to travel a relatively short distance for relief from summer heat, delivering them to resort areas like Blackwood's Lake Morgan or Grenloch Lake.

The railroad ran daily excursion trains to these swimming and entertainment centers where small amusement parks soon sprang up. Several of the initial developments like Hilltop failed during the late nineteenth century, but the railroad laid a developmental foundation that twentieth century land speculators exploited after the state completed the Black Horse Pike (Dorwart 2001:87-89).

New Jersey state officials recognized the impact of motor vehicle traffic on the railroads. But the state did not want to lose the rail service even though both the Reading and the Pennsylvania railroads had filed service discontinuance petitions many times before New Jersey's Public Utilities Commission (PUC). In addition, the state sought to eliminate as many grade crossings as possible due to the rising number of accidents between trains and automobiles. Competition between the two railroad companies led to even higher deficit spending. Finally, during 1931, the state began holding negotiations between the two rail companies to combine South Jersey rail operations, thereby eliminating duplicate trackage and grade crossings. As a result of these negotiations, the two railroads formed the Pennsylvania-Reading Seashore Lines (PRSL) in June 1933, with the PRR holding two-thirds of the corporate stock and the Reading possessing the rest. Both companies placed all of their trackage within the new company with the exception of the PRR's waterfront Camden terminal. For the routes to seaside resorts like Cape May and Wildwood, the Reading Company's Atlantic City trackage survived, while the PRR removed their duplicate trackage (Gladulich 1986:151-163). The Grenloch Branch remained in service through the formation of the Pennsylvania-Reading Seashore Lines, but in 1934, the PUC approved the PRSL's petition for discontinuing all passenger service on the branch. The last train operated in June (ibid.:170).

Freight service continued operating over the entire Grenloch Branch until 1973, when the PRSL embargoed all traffic below Bellmawr and then abandoned the section of track between Bellmawr and Grenloch (South Jersey Railroads website 2003). After the line's abandonment, someone removed the Blackwood Station from its original location; the building was subsequently moved to the Stone House Village in Washington Township, Gloucester County, where it is still situated today. Similar to Blackwood, the Grenloch Station was relocated about 100.0 yards from its original location and turned into a private dwelling. In 1968, the

Pennsylvania Railroad disappeared as a corporate entity when it merged with the New York Central to form the Penn Central Corporation. All subsidiaries and leased lines were included in this merger. By 1970, Penn Central had entered bankruptcy, although some transportation movements continued. The early to mid-1970s was not a good period to own stock in a northeastern railroad; most were also in bankruptcy as freight traffic dropped precipitously and track maintenance was usually deferred (Gunnarsson 1991:165-166). However, throughout this entire period, the PRSL remained an active and separate company from Penn Central. Congress, knowing that federal action was required to save the infrastructure of these railroads passed the Regional Rail Reorganization Act of 1973 and commissioned the United States Railway Administration (USRA) to develop an overall plan. The USRA filed a preliminary plan in February 1975, detailing, after exhaustive analysis, which railroads and branch lines should be retained and which should be abandoned. Growing out of this report, the United States Congress created the Consolidated Rail Corporation, or Conrail, to assume control, effective April 1, 1976, of the lines deemed worthy of continued service (USRA 1975).

Even though the PRSL, unlike Penn Central, remained a viable railroad corporation, the USRA report recommended that the trackage become part of Conrail, along with the parent companies of the PRSL, the Pennsylvania (aka Penn Central) and the Reading Railroad (ibid.). In the mid-1980s, Congress rejected a takeover bid by Norfolk Southern Railroad and ordered Conrail to “go public” by offering stock. In 1994, Norfolk Southern again tried to negotiate with Conrail for a merger. Consequently, Conrail aligned itself with CSX Corporation, and Norfolk Southern attempted a hostile takeover through stock acquisition. Conrail, Norfolk Southern and CSX finally agreed to find a compromise, which they reached in 1997. Norfolk Southern and CSX agreed to divide Conrail’s main trackage between them and to share all terminal duties and facilities (Conrail history website accessed 2004). Today, the remaining trackage on the Grenloch Branch is operated by a Conrail Shared Asset Operation (CSAO). The only present customers on the line are located in Bellmawr Industrial Park.

Road Improvements

European, and particularly British, advancements in highway construction influenced Americans to desire better roads. The ideas of Telford and McAdam, two British experimenters in road

construction and paving, provided reasonable alternatives (Lane 1939:143). The creation of these improved roads came with a high price tag, well beyond the affordability of a county's taxpayer base. It required private funding to bring about substantive road improvements, and this funding took the form of nineteenth century turnpikes. Between 1801 and 1829, the legislature incorporated a total of 51 turnpike companies; however, only slightly half of these actually reached the construction phase. All but one of these finished roads was located in either the central or northern portion of the state. South Jersey continued its interest in waterborne transportation initiatives (Lane 1939:143-153). Turnpike companies offered an alternative to poor public roads. Theoretically, these private roads could be properly maintained through the tolls collected along their route. Unfortunately, turnpikes had no practical applications in Camden County until the mid-nineteenth century (Hood 1871:172-191).

Although all highway travelers in New Jersey complained bitterly about road conditions during the nineteenth century, it fell to the agricultural community, working through the State Board of Agriculture, to provide a united voice for conditional improvement to the New Jersey state legislature. Ralph Ege, Esquire, in a speech presented to the New Jersey State Road Improvement Association, stated:

Our prosperity and general welfare as individuals and communities depend so largely upon the facilities afforded for easy and rapid communication and transportation, that the subject is engaging the attention of many of the most prominent statesmen and political economists of our day to see if some method cannot be devised that will be an improvement upon the present system, and give us much better roads at a cost that will be within reach, and not be excessive and unreasonable.

This State Board of Agriculture has been wrestling with this problem for years, and has repeatedly called upon the learned scientists of our own and other States to assist in solving the problem, and they tell us to construct Macadam roads, at a cost of from five to ten thousand dollars per mile, and levy a tax to foot the bill. The problem is so easy that it should have been solved long ago (New Jersey State Board of Agriculture 1893:482).

The New Jersey State Board of Agriculture formed the New Jersey State Road Improvement Association as an adjunct in 1892. The state legislature created the state agriculture board in 1884, and its annual reports contain road reports and papers from almost the first year. The improvement association represents the pinnacle of the state agriculture board's eight year effort

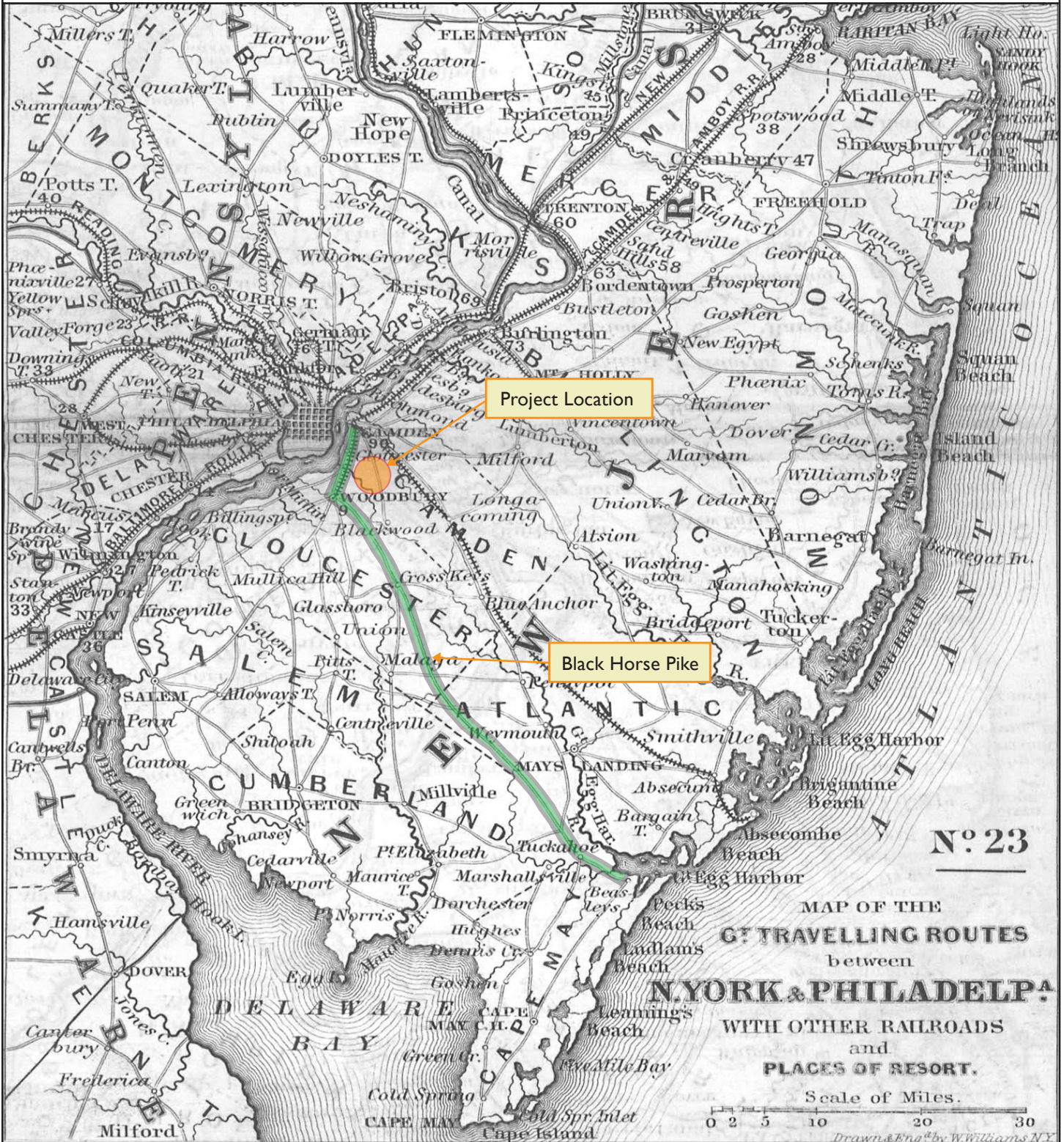
to influence pro-road-improvement legislation (New Jersey State Board of Agriculture 1893:16-17). The state road improvement association only existed for three years before its lobbying efforts paid off with results. In 1894, the state legislature created the position of Commissioner of Public Roads (Hasse 1914:615). Road improvement funding legislation began to be passed as early as 1891, and, reportedly, the first mile of road improved with state funds occurred in Swedesboro, Gloucester County during 1893 (A.G. Lichtenstein & Associates 1994:152). Roads would finally be of sufficient quality to encourage and expand commerce and transportation.

Local Roads

Surveyors first laid out the road currently known as the Black Horse Pike in 1795 as a straight-road replacement for the more ancient Irish Road and the old Cape Road. The latter road had its origin in an act of the 1716 Assembly, which provided that “since the road now used, ‘either by Egg-Harbour or Prince Maurice-River, by reason of the many Swamps and Creeks it passeth through, is at some Seasons altogether impassable, and the said Inhabitants having found out a more convenient Road, which they desire they may have liberty to lay out and clear’” (Boyer 1967:57). This law empowered the inhabitants to lay out a new road, from Cedar Swamp Bridge to Tuckahoe and then to the Town of Gloucester. The road was blazed between Maurice River and Four Mile Branch (a tributary to the South Branch of Big Timber Creek), came up through Cross Keys, passed over Stephen’s Branch (origin of Bell’s Lake), crossed the South Branch of Big Timber Creek at Delap’s Bridge, and continued up to Blackwoodtown, where it joined with the road to this town coming down from the Delaware River (Boyer 1967:57). Primitive road improvement soon extended to Weymouth, where it joined with the White Horse Pike (Figure 21).

Local residents referred to the northern end of this road as the Newton Road, because its northern end terminated in Newton Township, Gloucester County. In 1855, the Camden County section became the Camden & Blackwoodtown Turnpike Company and the portion from Blackwoodtown south obtained a legislative incorporation as the Williamstown and Good Intent Turnpike Company in 1852 (Hood 1871:172-191). Camden County freed the roadway from its

Figure 21
1847 Williams Map Showing the Black Horse Pike
 I-295 / I-76 / Route 42 Direct Connection
 Camden County, New Jersey



Map Document: X-Graphics\Projects\P-5931\Fig 17_1847WilliamsMap.ap



Not to Scale



Project Location



Black Horse Pike

turnpike tolls by purchasing the road in 1903. But little improvement occurred under county control. In the 1920s, the state assumed control of the road and began paving the road surface all the way to Atlantic City (Leap 1981:168-170). Finally, in 1925, the roadway received the name of Black Horse Pike as a contrast to the White Horse Pike, which the former road paralleled to the south (Leap 1981:78). The state made further improvements during the 1930s, when the highway department widened the road to four lanes from the Camden County-Gloucester County line south. Today, the Black Horse Pike serves as a major thoroughfare to Route 42 (the North-South Freeway) for the many suburban developments found along its Camden and Gloucester County corridor.

Initial Suburbanization in Camden County

Camden County's first fledgling suburbanization effort occurred during the mid-nineteenth century, when communities like Merchantville appeared. But true growth in a suburban community requires convenient transportation modalities such as turnpikes, streetcar lines, or railroads. Although Merchantville arose along the Camden and Moorestown Turnpike when founded, the community did not receive its railroad service until 1867, at which time the Camden & Burlington County Railroad was introduced and the town began to grow at a faster pace. The Camden & Atlantic Railroad, constructed between Camden and Atlantic City, began operating in 1854. Its route took it through Haddonfield and presented this colonial village with an opportunity for substantial expansion, but both Haddonfield and Merchantville are somewhat isolated incidents. The West Jersey Railroad, constructed by Camden & Amboy interests, occupied the former Camden & Woodbury Railroad right-of-way and began train service in 1857. Following the Civil War, during the period between 1870 and 1900, Camden County realized a genuine suburbanization boom as railroad and then streetcar line construction occurred throughout this time period, creating development corridors.

The Philadelphia & Atlantic City Railway, initially built as a narrow-gauge line between South Camden and Atlantic City by disgruntled Camden & Atlantic board of directors' members, wrought such suburban communities as West Collingswood, Oakland (now Oaklyn), Audubon, Orston, Haddon Heights, Barrington, Magnolia, Somerdale, Stratford, and Laurel Springs. Similarly, the developments that the Camden & Atlantic Railroad spawned included

Collingswood, Westmont, West Haddonfield, Lindenwold, Berlin, and Atco. The West Jersey Railroad's only real impact on Camden County during the nineteenth century was aiding in the growth of a reborn Gloucestertown, which became Gloucester City in 1868. The Camden branch of the Camden & Amboy Railroad wrought the developments of Pavonia and North Cramer Hill in East Camden, and Delair in Pennsauken Township. The Camden & Burlington County Railroad aided in Merchantville's growth, but also provided the impetus for such developments as Cramer Hill, Rosedale, and Pensauken (Spelled Pennsauken post 1892). In 1874, the Camden, Gloucester & Mount Ephraim Railway completed its line between Camden and Gloucester City. Two years later, the railroad company extended its line to Mount Ephraim with thoughts to construct the extension all the way to Blackwoodtown, although this did not happen until 1891, seven years after the P&R Railroad assumed control of the Camden, Gloucester & Mount Ephraim Railway and standard-gauged it in 1884. The extended line, known as the Camden County Railroad, generated planning for new developments in Mount Ephraim and Blackwood and lots laid out in such new suburban communities as Bellmawr, Runnemede, Glendora, Blenheim, Blackwood, and Grenloch.

The initial railroad extension into Mount Ephraim during 1876 caused James Davis to lay out his plan for development during the same year (Camden County Filed Plans). Within a year of extending the rails to Grenloch in 1891, the Bell family filed the subdivision plan called Bellmawr, located on the east side of the tracks, with the Camden County Clerk (ibid.). Both of these initial developments in or near the current project area were drafted as a direct result of the railroad's construction.

Twentieth-Century Suburbanization

However, while these railroad-oriented suburban developments first began in the late nineteenth century, their maturation did not occur until the state and county purchased the turnpike roads, removed the tolls, and began improving these highways in conjunction with the rising popularity of the automobile, again creating development corridors, only this time geared to the driving public. In all cases, these improved highways paralleled the rail lines, allowing developers to expand small housing tracts, extending them between rail and highway. The table below provides information on the parallel railroads and highways:

Table 4. Parallel Railroads and Highways in Early-Twentieth-Century Camden County.

Railroad Line	Parallel Highway
Pennsylvania/Camden & Amboy	Burlington Turnpike/Route 130
Pennsylvania/Camden & Burlington County	Camden & Moorestown Turnpike (Route 537)
Pennsylvania/Camden & Atlantic	Haddon Avenue and White Horse Pike (Route 30)
Philadelphia & Reading/Philadelphia & Atlantic City	White Horse Pike (Route 30)
Philadelphia & Reading/ Camden, Gloucester & Mount Ephraim	Black Horse Pike (Route 168)
Pennsylvania/West Jersey	Broadway and Route 130

Local rail-based commuter service began a gradual decline as an increasing number of residents purchased automobiles and took to the roads. Within the current project area, developers laid out West Bellmawr, located opposite the original Bellmawr development during 1906 (Camden County Filed Plans). In Mount Ephraim, the Mount Ephraim Land & Improvement Company laid out sections of its land between 1896 and 1906, followed by Tract #1 of the Halyburton Realty Company, platted in 1912. The Camden County Garden Farms Company platted their One-Acre Farms on the wedge of land between the Black Horse Pike and Bell Road in 1916. This development transcended the Mount Ephraim-Bellmawr boundary line (Little Timber Creek) into both communities (Camden County Filed Plans). The company sold four lots, located at the corner of Bell Road and Anderson Avenue in Bellmawr, to the Resurrection of Christ Polish National Catholic Church for use as a cemetery (Camden County Deeds 412:145).

Resurrection of Christ Cemetery

The City of Camden gained a sizeable Polish population beginning in the 1880s as this ethnic group migrated from Philadelphia to work in Camden’s growing leather and morocco industry, oilcloth works, iron foundries, and shipyards. At first, these newcomers settled among an already present German population and worshipped at Saints Peter and Paul Roman Catholic Church, the local German-speaking congregation. As more Polish arrived, they migrated to a city neighborhood called Liberty Park and established Saint Joseph’s Roman Catholic Church to serve the needs of the Polish communicants. The church incorporated in October 1892, following some occasional services held in private homes, and proceeded to erect a fitting edifice (Dorwart 2001:108-109). Nationally during this time period, the United States received an unprecedented influx of Polish émigrés, which added dramatically to the membership of the American Roman Catholic Church, making it the largest religious body in the country. Native Poles in America

totaled 147,440 in 1890. Ten years later, the number more than doubled to 383,407. Friction surfaced rather quickly between the new Poles and the established church hierarchy predominated by Irishmen. Church leaders shunned the Polish due to language barriers and the Poles' desire to retain old-world customs and religious practices. In response, the Poles repeatedly made requests for their own priests and bishops only to have the church ignore their petitions. American Catholic leaders thought the Poles should become "Americanized," a stand the Polish ardently resisted (Wytrwal 1969:257-274).

As author Joseph Wytrwal stated:

The Catholic Poles in America thus found themselves in a dire predicament: to become accepted Americans, they would have to reject their Polish heritage; to become accepted Catholics in America, they would have to reject their own Catholic Polish heritage and adopt an American version of English culture together with the equally unfamiliar form of English Catholicism. The educational requirements in the United States also presented the Poles with a double threat. In the existing parochial schools, their children would forget the ancestral language; in the public schools they would have training in neither language nor religion (ibid.:261).

Faced with this paradox, three distinct groups emerged within the Polish community: many accepted becoming "Americanized" and remained true to the Roman Catholic Church; a second group deserted their faith entirely; and a third faction denounced the demands presented by the Irish Catholic prelates. After attempting the establishment of a separate Slavic diocese in certain urban centers, the third group of Poles discussed above rebelled and inaugurated independent Polish parishes. A schism began appearing in American Polish enclaves in Wisconsin, the coal regions of Pennsylvania, and Chicago, Cleveland, Buffalo, and Baltimore. Finally in 1897, the Reverend Francis Hodur organized an independent congregation. The parish maintained the Roman Catholic rites but reverted to the Polish language for all rituals. Hodur and the congregants adopted a church charter that specified joint church governance shared between the priests and the laity. Other parishes soon assumed the same charter; by September 1904, 24 parishes with over 20,000 faithful Poles in five states united to create a new denomination called the Polish National Catholic Church. At the denomination's first national synod, the attendees elected Father Hodur as church Bishop (Wytrwal 1969:257-274).

Locally in Camden, New Jersey, it appears all was well at Saint Joseph's Roman Catholic Church for its first 20 years of existence. At some point, however, a renegade group of Catholic Poles faced the same paradox as others of their ethnicity around the country and split from the local parish in 1912 to form the Polish National Catholic Parish of the Resurrection of Christ. Led by Maksymillian J. Lawnicki, known locally as "Iron Mike," the parish's first priest, a church committee proceeded to purchase land at the northwest corner of Mount Ephraim Avenue and Thurman Street from the Camden Safe Deposit & Trust Company in June 1912 (Camden County Deeds 368:112). Because the church acquired this property before becoming properly incorporated, the Camden Safe Deposit & Trust Company confirmed the sale to the church in January 1913. The church achieved its incorporation in July 1912 (Camden County Deeds 373:294). The congregants erected a neat brick edifice on the purchased land; the church building also acquired the moniker of "Iron Mike" due to the influence that Lawnicki held over his parish (Evans, personal communication 2003).

Presumably the congregation increased in size during the first few years of the church's existence. With no land available immediately around the sanctuary for a cemetery, Lawnicki sought other arrangements to provide for his flock's deceased loved ones. A growing Polish presence in suburban villages like Mount Ephraim and Bellmawr led Father Lawnicki and his parish faithful out into the countryside surrounding Camden. As a result, the congregation formed the "Cemetery Association of the Polish National Catholic Parish of Resurrection of Christ" and in October 1916, the new association purchased lots 70, 71, 72 and 73, each measuring 100 feet by 400 feet, from the Camden County Garden Farms Company, a local land development firm. Located at the northwest corner of Bell Road and Anderson Avenue, the combined lots provided the congregation with a ±4.0-acre cemetery (Camden County Deeds 412:145). According to a cemetery plan drawn by the Works Progress Administration (WPA) in March 1938, the cemetery has a maximum capacity of 1,088 burials (Camden County Historical Society, map 89.96.40). The plan, drawn to record veterans' graves, shows two military men buried at the time it was drafted: Leon Sochacki and Stanley Gontarski, both World War I soldiers. Gontarski died during the war in the Argonne offensive (Sheridan 1919:30). The cemetery received additional veteran burials from subsequent wars.

The congregation continued worshipping at their church in Camden until its membership dwindled below viability. In August 1989, the parish closed the church and sold the building for \$1.00 to the Central Diocese, Polish National Catholic Church, located in Scranton, Pennsylvania (Camden County Deeds 4393:610). Exactly five months later, the Central Diocese sold the building to the Community Baptist Church of Camden for \$50,000 (Camden County Deeds 4422:634). The Baptist church still used the edifice in 2003. Although the congregation is gone, the local parish still maintains the cemetery in Bellmawr. In the 2002 tax records for Bellmawr Borough, the contact person is listed as Reverend Drabik, residing at 1111 Thurman Street, Camden, New Jersey. This is the same house that Maksymillian Lawnicki lived in during 1916 according to a Camden city directory of that time (Boyd 1916:1273). It is unknown how many burials the cemetery currently contains or when the most recent interment took place.

World War I and Beyond

America's entrance into World War I brought new, self-contained communities to house war workers in Camden County. Noreg Village rose in today's Brooklawn, constructed to house shipyard employees working at two shipbuilding facilities, the Pennsylvania and the New Jersey Shipbuilding corporations, with their shipyards located in South Gloucester. New York architect Electus Litchfield designed Yorkship Village, now Fairview, for the Emergency Fleet Corporation to house the surge of workers employed at New York Shipbuilding Corporation (Dorwart 2001:120). Originally constructed in Haddon Township, the City of Camden annexed Yorkship Village in 1918 (Snyder 1969:104). Adjoining Yorkship Village, Morgan Village housed laborers for the shipyard and Camden Forge. Following the end of World War I, developers of The Fairfield Estates, sections A and C, laid out this new neighborhood on the east side of the Black Horse Pike in what, today, is Haddon Heights Borough. However, at the time of its platting, The Fairfield Estates were located in Centre Township and not annexed by Haddon Heights until 1925 (Camden County Filed Plans; Snyder 1969:107, 111).

Beyond the improved highways, another galvanizing event in suburbanization was the construction of the Delaware River Bridge (today's Benjamin Franklin Bridge), completed in 1926. Suddenly, Delaware Township (present-day Cherry Hill) contained the upscale development of Colwick. During the 1920s, Earl R. Lippincott began constructing Erlton and

Haddonfield Gardens. In Audubon and more particularly in Haddon Heights, handsome and stately homes appeared along the White Horse Pike and the community’s side streets. As people moved to these and other developments in Camden County, many citizens resented being part of a larger township and “municipal madness” struck and struck hard. Between 1874 and 1929, 26 communities that began as suburban developments became separate boroughs through liberal state laws.

Table 5. Camden County Boroughs Created between 1874 and 1929.

Borough	Erected From	Date
Audubon	Haddon Township	1905
Barrington	Centre Township	1917
Bellmawr	Centre Township	1926
Berlin	Berlin Township	1927
Brooklawn	Centre Township	1924
Chesilhurst	Winslow and Waterford townships	1887
Clementon	Clementon Township	1925
Collingswood	Haddon Township	1888
Gibbsboro	Voorhees Township	1924
Haddonfield	Haddon Township	1875/1894
Haddon Heights	Centre and Haddon townships	1904
Hi-Nella	Clementon Township	1929
Laurel Springs	Clementon Township	1913
Lawnside	Centre Township and Barrington	1926
Lindenwold	Clementon Township	1929
Magnolia	Clementon and Centre townships	1915
Merchantville	Stockton and Delaware townships	1874
Mount Ephraim	Centre Township	1926
Oaklyn	Haddon Township	1905
Pine Hill	Clementon Township	1929
Pine Valley	Clementon Township	1929
Runnemede	Centre Township	1926
Somerdale	Clementon Township	1929
Stratford	Clementon Township	1925
Tavistock	Centre Township	1921
Woodlynne	Haddon Township	1901

Source: Snyder 1969:103-109

In the case of Clementon and Centre townships, these two political entities lost so much land mass to borough creation that they dissolved their government and completely disappeared from the map as political entities.

Within the current project area, state-funded improvements to the Black Horse Pike during the 1920s brought a new round of development, with Bellmawr receiving Orchard Terrace, Bell

Gardens, Crescent Park, Acres of Diamonds, and Bellmawr Terrace between 1923 and 1928 (Leap 1981:170; Camden County Filed Plans). Similarly, Mount Ephraim expanded with a revised version of James Davis's plan, and such developments as Buckingham Estates, the Linwood Tract, and Idora Park, all platted between 1919 and 1927 (Camden County Filed Plans). New housing starts boomed throughout Camden County during the 1920s, but the stock market collapse of October 1929 and the ensuing Great Depression had a profound effect on suburban development. For example, Delaware Township unemployed homeowners could not meet their mortgage obligations and they lost their homes. As Jeffrey Dorwart wrote, "Few newcomers bought property in the township. Many [development] projects remained little more than concrete sidewalks wandering through weed-choked building lots" (Dorwart 2001:164). This situation was typical throughout the county. Delaware Township's government went bankrupt due to the lack of tax revenue. Facing a budgetary crisis, Camden County was forced to bring suit against the Bellmawr, Runnemede, and Laurel Springs boroughs to collect back taxes owed to county government. Meanwhile the state ordered Delaware and Voorhees townships to be placed under the control of the State Municipal Finance Commission (ibid.:131, 164). As Camden County began to gear up for war production in anticipation of America's entry into World War II, new defense housing developments revived the moribund local home construction industry, putting many unemployed citizens back to work. The federal government constructed such war worker communities as Ablett Village in East Camden, Audubon Park, Bellmawr Park, Crescent Park, and additional dwellings in Camden's Morgan Village to house war workers. Of these defense housing developments, the federal government, in concert with organized labor, constructed Audubon Park and Bellmawr Park and subsequently operated each community as innovative mutual housing corporations. Both communities continue to operate under the mutual corporation system today (ibid.:140-142).

Bellmawr Park Mutual Housing Corporation

The Great Depression of the 1930s affected Camden County in the same way as other communities across America, causing bank failures and widespread unemployment. At first, business leaders presumed that the county's diverse economy would spare its people from dramatic effects. However, that hope was short-lived: by June 1933, the county enumerated almost 41,000 people on its relief rolls. Still, the citizenry retained steadfast faith in President

Herbert Hoover's economic policies and supported him in the 1932 election. Republican leadership in Camden County, firmly entrenched since the Civil War, warned that Franklin D. Roosevelt would meddle in local affairs if elected to the presidency. However, despite the Republicans' best effort to defeat Roosevelt, he ascended to the nation's highest office with a huge vote margin and a clear mandate for change. The Roosevelt administration and its "New Deal" brought forth a wide array of governmental agencies to deal with the country's economic woes. This so-called "alphabet soup" included the National Recovery Act (NRA), the Civil Works Administration (CWA), Public Works Administration (PWA), and the WPA. A variety of federally funded projects put Camden County residents back to work improving the county's infrastructure and recreational facilities for the future (Dorwart 2001:129-134).

The New Deal and the power of the rising Democratic Party stimulated local labor activism in the county. Several strikes occurred, and labor unrest grew violent at times. In 1934, John Green, a worker at the New York Shipbuilding Corporation, capitalized on labor's newfound strength in the New Deal Era and organized the Industrial Union of Marine and Shipbuilding Workers of America (IUMSWA) with help of others across the nation. Green formed the very first local of the IUMSWA at New York Shipbuilding Corporation and served the national organization as the first president, holding that position for many years. As the United States entered the final years of the Great Depression, it faced a world being ravaged by German, Italian, and Japanese military aggression. The rising global Axis threat caused American industries to retool for federal defense contracts and other preparations for war that finally ended the unprecedented decade-long financial malaise (Dorwart 2001:138-139). In Camden County, New Jersey, the two main urban centers, Camden and Gloucester City, dominated local industrial activity. The New York Shipbuilding Corporation stood ready to construct warships, its plant extending 2.0 miles along the Delaware River in South Camden and the northern tip of Gloucester. In 1938, it received the naval contract for Battleship "X" or the U.S.S. South Dakota, symbolically signaling the Great Depression's end in Camden County. Nearby, the Camden Forge manufactured many large components for the shipyard. RCA, the Radio Condenser Corporation, and a myriad of other industrial concerns received an ever-increasing number of defensive contracts (Dorwart and Mackey 1976:261-272).

Weary and restless from its long period of unemployment, the American workforce flocked to manufacturing centers across the country, eagerly seeking the new jobs generated through the defense contracts. In Camden County, the population grew by almost 50,000 people during the years 1940 to 1944. In their 1976 county history, authors Jeffrey Dorwart and Philip Mackey wrote: “War work required vast labor reserves and thousands of laborers moved into Camden County.... This growth stimulated real estate development and house construction in both Camden City and the suburban towns” (1976:271). Housing projects for war workers appeared seemingly overnight in Camden City and county suburban townships and boroughs. A special type of housing project arose out of the collaboration between organized labor and the federal government. Referred to as the “Camden Plan,” due to its direct connection with John Green, founder and president of the IUMSWA, the concept dates to September 1940, when Green testified before Congress. He indicated a dire need for defense housing, but wanted the tenants to become part of the process, assigning the residents with a level of responsibility (*Courier-Post* 13 December 1941:9).

As a result of his testimony, Green won a conference with federal housing officials and together labor and federal officials hammered out the mutual housing concept. In a special insert of the *Courier-Post* newspaper dated December 13, 1941, issued to celebrate the completion of the first mutual housing development, Audubon Village (renamed Audubon Park), Green stated:

It would be folly to build homes for workers and then turn these over to be managed by men with real-estate minds. We want the kind of democratic management which the United States Housing Authority stands for, in which the tenants accept some of the responsibility. We want management with a social outlook. Labor wants to create a culture for itself, and can only do so when it is able to organize decent facilities in the neighborhoods where we live (*Courier-Post* 13 December 1941:9).

The United States government began the Bellmawr Park Defense Housing project by obtaining the necessary land through condemnation proceedings. In federal district court, the government sought the right of eminent domain from the Crescent Housing Corporation, Morris Lichtman, George R. Price, and Frances Price. On September 26, 1941, the court found in favor of the United States and the government issued a Declaration of Taking on the same date, which indicated the landowners received \$60,000 for the vacant land (Camden County Deeds 936:268).

However, confident that it would win the case, the WPA dispatched 50 workers on September 21 to begin "...clearing 30 acres of densely wooded land...preliminary to the construction of a 500-unit national defense housing project" (*Courier-Post* 23 September 1941:20). Workmen for a second WPA project at the site installed the utilities and constructed paved access roads, storm sewers, and concrete sidewalks and curbs. The newspaper article indicated that private contractors would undertake the actual construction work, consisting of 275 buildings, "...to house Camden shipyard workers" (ibid.).

The September 27, 1941 issue of the *Courier-Post* carried a small article that indicated that Bellmawr Borough voted to construct a new water system to accommodate the new defense housing project. The news item stated that the "...500 defense homes [are] to be built in Crescent Park section by the government and the Inganamort development" (*Courier-Post* 27 September 1941:18). The Inganamort Corporation, a New Jersey development firm, had already gained experience constructing the adjacent Crescent Park Homes. The Division of Mutual Ownership Defense Housing (DMODH) awarded the design contract for the Bellmawr Park homes to the New York architectural firm of Mayer & Whittlesey, who worked in collaboration with Camden architect Joseph Hettel (Szylvian 1996:44). In discussing the architects' design approach to the Bellmawr development, Dr. Szylvian notes in her paper:

In an article that appeared in *The Architectural Forum*, the architects expressed their determination to avoid "architectural laziness" and "endless repetition." They were confident in their ability to create an architecturally stimulating community without resorting to a "jumbled" site plan and "vulgar style differences." Such an approach obviously was associated with the "speculator's interpretation of middle-class snobbishness" and an "imitation of the rich man's pre-1929 foolishness." (ibid.)

The local newspapers yielded no additional information on the Bellmawr Park development, so it is not clear whether the Day Housing Corporation partially prefabricated the buildings in Gloucester City like it did for the Audubon Park structures, although this is a likely scenario (*Courier-Post* 13 December 1941:2; Szylvian 1996:26-30). The architects involved in designing both Audubon and Bellmawr parks had gained a considerable reputation for building in the International Style. While the buildings at these two mutual housing developments feature some International Style elements, the overall "conventional appearance" likely stems from the desire

of John Green and his IUMSWA union “to provide the rank-and-file with homes that conformed to their notions of what a house should look like as much as possible” (Szylvian 1996:23).

Early in June 1942, Hurley’s Department Store began advertising that they had furnished the model homes at the development and also maintained a similar display within their retail establishment. In part, the ad reads, “Your New Victory Home Completely Furnished as Low as \$359.90” (*Courier-Post* 6 June 1942:2). By June 6, 1942, the press of war workers and the lack of housing had reached critical mass. Although not fully completed, the Bellmawr Park Mutual Housing Authority admitted residents on June 6, nine days ahead of the scheduled opening date. The housing authority operated under the aegis of the Federal Public Housing Administration. A total of 28 families moved in early and over 1,000 applicants had filed with the authority. According to the June 18, 1942 edition of the *Courier-Post*, the government restricted Bellmawr Park exclusively to defense workers. The Bellmawr Park Mutual Housing Authority manager Mrs. Margaret Kearney stated:

To each applicant, the plan of the authority is explained. ...The plan provides a program for the ultimate mutual ownership of all homes by the residents. All residents become members of the management corporation and through it they will become the permanent owners of the whole property. This will take approximately 33 years.

Through this system the residents can obtain the following advantages: Transfer from dwelling of one size to another without loss of equity, a full share of all economies effected by management, cash refunds for careful maintenance of dwelling, participation in management and operation of the property, and unrestricted enjoyment of community and recreational facilities. (*Courier-Post* 18 March 1942:17)

Mr. Joseph Prestone, a New York Shipbuilding Corporation employee and formerly of Philadelphia, became the first resident of Bellmawr Park, along with his wife and child. He moved into 370 Browning Lane (*ibid.*).

Following the end of the war, the housing authority continued to operate as an adjunct to the federal government. However, on the last day of 1952, the United States issued a quitclaim deed to the Bellmawr Park Mutual Housing Corporation. Reciting the actual government agencies involved, the deed states in part that the United States of America acted “...by and through the Public Housing Administration, a constituent unit of the Housing and Home Finance Agency...”

(Camden County Deeds 1707:437). The sale was "...subject to purchase money mortgage in the amount of \$1 million bearing even date" (ibid.:440). The deed featured a appended Exhibit "A," containing a list of an "Inventory of non-Expendable Property—Project NJ-28042" (ibid.). The list included such items as "60 gas ranges," an automobile, two Cushman scooters, a pick-up truck, office equipment, chairs, cots, swing sets, jungle bards, see-saws, and picnic tables. The Bellmawr Park Mutual Housing Corporation continues to manage and operate the Bellmawr Park development today in 2006.

Post World War II Suburban Housing

Following the Second World War, Camden County would undergo its most dramatic suburban transformation, with thousands of single-family homes erected for soldiers and sailors returning home from the war. Even before hostilities ceased, the federal government rearmed World War II veterans with a new type of weapon to ensure a better future—the "G.I. Bill of Rights." Passed unanimously by the 78th Congress, President Franklin Roosevelt signed the "Servicemen's Readjustment Act of 1944 (Public Law 78-346) into law on June 22, 1944 (VA [VA] history website 2003). Congress passed this law to assist the millions of men and women serving in the military to resettle into civilian life with minimal impact on the nation's economy and diminution of any associated sociological problems. Under this law, the VA offered guaranteed home loans and education benefits to veterans. According to the VA:

Credit was viewed as one of the cornerstones of a program to aid the veteran in his/her effort to readjust to civilian life. In the opinion of the supporters of the original legislation, the Government should provide the means whereby the veteran could obtain favorable credit which would permit him/her to shelter his/her family or begin a business or farming venture. This concept arose because of the feeling that veterans, in view of their service in the Armed Forces had missed an opportunity to establish a credit rating which could be the basis of borrowing to acquire a home or to establish a business. The establishment of the loan guaranty program was an attempt to place the veteran on a par with his/her non-veteran counterpart. (VA history website 2003)

As originally drafted, the home loan program featured several pronounced limitations. The VA limited its maximum guaranty to 50 percent of the total loan, but not to exceed \$2,000, and limited the length of the loans to 20 years with a maximum interest rate of four percent. Wording in the law included a type of price control, vis-à-vis, "the purchase price paid or to be paid, or the construction cost, including the value of the land, could not exceed the reasonable normal value

as determined by an appraisal” (Public Law 1944:387-391). Only World War II veterans were eligible for benefits and loan applications had to be submitted within two years of service separation or the cessation of hostilities. Congress addressed these restrictions and shortcomings in the amending legislation passed in 1945 (Public Law 79-268), resulting in almost a total rewrite of loan guaranty benefit as stated in the 1944 law. The new law raised the maximum guaranty loan to \$4,000 and dropped the word “normal” from the phrase “reasonable normal value.” Congress also extended the loan maturity periods from 20 to 25 years and veterans now had a ten-year window to apply for a VA mortgage. In an evolution of legislative intent, the federal government transformed the home loan benefit from a goal of immediate readjustment aid to a long-range veteran benefit (VA history website 2003).

The revamped mortgage benefit spurred housing starts in the second half of the 1940s. In the years 1948 and 1949, residential construction set new, successive all-time records. But housing remained at a premium, with many urban centers still overcrowded with defense workers who relocated from rural areas to obtain industrial-based employment. By 1950, Congress was again spurred into action, passing change legislation to both the Servicemen’s Readjustment Act and the National Housing Act. This Congressional effort included eight basic changes in the veteran home loan program included in the Housing Act of 1950 (Public Law 81-475). Percentage, monetary, interest, and maturity rates changed as part of this landmark legislation. The law also authorized the VA to establish minimum construction standards, which strengthened the appraisal and inspection process, offering protection to the purchasing veterans (VA history website 2003). Developers and builders scrambled to design houses according to the new standards set forth by the VA, which minimally included hardwood floors, plastered walls, Youngstown-style metal kitchen cabinets, and ceramic-tiled bathrooms. In 1953, returning Korean Conflict military personnel received the same veteran benefits.

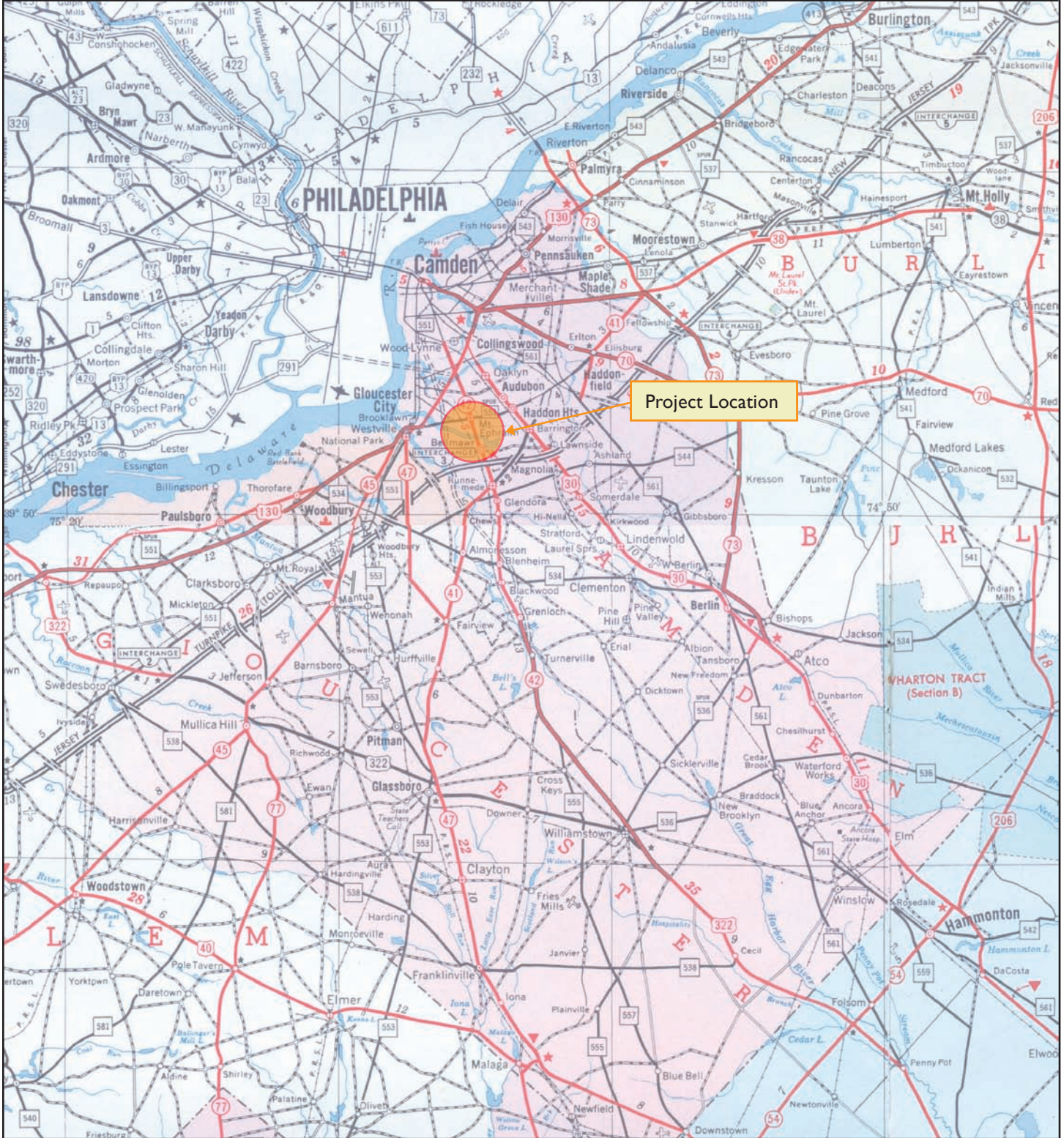
The Impact of Improved Highways and the Walt Whitman Bridge

The improved roads of the late nineteenth into the early years of the twentieth century ushered in a second “transportation revolution,” centered on the automobile. This new revolutionary age began in the region after 1910 and has continued unabated throughout the twentieth century. New types of road paving, such as concrete and bituminous asphalt were introduced during the

opening years of the automobile age, generating a new wave of transportation technological advances. The automobile has accelerated and intensified the process of suburbanization and commercial expansion that began with the railroad and trolley lines. The Delaware River (now the Benjamin Franklin) Bridge, completed in 1926, facilitated access to southern New Jersey counties from the Philadelphia metropolitan area. Highway planning efforts of the 1930s lacked funding for actual construction due to the Great Depression. America's entry into World War II also delayed any proposed road construction. Following the war, however, New Jersey revisited the need for new limited-access highways built to modern standards. For example, the completion of the New Jersey Turnpike in 1952 made access to Camden County attractive to commuters and new or relocating industrial enterprises (Cranmer 1964:56-67) (Figure 22). In 1951, New Jersey Governor Alfred Driscoll and Pennsylvania Governor John S. Fine signed a bi-state act to create the Delaware River Port Authority (DRPA). A year later, President Harry Truman approved the new authority and at the same ceremony, signed a congressional bill authorizing the construction of a new bridge over the Delaware River. The new authority signed bridge construction contracts in 1953 and work began. Designed to connect south Philadelphia and Gloucester City, officials named the new suspension bridge for Camden poet Walt Whitman (Andariese 1981:66-67). The span opened for passage in May 1957 and quickly eclipsed the upstream, newly-named Benjamin Franklin Bridge in total traffic carried. Walter Andariese, chronicler of the Benjamin Franklin Bridge, indicates the causality of this volume change when he writes:

The Benjamin Franklin Bridge did not have the Walt Whitman's accessibility. Brand-new superhighways were built to the Whitman, the North-South Freeway in New Jersey from Turnersville, and an extension from the Schuylkill Expressway in Philadelphia. (The Atlantic City Expressway joined the North-South Freeway in 1964.) The new bridge created much of its future traffic. Many people living and working in Philadelphia found it desirable to live in Jersey—and to use the bridge getting to their jobs. (ibid.:69)

Figure 22
1955 New Jersey State Highway Department Map
Showing Highway Development in the Vicinity of the Project Area
 I-295 / I-76 / Route 42 Direct Connection
 Camden County, New Jersey



Map Document: X:\Graphics\Projects\IP-593\Fig18_1955NJSTHWYMap.apr

Not to Scale

Project Location

Concerning the lasting impact of the bridge on Camden County's postwar development, authors Jeffrey Dorwart and Philip Mackey state in their 1976 Camden County history:

Movement to Camden City's outlying neighbors had accompanied the opening of the first Camden-Philadelphia bridge in 1926 and the dedication of a second crossing in 1957 also introduced an era of suburban expansion. ...The \$85 million Walt Whitman Bridge, the seventh longest suspension bridge at the time, opened up hitherto sparsely-settled areas of Camden County, augmented population in established suburban communities, and encouraged the relocation of industry in both Camden and neighboring Gloucester Counties. Industrial parks, shopping centers, apartment units, and housing projects appeared in Barrington, Magnolia, and Bellmawr in the late fifties and early sixties. Population growth in these communities reflected economic development. Bellmawr expanded from 5213 to 11,853 residents between 1950 and 1960, and by 1970, 15,618 people lived in the borough (1976:329).

I-76, Route 42, and I-295

In 1932, the Regional Planning Federation, predecessor to the Delaware Valley Regional Planning Commission (DVRPC), proposed constructing a parkway from today's Benjamin Franklin Bridge to Atlantic City in a design similar to that of Robert Moses. Unfortunately, the federation lacked a prominent planner who could pursue this project to completion and the planning organization accomplished little more than placing a dotted line across south Jersey. Following World War II, the New Jersey State Highway Department again proposed such a road and the announcement of a new bridge over the Delaware River added urgency to the plans. The state acquired right-of-way for the new road during the early 1950s and construction began. The original plans called for the roadway to extend from the foot of the Walt Whitman Bridge to points south. However, a planned roadway from the Benjamin Franklin Bridge to Gloucester City and a connection with Route 42 received 90-percent federal funding in 1956, so the state revised the plans for Route 42, placing its new northern terminus in Bellmawr. The federally funded 3.1-mile highway, which today carries the I-76 designator, opened for traffic on May 16, 1957, the same day as the Walt Whitman Bridge opened. The first 4.3-mile segment of Route 42 opened from its terminus in Bellmawr to Route 168 in Blackwood during 1958. A year later, the remaining 3.8 miles opened, providing access to Turnersville and an eventual connection with the planned Atlantic City Expressway, which opened in 1965. In anticipation of increased traffic, the state widened Route 42 to six lanes. Eleven years after completing the Route 55 interchange with Route 42 in 1985, the state widened Route 42 between its northern terminus and the new

interchange to eight lanes. Today, Route 42 carries about 85,000 vehicles daily; I-76 has a daily traffic count of 145,000; and 200,000 vehicles traverse the I-295/I-76/Route 42 interchange every work day (Philadelphia area highway website 2004).

Planning for Interstate Route 295 began several years before President Dwight Eisenhower signed the enabling legislation for an interstate highway system. During the late 1940s, New Jersey lawmakers authorized a four-lane, limited access highway to replace the existing Route 130 and connect Trenton and Camden with the Delaware Memorial Bridge, under construction at the time. The state opened portions of the new U.S. Route 130 in Gloucester County in 1948 and 1954, but the new roadway did not meet the federal interstate standards drafted after Eisenhower signed the interstate legislation in 1954. Constructed in sections from the Delaware Memorial Bridge to Trenton from 1954 through 1994, today traffic count on I-295 varies dependant upon the section being traveled. Within the corridor between Exit 24 (Gloucester County Route 551) and Exit 29 (U.S. 30), daily vehicular traffic totals 65,000 south of Exit 26 and ca. 105,000 north of Exit 26. Construction crews built this section of 295 between 1958 and 1961 (Philadelphia area highway website 2004).

Local Postwar Residential Development

Beginning in the mid-1950s and for the ensuing ten years, Bellmawr received its final round of major subdivision developments. Builder/developers platted both Bellwood Park and Bellcroft in 1955. The following year, Bellcroft Estates and Crescent Park, Section 2 appeared on the landscape. All of these housing subdivisions developed on the west side of Black Horse Pike. Across the pike, construction began on Maple Lane during 1958. Adjacent to Anderson Avenue, Collett Court appeared in 1961 and Maloney Court the following year. Construction workers completed the small development called Bellcrest, which features small, split-level semi-detached houses that have a governmental-design appearance, in 1964. Another developer built the Countrytowne Apartments along Browning Road during the same year. In the southwestern corner of Gloucester City, the Cypress Garden subdivision developers filed plans with the county in 1953 for the new residential neighborhood across Market Street from Sherwood Park homes, which began a year earlier. Another subdivision named Park Manor appeared along Market Street in Gloucester City during 1954 (Camden County Filed Plans).

Possessing single homes in suburban communities like Bellmawr and Mount Ephraim during the 1950s and 1960s allowed residents to continue working at the old heavy industries in Camden, Gloucester and even Philadelphia, but permitted them to retreat from urban blight, decay, crime and social unrest at quitting time by driving to their tract house “in the country.” However, local deindustrialization began in the second half of the 1960s, when one of the area’s leading employers, the New York Shipbuilding Corporation, closed down after auctioning off all of its equipment. Other firms followed, ceasing business entirely, or, in some cases, relocating to the southern states. The phenomena of heavy industry abandoning urban centers during the 1960s and into the 1970s gave rise to industrial parks and corporate centers in suburban locations. Esterbrook Pen Corporation, based in Camden since 1859, moved to the Cherry Hill Industrial Park in 1966 before its final relocation to Canada. Local real estate tycoon Leslie Rogers and others developed so many diversified business centers in Pennsauken Township, it caused comedians in area night clubs to quip that Pennsauken was an Indian word meaning “Industrial Park.” In Bellmawr, the developers of the Interstate Industrial Park platted the first section in 1972, followed by a second section two years later (Camden County Filed Plans). Presumably, the park’s name is based on the presence of the adjacent Interstate Highway Route 295.

Today, Bellmawr and Mount Ephraim are mature suburban communities with only pockets of land and some single lots remaining for development. As an indication of the availability of limited construction sites, Bellmawr Borough has recently razed the Bell House, a grand, early nineteenth-century frame farmhouse once standing near the corner of Bell Road and Browning Road, and is constructing a new senior housing project in its stead.

4.2 Historic Architectural Survey Results

An intensive-level historic architectural field survey was conducted within the proposed APE in May 2004. The survey revealed that one previously identified resource, the Bell Farm, is no longer extant. A total of 51 historic architectural resources aged 50 years or older were identified within the APE during the intensive-level survey, including two extant, previously documented resources (the Harrison-Glover House and Bellmawr Park). The resources identified include eight residential historic districts and 43 individual properties, all of which are listed in Table 6.

(Table on following page.)

Table 6. Historic Architectural Resources Summary Table.

Resource Name	Resource ID No.	Plate No.	Resource Type	Municipality	Approximate Construction Date	Eligibility Recommendation
Bellmawr Park District (a.k.a. Bellmawr Park Mutual Housing Historic District)	ADM No. 1	1	Residential Historic District	Bellmawr Borough	1942	Eligible*
Bellwood Park District	ADM No. 2	2	Residential Historic District	Bellmawr Borough	Ca. 1955	Not Eligible
Crescent Park District	ADM No. 3	3	Residential Historic District	Bellmawr Borough	Ca. 1925-1945	Not Eligible
Linwood Tract District I	ADM No. 4	4	Residential Historic District	Mount Ephraim Borough	Ca. 1925-1935	Not Eligible
Linwood Tract District II	ADM No. 5	5	Residential Historic District	Mount Ephraim Borough	Ca. 1925-1945	Not Eligible
Linwood Tract District III	ADM No. 6	6	Residential Historic District	Mount Ephraim Borough	Ca. 1925-1935	Not Eligible
Linwood Tract District IV	ADM No. 7	7	Residential Historic District	Mount Ephraim Borough	Ca. 1940-1955	Not Eligible
West Browning Road District	ADM No. 8	8	Residential Historic District	Bellmawr Borough	Ca. 1950	Not Eligible
Camden County Railroad	ADM No. 9	9	Rail-Related	Bellmawr Borough, Mount Ephraim Borough	1890	Not Eligible
Polish National Catholic Church of Resurrection of Christ Cemetery (Anderson Avenue)	ADM No. 10	10	Religious	Bellmawr Borough	Ca. 1916	Not Eligible
80 Coolidge Avenue	ADM No. 11	11	Residential	Bellmawr Borough	Ca. 1945	Not Eligible
612 Creek Road	ADM No. 12	12	Commercial	Bellmawr Borough	Ca. 1946	Not Eligible
620 Creek Road	ADM No. 13	13	Commercial	Bellmawr Borough	Ca. 1940	Not Eligible
628 Creek Road	ADM No. 14	14	Residential	Bellmawr Borough	Ca. 1953	Not Eligible
640 Creek Road	ADM No. 15	15	Commercial	Bellmawr Borough	Ca. 1946	Not Eligible
700 Creek Road	ADM No. 16	16	Commercial	Bellmawr Borough	Ca. 1945	Not Eligible

Table 6 Continued.

Resource Name	Resource ID No.	Plate No.	Resource Type	Municipality	Approximate Construction Date	Eligibility Recommendation
701 Creek Road	ADM No. 17	17	Residential	Bellmawr Borough	Ca. 1940	Not Eligible
708 Creek Road	ADM No. 18	18	Commercial	Bellmawr Borough	Ca. 1948	Not Eligible
716 Creek Road	ADM No. 19	19	Commercial	Bellmawr Borough	Ca. 1946, 1994	Not Eligible
Bellmawr Little League (Essex Avenue)	ADM No. 20	20	Municipal/ Recreation	Bellmawr Borough	Ca. 1953	Not Eligible
48 Essex Avenue	ADM No. 21	21	Residential	Bellmawr Borough	Ca. 1925	Not Eligible
VFW Post No. 956 (52 Essex Avenue)	ADM No. 22	22	Recreational	Bellmawr Borough	Ca. 1948	Not Eligible
171 Essex Avenue	ADM No. 23	23	Residential	Bellmawr Borough	Ca. 1930	Not Eligible
82 Harding Avenue	ADM No. 24	24	Residential	Bellmawr Borough	Ca. 1955	Not Eligible
151 Harding Avenue	ADM No. 25	25	Residential	Bellmawr Borough	Ca. 1947	Not Eligible
153 Harding Avenue	ADM No. 26	26	Commercial	Bellmawr Borough	Ca. 1940	Not Eligible
112-116 Stanley Avenue	ADM No. 27	27	Residential	Bellmawr Borough	Ca. 1955	Not Eligible
121 Stanley Avenue	ADM No. 28	28	Commercial	Bellmawr Borough	Ca. 1940	Not Eligible
Harrison-Glover House/New Saint Mary's Cemetery (515 West Browning Road)	ADM No. 29	29	Religious	Bellmawr Borough	1764	Not Eligible
Annunciation Church and School Complex (601-605 West Browning Road)	ADM No. 30	30	Religious/ Institutional	Bellmawr Borough	Ca. 1951-1965	Not Eligible
Johnnie's Liquor Store (834 West Browning Road)	ADM No. 31	31	Commercial	Bellmawr Borough	Ca. 1950	Not Eligible
846-856 West Browning Road	ADM No. 32	32	Commercial	Bellmawr Borough	Ca. 1950	Not Eligible

Table 6 Continued.

Resource Name	Resource ID No.	Plate No.	Resource Type	Municipality	Approximate Construction Date	Eligibility Recommendation
39 Adams Avenue	ADM No. 33	33	Residential	Mount Ephraim Borough	Ca. 1940-1946	Not Eligible
202-206 Baird Avenue	ADM No. 34	34	Residential	Mount Ephraim Borough	Ca. 1946-1949	Not Eligible
713 Bell Road	ADM No. 35	35	Residential	Mount Ephraim Borough	Ca. 1928-1939	Not Eligible
715 Bell Road	ADM No. 36	36	Residential	Mount Ephraim Borough	Ca. 1939-1949	Not Eligible
101 Cleveland Avenue	ADM No. 37	37	Residential	Mount Ephraim Borough	Ca. 1918	Not Eligible
102 Cleveland Avenue	ADM No. 38	38	Residential	Mount Ephraim Borough	Ca. 1926	Not Eligible
106 Cleveland Avenue	ADM No. 39	39	Residential	Mount Ephraim Borough	Ca. 1926	Not Eligible
110 Cleveland Avenue	ADM No. 40	40	Residential	Mount Ephraim Borough	Ca. 1926	Not Eligible
328 Emerson Avenue	ADM No. 41	41	Residential	Mount Ephraim Borough	Ca. 1928	Not Eligible
101 Harding Avenue	ADM No. 42	42	Residential	Mount Ephraim Borough	Ca. 1946-1949	Not Eligible
102 Harding Avenue	ADM No. 43	43	Residential	Mount Ephraim Borough	Ca. 1930s	Not Eligible
105 Harding Avenue	ADM No. 44	44	Residential	Mount Ephraim Borough	Ca. 1946-1949	Not Eligible
106 Harding Avenue	ADM No. 45	45	Residential	Mount Ephraim Borough	Ca. 1930s	Not Eligible
115 Harding Avenue	ADM No. 46	46	Residential	Mount Ephraim Borough	Ca. 1946-1949	Not Eligible
116 Harding Avenue	ADM No. 47	47	Residential	Mount Ephraim Borough	Ca. 1946-1950	Not Eligible

Table 6 Continued.

Resource Name	Resource ID No.	Plate No.	Resource Type	Municipality	Approximate Construction Date	Eligibility Recommendation
Mount Ephraim Borough Dept. of Public Works (33 Linden Avenue)	ADM No. 48	48	Municipal/ Recreation	Mount Ephraim Borough	Ca. 1925-1950	Not Eligible
128 Roosevelt Avenue	ADM No. 49	49	Residential	Mount Ephraim Borough	Ca. 1955	Not Eligible
129 Roosevelt Avenue	ADM No. 50	50	Residential	Mount Ephraim Borough	Ca. 1926	Not Eligible
135 Roosevelt Avenue	ADM No. 51	51	Residential	Mount Ephraim Borough	Ca. 1918-1925	Not Eligible

* NJSHPO opinion of eligibility received July 6, 2005; FHWA concurrence received July 18, 2005 (Appendix A).

The locations of all 51 resources are shown in Figure 23. One resource, Bellmawr Park, was recommended eligible for listing in the National Register of Historic Places.

Each of the 51 historic architectural resources identified within the APE was documented using a NJSHPO Survey Form (Volumes II and III, Appendix F). Please see the survey forms in Appendix F for detailed information on each property surveyed and documented at the intensive level, and see Plates 1 to 51 for a photograph of each resource. The resources are briefly described in sections 4.2.1 to 4.2.3.

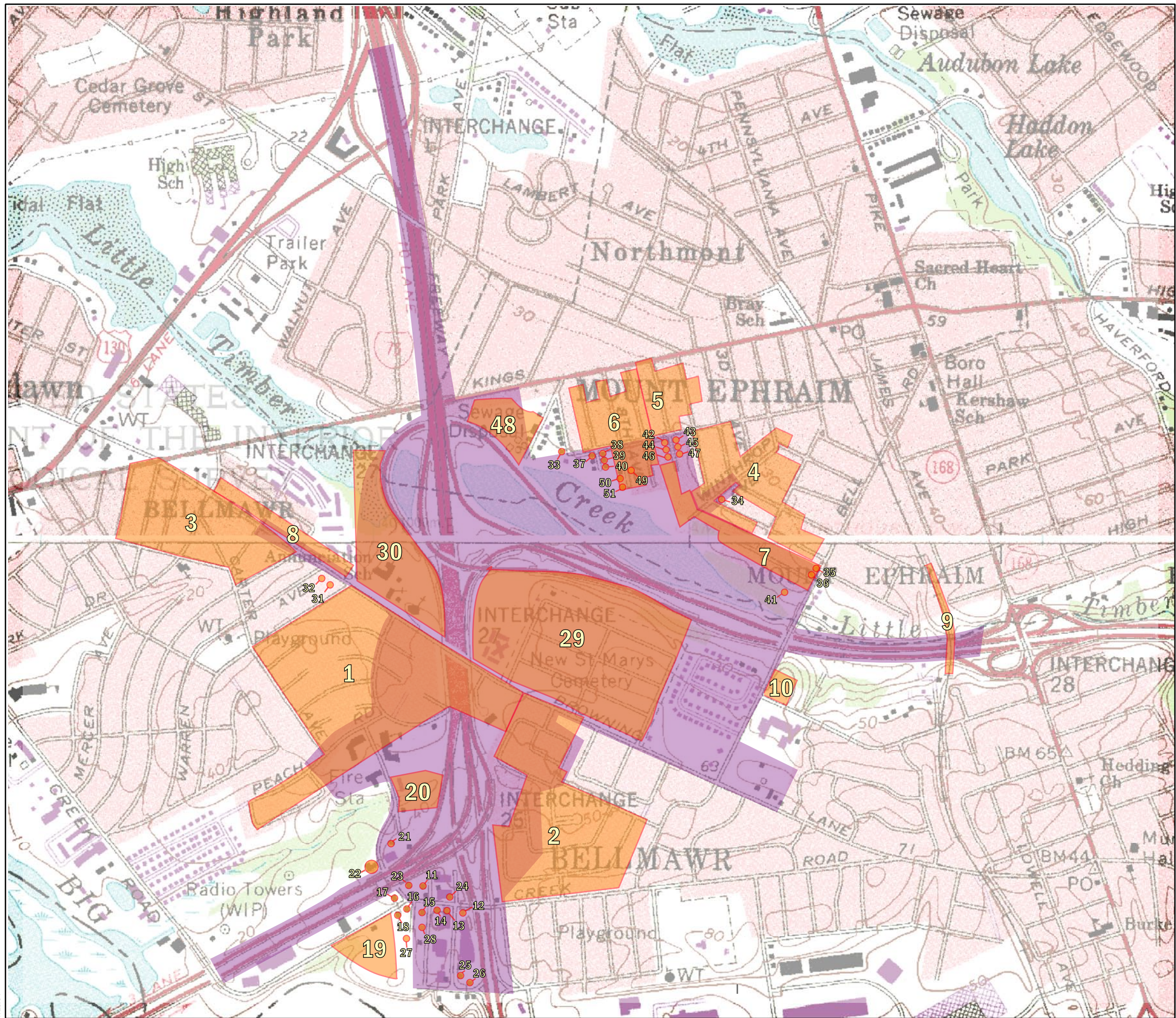
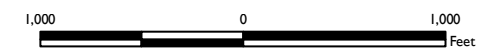


Figure 23
Historic Architectural Resources
Identified Within or Adjacent to the APE
 I-295/I-76/Route 42 Direct Connection
 Camden County, New Jersey

Proposed APE



Surveyed Resources



Historic Architectural Resources Technical Environmental Study
 I-295/I-76/Route 42 Direct Connection, Camden County

Sources: USGS Camden and Runnemede, NJ Topographic Quadrangles.



Plate 1: Representative dwelling in the Bellmawr Park District. View looking southwest along Princeton Avenue (September 2003).



Plate 2: Representative dwelling in the Bellwood Park District. View looking south along Windsor Drive (May 2004).



Plate 3: Streetscape along Union Avenue in the Crescent Park District. View looking east (May 2004)



Plate 4: Representative dwelling in the Linwood Tract District I. View looking northeast along Winthrop Avenue (May 2004).



Plate 5: Representative dwelling in the Linwood Tract District II. View looking northwest along Harding Avenue (May 2004).



Plate 6: Representative dwelling in the Linwood Tract District III. View looking southeast along Roosevelt Avenue (May 2004).



Plate 7: Representative dwelling in the Linwood Tract District IV. View looking southwest along Lowell Avenue (May 2004).



Plate 8: Representative dwellings in the West Browning Road District. View looking east (May 2004).



Plate 9: Camden County Railroad. View looking north from Anderson Avenue (September 2003).



Plate 10: Polish National Catholic Church of Resurrection of Christ Cemetery. View looking northwest (September 2003).



Plate 11: 80 Coolidge Avenue. View looking southwest (May 2004).



Plate 12: 612 Creek Road. View looking northeast (May 2004).



Plate 13: 620 Creek Road. View looking southwest (May 2004).



Plate 14: 628 Creek Road. View looking south (May 2004).



Plate 15: 640 Creek Road. View looking southeast (May 2004).



Plate 16: 700 Creek Road. View looking southwest (May 2004).



Plate 17: 701 Creek Road. View looking north (May 2004).



Plate 18: 708 Creek Road. View looking southwest (May 2004).



Plate 19: 716 Creek Road. View looking southeast (May 2004).

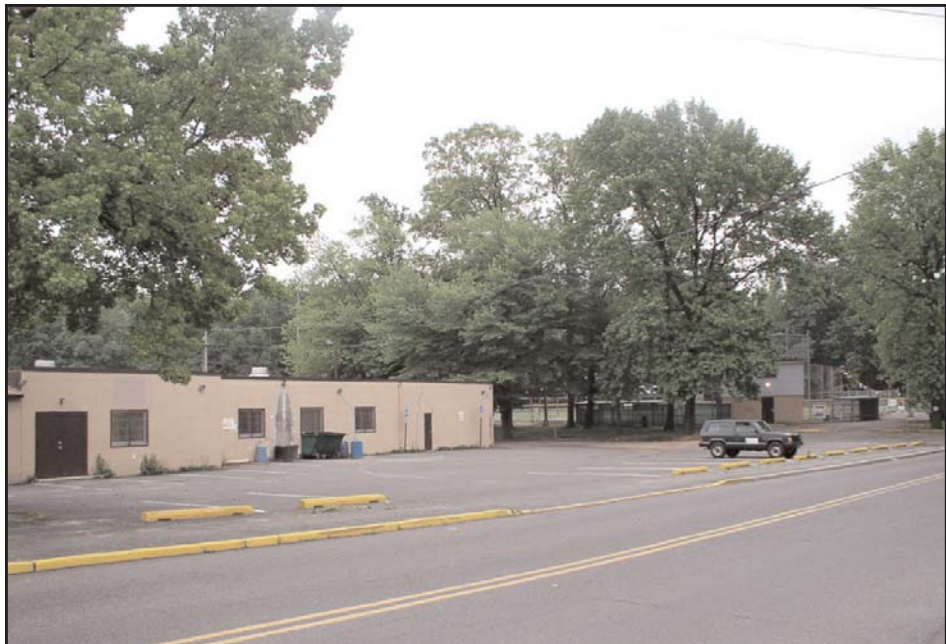


Plate 20: Bellmawr Little League, Essex Avenue. View looking southeast (May 2004).



Plate 21: 48 Essex Avenue. View looking south (May 2004).



Plate 22: VFW Post No. 956 Lodge, 52 Essex Avenue. View looking southwest (May 2004).



Plate 23: 171 Essex Avenue. View looking east (May 2004).



Plate 24: 82 Harding Avenue. View looking southwest (May 2004).



Plate 25: 151 Harding Avenue. View looking east (May 2004).



Plate 26: 153 Harding Avenue. View looking northwest (May 2004).



Plate 27: 112-116 Stanley Avenue. View looking southwest (May 2004).



Plate 28: 121 Stanley Avenue. View looking northwest (May 2004).



Plate 29: Hugg-Harrison-Glover House and New Saint Mary's Cemetery. View looking northwest (September 2003).



Plate 30: Parish Hall at the Annunciation Church and School Complex, 601-605 West Browning Road. View looking north (May 2004).



Plate 31: 834 West Browning Road. View looking southeast (May 2004).



Plate 32: 846-856 West Browning Road. View looking southwest (May 2004).



Plate 33: 39 Adams Avenue. View looking southwest (May 2004).



Plate 34: 202-206 Baird Avenue. View looking northeast (May 2004).



Plate 35: 713 Bell Road. View looking southwest (May 2004).



Plate 36: 715 Bell Road. View looking northwest (May 2004).



Plate 37: 101 Cleveland Avenue. View looking southwest (May 2004).



Plate 38: 102 Cleveland Avenue. View looking southeast (May 2004).



Plate 39: 106 Cleveland Avenue. View looking southeast (May 2004).



Plate 40: 110 Cleveland Avenue. View looking southeast (May 2004).



Plate 41: 328 Emerson Avenue. View looking northwest (May 2004).



Plate 42: 101 Harding Avenue. View looking southeast (May 2004).



Plate 43: 102 Harding Avenue. View looking southeast (May 2004).



Plate 44: 105 Harding Avenue. View looking northwest (May 2004).



Plate 45: 106 Harding Avenue. View looking southeast (May 2004).



Plate 46: 115 Harding Avenue. View looking southwest (May 2004).



Plate 47: 116 Harding Avenue. View looking southeast (May 2004).



Plate 48: Mt. Ephraim Department of Public Works, 33 Linden Avenue. View looking north (May 2004).



Plate 49: 128 Roosevelt Avenue. View looking northeast (May 2004).



Plate 50: 129 Roosevelt Avenue. View looking southeast (May 2004).



Plate 51: 135 Roosevelt Avenue. View looking southeast (May 2004).



4.2.1 Districts

Bellmawr Park District (also known as the Bellmawr Park Mutual Housing Historic District)

The NJSHPO determined the Bellmawr Park Mutual Housing Historic District eligible for listing in the National Register in a letter dated July 6, 2005. The district is eligible under Criteria A and C, and its period of significance is 1942 to 1945 (Appendix A). Contributing elements to the district include all residential buildings and communal open space dating from within the period of significance, the Bellmawr Park Mutual Housing Corporation office building, and the Bellmawr Park School. In the May 2005 draft of this report, it was recommended that the Bellmawr Park School be excluded from the National Register boundaries of the district due to a current lack of association with the Bellmawr Park Mutual Housing Corporation; however, NJSHPO issued an opinion on July 6, 2005, stating that the school should be included as a contributing element to the district because it was constructed during the period of significance and was historically associated with Bellmawr Park (Figure 24). NJDOT and the Federal Highway Administration (FHWA) concurred with the SHPO's opinion in a letter dated July 18, 2005 (Appendix A).

Bellmawr Park is comprised of one municipal tax parcel (Block 49, Lot 1) upon which the Division of Mutual Ownership Defense Housing (DMODH) and the Bellmawr Park Mutual Housing Authority constructed 176 multi-unit residential and support buildings for defense workers at Camden's New York Shipbuilding Corporation in 1942. The development is located immediately adjacent to the I-295/I-76/NJ Route 42 interchange, and Route 42 divides the community into two sections just south of the interchange. The majority of the resource is situated within an area bounded by West Browning Road to the north, Princeton Avenue to the west, and the highway interchange to the east. A small section of the development is located immediately east of the interchange and south of West Browning Road. In addition to the 175 residential buildings within Bellmawr Park, a housing office is located at the intersection of Peach Road and Essex Avenue. There are 70 buildings within Bellmawr Park that are located within the APE for the I-295/I-76/Route 42 Direct Connection project, and Building/Element Attachments for those 70 buildings are included in the NJSHPO survey form for this resource (Appendix F).

Figure 24
Bellmawr Park
Mutual Housing Historic District
National Register Boundary
 I-295 / I-76 / Route 42 Direct Connection
 Camden County, New Jersey

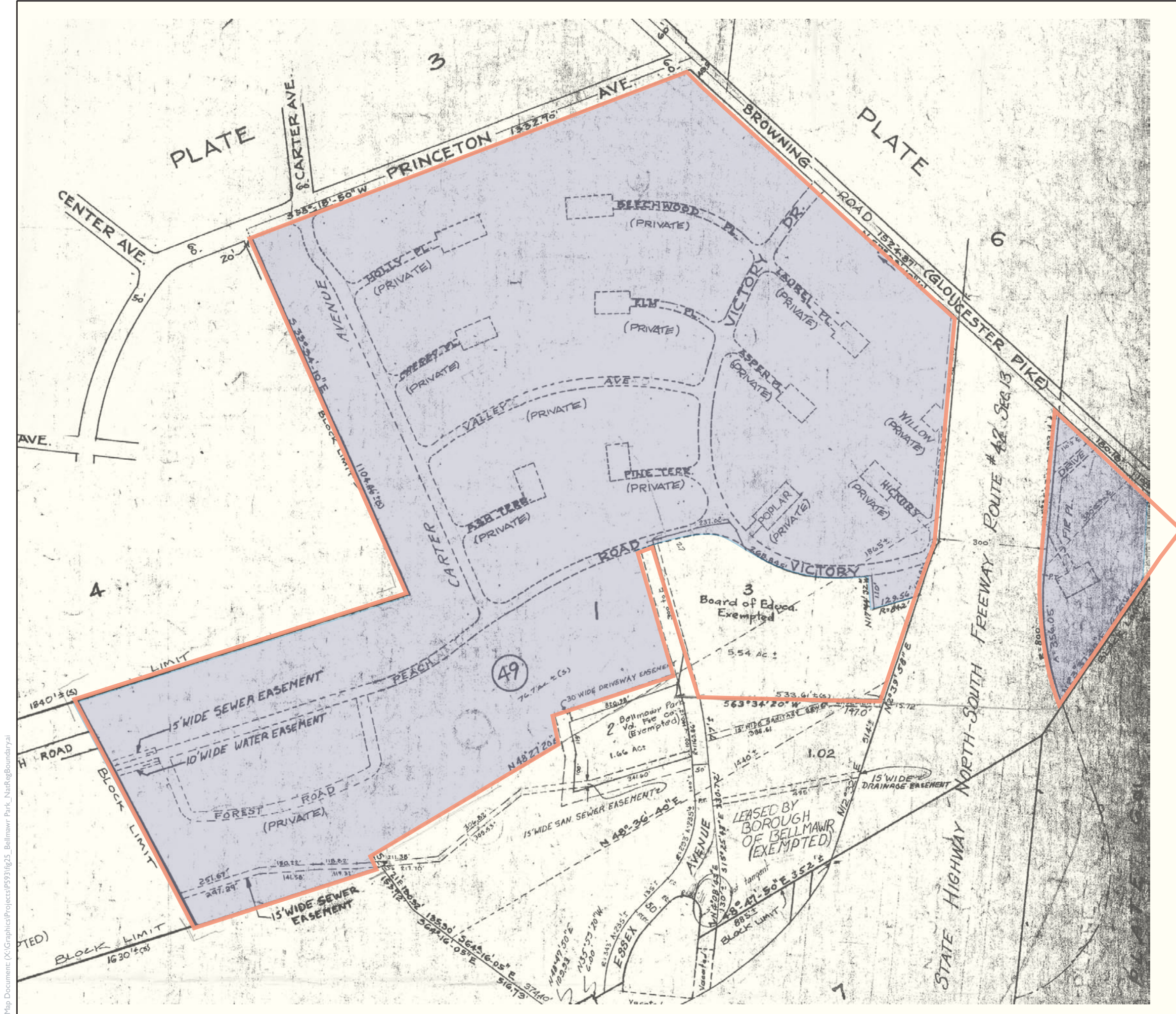
-  National Register Boundary Proposed by A.D. Marble & Company, May 2005
-  National Register Boundary Established by NJ SHPO, July 2005



Not to Scale

Historic Architectural Resources Technical Environmental Study
 I-295/I-76/Route 42 Direct Connection, Camden County

Source: Bellmawr Borough Tax Map, 1970.



Generally, the residential buildings within Bellmawr Park are simple, one- or two-story, light timber frame buildings with concrete foundations and side-gabled, hipped, or flat roofs. The buildings are currently clad in brick facing or asbestos, vinyl, or aluminum siding. Most buildings have undergone significant modifications, the most common of which are the application of siding, the installation of replacement windows and doors, the construction of small additions, the replacement and/or enclosure of porches, and the enlargement of window openings. Asphalt shingle roofing and small brick chimneys are visible on all dwellings.

The residential buildings within the development can be categorized into five primary types, designated Types A, B, C, D, and E for the purposes of this study. Type A is characterized by single-story, side-gabled buildings containing two side-by-side units. Type B consists of two-story, brick-faced, side-gabled or flat-roofed buildings containing four side-by-side units. Type C is characterized by single-story, brick-faced, side-gabled buildings containing two side-by-side units (similar to Type A, but clad in brick instead of asbestos, vinyl, or aluminum siding). Type D consists of single-story, side-gabled or hipped-roofed buildings containing four side-by-side units. Type E consists of single-story, hipped-roofed buildings containing two side-by-side units.

Bellwood Park District

The Bellwood Park District (Plate 2) is comprised of 219 individual residential properties located within a suburban post-war development. Bellwood Park was subdivided ca. 1955, according to Camden County filed plans, and the dwellings were likely constructed shortly thereafter. The development is located immediately adjacent to the I-295/I-76/Route 42 interchange. The majority of the resource is situated within an area bounded by Browning Road to the north, Route 42 to the west, Creek Road to the south, and an adjacent mid-twentieth-century development, Belcroft Estates, to the east. There are 121 buildings within Bellwood Park that are located within the proposed APE for the I-295/I-76/Route 42 Direct Connection project, and Building/Element Attachments for those 121 buildings are included in the survey form for this resource (Appendix F).

The buildings within the Bellwood Park District are simple, one-story, light timber frame, Minimal Traditional-style dwellings with concrete foundations and side-gabled roofs. The

buildings are currently clad in either brick or Permastone with asbestos, vinyl, or aluminum siding, or they are plain with asbestos, vinyl, or aluminum siding. Most buildings have undergone significant modifications, the most common of which are the application of siding, the installation of replacement windows and doors, and the construction of small additions. Asphalt shingle roofing and small brick chimneys are visible on all dwellings.

The residential buildings within the development can be categorized as one primary type, designated Type A, for the purposes of this study. Type A is characterized by single-story, side-gabled dwellings. Within Type A, there are four subtypes that describe the front façade of each dwelling. Subtype 1 features a plain façade with either aluminum, asbestos, or vinyl cladding. Subtype 2 features brick cladding in the lower half of the façade and aluminum, asbestos, or vinyl siding in the upper half of the façade. Subtype 3 features Permastone cladding in the lower half of the façade and aluminum, asbestos, or vinyl siding in the upper half of the façade. Subtype 4, described as “other,” includes dwellings with altered facades.

Crescent Park District

The Crescent Park District (Plate 3) is comprised of 159 individual residential properties situated within a suburban development located to the west of the I-295/I-76/Route 42 interchange. The majority of the resource is bounded by West Browning Road to the east/northeast, King’s Highway to the northwest, and Market Street to the south. Physical evidence indicates that the dwellings within the Crescent Park District were constructed ca. 1926 to 1945. Dwellings of similar age and form surround the district; however, their differences, including size, fenestration patterns, and roof forms, are substantial enough that their inclusion within the Crescent Park District is not warranted. There are six buildings within the Crescent Park District that are located within the proposed APE for the I-295/I-76/Route 42 Direct Connection project, and Building/Element Attachments for those six buildings are included in the survey form for this resource (Appendix F).

The residential buildings within the Crescent Park District are simple, one-and-one-half to two-story, light timber frame buildings with rusticated concrete block foundations and side-gabled, gable-front, gambrel, or cross-gabled roofs. The buildings are currently clad in a number of

materials, the most common of which are vinyl or aluminum siding, asbestos shingles, and/or brick. Most buildings have undergone significant modifications, the most common of which are the application of modern siding, the installation of replacement windows and doors, the construction of small additions, and the replacement and/or enclosure of porches. Asphalt shingle roofing and small brick chimneys are visible on most dwellings.

The residential buildings within the development can be categorized into six primary types, designated Types A, B, C, D, E, and F for the purposes of this study. Type A is characterized by one-and-one-half-story dwellings with side gambrel roofs. Type B consists of one-and-one-half-story dwellings with steeply pitched side gable roofs. Type C is characterized by one-and-one-half-story, side-gabled dwellings with symmetrically sloped cross gables. Type D consists of one-and-one-half-story, side-gabled dwellings with asymmetrically sloped cross gables. Type E is characterized by two-and-one-half-story, side-gabled dwellings with second-story overhangs. Type F consists of one-and-one-half-story, gable-front dwellings with enclosed front porches. Several dwellings within the district boundaries do not fall into a category; therefore, they are designated “other.”

Linwood Tract District I

The Linwood Tract District I (Plate 4) is comprised of 93 individual residential properties located within a larger suburban subdivision historically known as the Linwood Tract. The Linwood Tract was subdivided during the 1920s, according to Camden County filed plans, and physical evidence indicates that the dwellings in the Linwood Tract District I were most likely constructed between ca. 1925 and 1935. The district is located to the east of the I-295/I-76/Route 42 interchange, along Baird and Grant Avenues roughly between Bell Road and Linwood Avenue, and along Garfield and Winthrop Avenues roughly between Baird and Lincoln Avenues. There are seven buildings within the Linwood Tract District I that are also located within the proposed APE for the I-295/I-76/Route 42 Direct Connection project, and Building/Element Attachments for those seven buildings are included in the survey form for this resource (Appendix F).

The residential buildings within the Linwood Tract District I are simple, one-story, light timber frame dwellings with parged concrete foundations and side- and cross-gabled roofs. The buildings are currently clad in a number of materials, the most common of which are vinyl, asbestos, aluminum, or wooden clapboard siding. A number of the dwellings feature interior brick chimneys. Most buildings have undergone significant modifications, the most common of which are the application of modern siding, the installation of replacement windows and doors, and the construction of small additions. Most of the dwellings have asphalt-shingled roofs.

The residential buildings within the district can be categorized into four primary types, designated Types A, B, C, and D for the purposes of this study. Type A is characterized by one-story, side-gabled dwellings with front gable ells projecting from one side of the facades. Type B consists of one-story, side-gabled dwellings with hipped ells projecting from one side of the facades. Building Type C is characterized by one-story, light timber frame, side-gabled dwellings with rear ells and small, centered cross gables located above the front entryways of the facades. Type D consists of one-story, side-gabled dwellings lacking front cross gables or ells. Most of the other major architectural details are similar between building types, including fenestration patterns and cladding types. Several dwellings within the district boundaries do not fall into a category; therefore, they are designated “other.”

Linwood Tract District II

The Linwood Tract District II (Plate 5) is comprised of 36 individual residential properties located within a larger suburban subdivision historically known as the Linwood Tract. The Linwood Tract was subdivided during the 1920s, according to Camden County filed plans, and physical evidence suggests that the dwellings within the Linwood Tract District II were constructed between ca. 1925 and 1945. The district is located to the east of the I-295/I-76/Route 42 interchange, along Harding and Baird Avenues roughly between King’s Highway and Linwood Avenue. There are four buildings within the Linwood Tract District II that are also located within the proposed APE for the I-295/I-76/Route 42 Direct Connection project, and Building/Element Attachments for those four buildings are included in the survey form for this resource (Appendix F).

The residential buildings within the Linwood Tract District II are simple, one-and-one-half-story, light timber frame buildings with parged concrete foundations and side- and cross-gabled roofs. The buildings are currently clad in a number of materials, the most common of which are vinyl and aluminum siding, PermaStone, and brick. Exterior chimneys are attached to the gable ends. Most of the buildings have undergone significant modifications, the most common of which are the application of modern siding, the installation of replacement windows and doors, and the construction of small additions. Most of the dwellings have asphalt-shingled roofs.

The residential buildings within the district can be categorized into four primary types, designated Types A, B, C, and D for the purposes of this study. Type A is characterized by one-and-one-half-story, side-gabled dwellings. Type B consists of one-and-one-half-story, side-gabled dwellings with two gable dormers in each façade. Type C consists of one-and-one-half-story, side-gabled dwellings with a small, centered cross gable located over the front entryway in each façade. Type D consists of one-and-one-half-story, side-gabled dwellings with a large, off-center cross gable in each facade. Most of the other major architectural details are similar between building types, including fenestration patterns and cladding types. Several dwellings within the district boundaries do not fall into a category; therefore, they are designated “other.”

Linwood Tract District III

The Linwood Tract District III (Plate 6) is comprised of 89 individual residential properties located within a larger suburban subdivision historically known as the Linwood Tract. The Linwood Tract was subdivided during the 1920s, according to Camden County filed plans, and physical evidence indicates that the dwellings in the Linwood Tract District III were most likely constructed between ca. 1925 and 1935. The district is located to the east of the I-295/I-76/Route 42 interchange, along Cleveland Avenue roughly between King’s Highway and Linwood Avenue, and along Jefferson and Roosevelt Avenues roughly between King’s Highway and a half a block south of Linwood Avenue. There are 31 buildings within The Linwood Tract District III that are also located within the proposed APE for the I-295/I-76/Route 42 Direct Connection project, and Building/Element Attachments for those 31 buildings are included in the survey form for this resource (Appendix F).

The residential buildings within the Linwood Tract District III are simple, one-story, light timber frame dwellings with parged concrete foundations and cross-gabled roofs. The buildings are currently clad in a number of materials, the most common of which are vinyl and aluminum siding, asbestos shingles, and brick. Most buildings have undergone significant modifications, the most common of which are the application of modern siding, the installation of replacement windows and doors, the construction of small additions, and the replacement and/or enclosure of porches. Most of the dwellings have asphalt-shingled roofs.

The residential buildings within the district can be categorized into two primary types, designated Types A and B for the purposes of this study. Type A is characterized by one-story, cross-gabled dwellings. Type B consists of one-story, cruciform dwellings with hipped roofs. Most of the other major architectural details are similar between building types, including fenestration patterns and cladding types. Several dwellings within the district boundaries do not fall into a category; therefore, they are designated “other.”

Linwood Tract District IV

The Linwood Tract District IV (Plate 7) is comprised of 48 individual residential properties located within a larger suburban subdivision historically known as the Linwood Tract. The Linwood Tract was subdivided during the 1920s, according to Camden County filed plans, and physical evidence indicates that the dwellings in the Linwood Tract District IV were most likely constructed between ca. 1940 and 1955. The district is located to the east of the I-295/I-76/Route 42 interchange, along Lowell and Harding Avenues roughly between Bell Road and Linwood Avenue. All 47 buildings within the Linwood Tract District IV are located within the proposed APE for the I-295/I-76/Route 42 Direct Connection project, and Building/Element Attachments for those 48 buildings are included in the survey form for this resource (Appendix F).

The residential buildings within the Linwood Tract District IV are one- to two-story, light timber frame buildings with parged concrete foundations and side- or front-gabled roofs. The buildings are currently clad in a number of materials, the most common of which are vinyl, asbestos, aluminum, and wooden clapboard siding. A majority of the dwellings feature interior or exterior brick chimneys. Most buildings have undergone significant modifications, the most common of

which are the application of modern siding, the installation of replacement windows and doors, and the construction of small additions. Most of the dwellings have asphalt-shingled roofs.

The residential buildings within the district can be categorized into eight primary types, designated Types A, B, C, D, E, F, G, and H for the purposes of this study. Type A is characterized by one-story, side-gabled dwellings with large picture windows and two cladding types in each façade. Type B consists of one-story, side-gabled, split-level dwellings. Type C consists of one-and-one-half-story, gable-front bungalows. Type D consists of one-story, side-gabled dwellings with off-center front entries. Type E consists of one-and-one-half-story Cape Cod dwellings. Type F is characterized by one-story, side-gabled dwellings with cross gables projecting from one side of the façades. Type G is characterized by one-story, side-gabled dwellings with cross gables over two bays in the facades. Type H consists of two-story, split-level dwellings. Most of the other major architectural details are similar between building types, including fenestration pattern and cladding type.

West Browning Road District

The West Browning Road District (Plate 8) is comprised of 68 individual residential properties located along the north side of West Browning Road between Princeton Avenue and Park Drive in Bellmawr Borough, Camden County, New Jersey. Physical evidence indicates that the dwellings within the West Browning Road District were constructed ca. 1950. There are 68 total buildings within the West Browning Road District, and 44 buildings in the grouping are located within the proposed APE for the I-295/I-76/Route 42 Direct Connection project. Building/Element Attachments for those 44 buildings are included in the survey form for this resource (Appendix F).

The residential buildings within the West Browning Road District are simple, one-and-one-half-story, common bond brick buildings with concrete block foundations and flat roofs. The buildings are currently clad in vinyl or aluminum siding, stucco, Permastone, or brick. Most buildings have undergone significant modifications, the most common of which are the application of modern siding, the installation of replacement windows and doors, and the

modification of front porches. Asphalt shingle-covered pent roofs can be found on a majority of the dwellings.

The residential buildings within the grouping can be categorized as two primary types, designated Type A and Type B for the purposes of this study. Type A is characterized by one-and-one-half-story, flat-roofed row houses comprised of blocks of six dwellings. The two end units in each block project forward toward West Browning Road, and the four center units are recessed. The end units also differ from the others because they lack faux pent roofs. Type B is characterized by one-and-one-half-story, flat roofed row houses comprised of twenty or more dwellings in one continuous row. Type B row houses feature faux pent roofs on every other two dwellings within the row.

4.2.2 Individual Properties in Bellmawr Borough

Camden County Railroad

This description covers the section of the Camden County Railroad (Plate 9) (currently a portion of Conrail's Grenloch Industrial Track) located between Snyder Avenue in Bellmawr and Glover Avenue in Mount Ephraim. This approximately 1,200-foot long section of the railroad right-of-way occupies Bellmawr Borough Block 181 and traverses I-295. It was originally constructed in 1890 as an extension of an existing line running between Camden and Mount Ephraim. The Camden County Railroad Company extended the line from Mount Ephraim to Grenloch (formerly Spring Mills) between 1890 and 1891. The current active section of the Camden County Railroad extends from the historic end of track for the Camden, Gloucester and Mount Ephraim Railway, located at the northern edge of King's Highway in Mount Ephraim Borough, to a point just south of Benigno Boulevard in Bellmawr Borough. The portion of the line delineated in this description encompasses the section between Snyder and Glover Avenues. It does not cover the portion of the line between Camden and Mount Ephraim (the Camden, Gloucester & Mount Ephraim Railway) or the non-active section of the Camden County Railroad from the current end of track in Bellmawr Borough to the historic end of track in Grenloch. The right-of-way between Snyder and Glover Avenues currently contains the following railroad-related features: an intact berm, ballast in the rail bed, a single track of steel rails, wood ties, a late-twentieth-century metal culvert, and a steel and concrete bridge

constructed over I-295 in 1958. Telephone lines supported by wooden poles run adjacent to the railroad berm within the western edge of the right-of-way, and power lines supported by steel poles run adjacent to the berm within the eastern edge of the right-of-way. There are no supporting buildings within the section of the right-of-way located between Snyder and Glover Avenues. The edges of the right-of-way are defined by moderate, mature tree growth and mid-twentieth-century residential development.

Polish National Catholic Church of Resurrection of Christ Cemetery (Anderson Avenue)

The Polish National Catholic Parish of Resurrection of Christ Cemetery (Plate 10), occupying Bellmawr Borough Block 80, Lot 3, is located at the northeast corner of the intersection of Bell Road and Anderson Avenue. The cemetery measures 121.9 meters (400.0 ft) by 125.2 meters (410.7 ft) and appears to consist of approximately 50 to 75 plots, arranged in an irregular pattern. The cemetery was constructed ca. 1916, and the majority of burials date from ca. 1920 to ca. 1970. The cemetery is comprised only of headstones, with no organized layout or circulation routes. While several stones feature free-standing crosses, most of the rectilinear granite and marble headstones are relatively simple and are inscribed with modest floral and religious images in addition to family names.

80 Coolidge Avenue

The property at 80 Coolidge Avenue (Plate 11) is located on the west side of Coolidge Avenue, between Creek Road and I-295, in Bellmawr Borough, Camden County, New Jersey. The parcel is identified in tax records as Map 7, Block 57, Lot 8. The irregular lot measures approximately 130.0 feet by 105.0 feet. A ca. 1945 dwelling and a ca. 1945 garage are the only buildings on the property.

The dwelling at 80 Coolidge Avenue in Bellmawr Borough, Camden County, New Jersey is a one-story, front-gabled, three-bay by three-bay vernacular bungalow, constructed on a continuous, raised parged foundation. The wooden frame structure has aluminum siding and is covered with an asphalt shingle roof. The vinyl, faux panel entry door, located on the front façade, has aluminum trim, an aluminum storm/screen door, and is set to the left of center. A five-step brick stoop provides access to the entry. A large, one-bay by three-bay, flat-roofed

addition is attached to the north elevation of the main block. A brick chimney is located between the two easterly bays on the south elevation, and a parged chimney projects above the roofline from between the main block and the addition. The interior is lit by modern, one-over-one, double-hung, replacement sash windows.

612 Creek Road

The property at 612 Creek Road (Plate 12) is located at the northeast corner of Creek Road and Harding Avenue, in Bellmawr Borough, Camden County, New Jersey. The parcel is identified in tax records as Map 7, Block 67, Lot 1. The property consists of one ca. 1946 industrial building on an approximately 100.0-foot by 40.0-foot lot.

The industrial building at 612 Creek Road in Bellmawr Borough, Camden County, New Jersey is a one-story, flat-roofed, rectangular, four-bay by two-bay industrial building constructed on grade. The parged, concrete block structure has an enclosed, shed roofed storage area attached to the south elevation. Metal coping caps the concrete block walls of the north and west elevations; concrete coping caps the south elevation. The diagonal northwest corner of the building allows the main entrance to face the corner of Creek Road and Harding Avenue. The door in the main entrance is a modern light and faux panel door. Large plate glass windows in metal frames flank the entry in the north and west elevations. An oversized, metal overhead door is located in the southwest corner of the west elevation facing Harding Avenue. A smaller, metal pedestrian entry is located immediately to the left of the overhead door. In addition to the two plate glass windows, the building contains two double casement windows topped by single-light, arched sashes. One is located in the northeast corner of the north elevation and the other is in the west elevation between the pedestrian door and the plate glass window.

620 Creek Road

The property at 620 Creek Road (Plate 13) is located on the south side of Creek Road, between Harding and Coolidge Avenues, in Bellmawr Borough, Camden County, New Jersey. The parcel is identified in tax records as Map 7, Block 61, Lot 3. The property measures 60.0 feet by 100.0 feet. A ca. 1940 industrial building is the only building on the property.

The industrial building at 620 Creek Road in Bellmawr Borough, Camden County, New Jersey is a rectangular, five-bay wide industrial building constructed on grade. Two large overhead doors dominate the center and east side of the façade (north elevation) of the stuccoed, concrete block building. A modern, faux pane and panel pedestrian door is located in the northeast corner of the façade. A three-light by three-light metal frame sash is found in the northwest corner. Located to the left of the window is a wooden pane and panel door leading to what appears to be an office. A one-bay wide by three-bay deep second story addition is attached to the east side of the building. The addition features modern windows and has a shallow gabled roof. A one-bay by one-bay shed roofed addition covered in vinyl is attached to the rear of the aforementioned addition.

628 Creek Road

The property at 628 Creek Road (Plate 14) is located on the southeast corner of Creek Road and Coolidge Avenue, in Bellmawr Borough, Camden County, New Jersey. The parcel is identified in tax records as Map 7, Block 1, Lots 1 and 2. The combined lots measure approximately 100.0 feet by 100.0 feet. A ca. 1953 dwelling and a ca. 1953 garage are the only buildings on the property.

The house at 628 Creek Road in Bellmawr Borough, Camden County, New Jersey is a two-story, side-gabled, three-bay by three-bay vernacular residence constructed on a continuous, raised, Permastone covered foundation. A two-bay by one bay, gable-front addition to the façade (north elevation) contains the main entry. A portion of the gabled roof in the northeast corner that is supported by brick columns and accessed by four concrete steps creates a small, recessed entry porch. The door itself is wood and protected by an aluminum storm/screen door. A large, modern, tripartite picture window is located to the right of the entry porch. The gable of the addition is covered with vertical aluminum siding. A narrow double window is located on the main block to the left of the entry. The same narrow double windows are found near the northeast and northwest corners of the second floor.

The west elevation contains a second entry. Set left of center, a gabled hood supported by wrought iron posts protects the entry. The entry is accessed via brick stairs or a wooden handicap

ramp. Windows are set near the corners of the elevation. A small, one-bay by one-bay, gabled at grade entry is found in the southwest corner of the south elevation. The gabled roof projects beyond the end wall protecting the entry door. A pair of brackets supports the hood. A historic four pane fixed sash is centered just below the eaves on the west side of the entry. The east elevation could not be observed. The majority of the windows in the building are one-over-one, aluminum replacement sash windows protected by storm windows.

640 Creek Road

The property at 640 Creek Road (Plate 15) is located on the south side of Creek Road, between Stanley and Coolidge Avenues, in Bellmawr Borough, Camden County, New Jersey. The parcel is identified in tax records as Map 7, Block 59, Lot 2. The property measures 120.0 feet by 220.0 feet. One ca. 1946 industrial building is the only building on the property. The building is associated with the business at 700 Creek Road.

The industrial building at 640 Creek Road in Bellmawr Borough, Camden County, New Jersey gives the appearance of a rectangular shaped, additive structure. The original block appears to be a one-story, flat-roofed, six-bay by six-bay industrial building constructed on grade. The painted, concrete main block has brick veneer and a brick water table applied to the bottom quarter of the exterior wall. Visually, the façade (north elevation) is divided in two by a tall parapet on the east side of the façade, and a shorter, stepped parapet on the west side. On the left side of the main block, the dominant feature is an oversized overhead door flanked by three-by-four light, metal frame windows. Three evenly spaced, three-by-four light, metal frame windows are located on the right side. The center two rows of these windows tilt open and have concrete slip sills. The concrete block walls on the east elevation are a third of the height of those on the façade. The rest of the height of this wall comes from corrugated fiberglass panels, which allow light into the interior.

A large five-bay wide addition that is as deep as the main block is attached to the west elevation. A brick veneer façade (ca. 1970s or 1980s) most likely replaces the original façade of the addition. The brick façade has a modern aluminum entry door with sidelights and transom where it adjoins the main block. The entry is protected by a large block hood. Four, large, rectangular,

fixed single light windows are evenly spaced along the rest of the façade. The west elevation of the addition is blank except for two large doors near the southwest corner. Closest to the corner is a large loading dock entry protected by sliding doors. A rail for moving heavy objects projects from the top of the space. A flat, metal pedestrian door, accessed by three concrete steps, is located to the left of the loading dock.

The rear (south) elevations of the main block and side addition are blank. Attached to the southeast corner is a corrugated metal structure which connects the main block to another concrete block addition. This rear addition is six bays long by one bay wide. The west elevation of the rear addition has five evenly spaced, metal frame windows. Protected by metal bars, the sash have single lights top and bottom with two three-light rows in the center. The center rows tilt in. A flat metal door occupies the southwest corner of this elevation. The south elevation of this block has a single window of the previously described type set left of center. The east elevation also has two of the same windows roughly centered on the elevation. A metal pedestrian door is located in the southeast corner. Placed to the right of the window is a small, metal frame window which is protected by metal bars. An overhead door sits in the northeast corner of the block.

700 Creek Road

The property at 700 Creek Road (Plate 16) is located on the southwest corner of Creek Road and Stanley Avenue, in Bellmawr Borough, Camden County, New Jersey. The parcel is identified in tax records as Map 7, Block 58, Lots 2 and 3. The property consists of one ca. 1945 industrial building situated on two parcels with a combined measurement of 80.0 feet by 100.0 feet.

The industrial building at 700 Creek Road in Bellmawr Borough, Camden County, New Jersey gives the appearance of a rectangular shaped, additive structure. The original block appears to be a one-story, flat-roofed, three-bay by three-bay industrial building constructed on grade. The stuccoed, concrete block main block has a wooden pane and panel door in the northeast corner of the façade (north elevation). To the right of this door are two large, three-pane picture windows in metal frames. The east elevation is divided into three bays by two buttresses, and features an overhead door in the southeast corner. A three-light by two-light metal sash window occupies the

bay in the northeast corner. Sheet metal containing a small louvered vent fills the window opening in the center bay.

A large, three-bay by five-bay concrete block addition is attached to the west elevation. The façade of the addition is symmetrical with that of the original block except the windows are much smaller and there is a flat metal door in the northwest corner. The west elevation features four evenly spaced, three light by three light metal sash windows. A flat metal door occupies the southwest corner of this elevation. The south elevation of the west addition is blank. A third addition, which measures two bays by two bays, is attached to the southeast corner of the building. This stucco-covered, concrete block addition has two openings on the southeast elevation—a three- light by three-light metal sash window and a louvered opening. A fourth one bay by one bay addition is attached to the east elevation of this addition. Despite the additions, the building gives the appearance of a unified whole. The stuccoing of the exterior walls and a continuous terra cotta coping above the parapet walls aid in this.

701 Creek Road

The property at 701 Creek Road (Plate 17) is located on the west side of Essex Avenue, in Bellmawr Borough, Camden County, New Jersey. The parcel is identified in tax records as Map 7, Block 53.01, Lot 1. The rectangular lot measures approximately 112.0 feet by 60.0 feet. A ca. 1940 dwelling and a modern garage are the only buildings on the property.

The house at 701 Creek Road in Bellmawr Borough, Camden County, New Jersey is a highly altered, one-story, side-gabled dwelling. The five-bay-wide by three-bay-deep vernacular bungalow has been highly altered through a number of side- and front-gabled additions. The building rests on a continuous, parged foundation and is presently clad in vinyl siding. The house is lit by a mixture of modern and original windows, most of which are one-over-one, double-hung sash windows with aluminum/vinyl surrounds. An enclosed, shed roof porch is located on the front façade and features a parged foundation, vinyl siding, and modern replacement windows.

708 Creek Road

The property at 708 Creek Road (Plate 18) is located on the south side of Creek Road, at the intersection with Essex Road, in Bellmawr Borough, Camden County, New Jersey. The parcel is identified in tax records as Map 7, Block 58, Lot 1. The property consists of one ca. 1948 industrial building situated on an L-shaped lot measuring approximately 90.0 feet wide by 100.0 feet deep.

The industrial building at 708 Creek Road in Bellmawr Borough, Camden County, New Jersey is a one-story, flat-roofed, four-bay by three-bay industrial building constructed on grade. The painted concrete block structure has a full-width, covered/faux pent entry across the façade. The entry porch is supported by a metal pipe column in the center and turned wooden posts at the corners. Metal coping caps the concrete block walls. The symmetrical façade has two center entries protected by modern faux panel vinyl replacement doors. Large plate glass windows in metal frames flank the entries. The rest of the windows are two-over-two awning sash in metal frames with brick slip sills and concrete lintels.

A three-bay deep concrete block addition is attached to the rear of the building. The addition is flush to the east wall of the main block, but overhangs the west elevation by one bay. The addition shares many of the same details as the main block. Metal coping also caps the concrete block walls, but the walls are two courses taller than those of the main block. The window sash and lintels are the same, but the sills are concrete. A modern, oversized overhead door is located in the northeast corner of the north elevation.

716 Creek Road

The property at 716 Creek Road (Plate 19) is located on the south side of Creek Road, west of the intersection with Essex Road, in Bellmawr Borough, Camden County, New Jersey. The parcel is identified in tax records as Map 9, Block 78, Lot 4. The irregularly shaped property consists of approximately 6.0 acres with 1,057.8 feet of frontage along Creek Road. There are two industrial buildings on the property—one historic (ca. 1946), and the other modern (ca. 1994).

The industrial building at 716 Creek Road in Bellmawr Borough, Camden County, New Jersey is a one-story, gable-front, three-bay by four-bay industrial building constructed on grade. The painted, concrete block structure has an oversized overhead door located in the northeast corner of the façade (north elevation). A pedestrian door protected by a small gabled hood is located in the northwest corner. To the left of the pedestrian door is a four light by four light metal sash window with a concrete slip sill. Asbestos siding covers the gable on the facade. Located in the center of the façade gable is a blind, double-hung window. A paired casement window is located to the right of center, halfway between the gable and the concrete block wall.

The east elevation features four three-light by two-light, metal sash windows with concrete sills. Each window is centered in a bay which is delineated by steel beams which support the roof structure. A modern concrete block building (ca. 1994) stands approximately 50.0 feet east of the historic building.

Bellmawr Little League (Essex Avenue)

The Bellmawr Little League property (Plate 20) is located on the east side of Essex Avenue between Victory Drive and Creek Road in Bellmawr Borough, Camden County, New Jersey. The parcel is identified in tax records as Map 5, Block 49, Lot 1.02. The lot is irregularly shaped and approximately 3.0 acres in size. The property is comprised of two little league baseball fields surrounded by chain-link fences, aluminum bleachers, two press boxes, a large asphalt parking lot, and a concrete concession stand. A number of mature trees are located throughout the property, and the area surrounding the baseball fields is covered with grass. The property does not display any planned landscape features, including plantings, landforms, or circulation paths.

The Bellmawr Little League concession stand is a one-story, concrete block, flat-roofed recreational building constructed ca. 1953. The building is seven bays wide and two bays deep. The rectangular, utilitarian building features a number of small additions. Steel doors provide access to the building in several elevations. Multiple horizontal-sliding, vinyl windows with concrete sills and lintels light the building. Two large openings in the concession area at the southeast corner of the building are covered with plywood when not in use. Two aluminum ventilators pierce the roofline.

The press boxes are small, two-story buildings with concrete block first stories and frame second stories. The first stories are clad in stucco, and the second stories are clad in vinyl siding. A number of modern windows light the interiors of the building. Modern industrial doors are located in the first stories, and provide access to the buildings.

48 Essex Avenue

The property at 48 Essex Avenue (Plate 21) is located on the east side of Essex Avenue, in Bellmawr Borough, Camden County, New Jersey. The parcel is identified in tax records as Map 7, Block 55, Lot 3. The irregular lot measures approximately 132.0 feet by 170.0 feet by 57.0 feet. A ca. 1925 dwelling and two modern sheds are the only buildings on the property.

The dwelling at 48 Essex Avenue in Bellmawr Borough, Camden County, New Jersey is a one-and-one-half-story, side-gabled dwelling. The three-bay wide by two-bay deep vernacular bungalow has been highly altered through a number of small rear and side additions. The building rests on a continuous, poured concrete foundation and is presently clad in aluminum siding. An exterior stucco chimney runs along the north elevation of the dwelling. The house is lit by modern, one-over-one, double-hung sash windows with wooden sills and lintels. The modern, aluminum pane-and-panel door is accessed by a concrete stoop. A large second-story addition creates a half gable with shed roof addition in the south elevation. A gable-front dormer is located in the east elevation. The dormer features a modern vinyl window and is clad in aluminum siding. Two modern frame sheds are located on the property to the west of the dwelling.

52 Essex Avenue

The property at 52 Essex Avenue (Plate 22) is located on the west side of Essex Avenue, in Bellmawr Borough, Camden County, New Jersey. The parcel is identified in tax records as Map 7, Block 53, Lot 1. The rectangular lot measures approximately 114.0 feet by 105.0 feet. The ca. 1948 VFW Post No. 956 lodge is the only building on the property.

The building at 52 Essex Avenue in Bellmawr Borough, Camden County, New Jersey functions as the VFW Post No. 956 lodge. The one-story, six-bay wide by five-bay deep vernacular building has been altered through a number of small additions. A side ell with a small

rectangular addition is attached to the north side elevation. The building rests on a continuous, concrete block foundation and is constructed out of concrete block. The lodge is lit by a mixture of vertical and horizontal casement windows, most of which are modern replacement windows. Two pairs of modern, commercial aluminum pane-and-panel doors are located on the front facade. Both entryways are protected by small modern overhangs and can be accessed by concrete steps.

171 Essex Avenue

The property at 171 Essex Avenue (Plate 23) is located on the east side of Essex Avenue, in Bellmawr Borough, Camden County, New Jersey. The parcel is identified in tax records as Map 7, Block 57, Lot 2. The irregular lot measures approximately 107.0 feet by 105.0 feet by 85.0 feet by 53.0 feet. A ca. 1930 dwelling is the only building on the property.

The dwelling at 171 Essex Avenue in Bellmawr Borough, Camden County, New Jersey is a one-and-one-half story, front-gabled dwelling. The three-bay wide by three-bay deep, vernacular bungalow has been highly altered through a large second story addition. The building rests on a continuous, poured concrete foundation and is presently clad in vinyl siding. An exterior brick chimney runs along the north elevation of the dwelling. The house is lit by a mixture of modern windows, most of which are one-over-one, double-hung sash windows with aluminum/vinyl surrounds. The modern, aluminum pane-and-panel door is accessed by a concrete stoop. A large second-story addition creates a half gabled and half shed-roofed addition on the south elevation.

82 Harding Avenue

The property at 82 Harding Avenue (Plate 24) is located on the west side of Harding Avenue, north of Creek Road, in Bellmawr Borough, Camden County, New Jersey. The owner parcel is identified in tax records as Map 7, Block 62, Lot 11. The lot measures approximately 105.0 feet by 100.0 feet. A ca. 1955 dwelling is the only building on the property.

The dwelling at 82 Harding Avenue in Bellmawr Borough, Camden County, New Jersey is a two-story, side-gabled three-bay by three-bay vernacular duplex constructed on a continuous, raised foundation. The frame dwelling is clad in permastone. Asphalt shingles cover the very shallow roof. Double entry doors are centered on the nearly symmetrical façade (east elevation).

The front entrances are protected by aluminum storm/screen doors and accessed by modern wooden steps or a ramp. Double windows flank the entry. A second double window is located on the south side of the second floor above those on the first floor. A single window on the north side of the second floor breaks the symmetry. Four windows are symmetrically arranged on the north side elevation. A large, parged chimney dominates the southeast corner of the south elevation. Windows are all modern double-hung, replacement sash windows.

151 Harding Avenue

The property at 151 Harding Avenue (Plate 25) is located on the east side of Harding Avenue, between Creek Road and Leaf Avenue, in Bellmawr Borough, Camden County, New Jersey. The parcel is identified in tax records as Map 7, Block 67, Lot 6.01. The property measures 60.0 feet by 200.0 feet. A ca. 1947 vernacular dwelling is the only building on the property.

The dwelling at 151 Harding Avenue in Bellmawr Borough, Camden County, New Jersey is a one-story, gable-front, three-bay by three-bay vernacular bungalow constructed on a continuous, raised, parged foundation. The wooden frame structure has aluminum siding on the walls, vertical aluminum siding in the gables, and an asphalt shingle roof. The wooden panel entry door, located on the east elevation, has aluminum trim and is set to the left of center. A two-bay wide, concrete front porch with a wrought iron railing sits off-center to the left and is accessed via five concrete steps. The center bay in the north elevation contains a tripartite, canted bay window. A rear entrance (east elevation) is set to the right of center, has a shed-roofed aluminum hood, and is accessed via a four step concrete stoop. The south elevation contains an exterior, parged, concrete block chimney between the two westerly bays, and a metal bulkhead in the southeast corner leads to the basement. Windows are primarily wooden, six-over-six, double-hung sash, arrayed singly or doubly and surrounded with aluminum trim.

153 Harding Avenue

The property at 153 Harding Avenue (Plate 26) is located south of Creek Road, at the northeast corner of Harding and Leaf Avenues in Bellmawr Borough, Camden County, New Jersey. The parcel is identified in tax records as Map 7, Block 67, Lots 7 and 8. The property consists of one

ca. 1940 industrial building situated on two roughly rectangular lots measuring approximately 100.0 feet by 200.0 feet.

The industrial building at 153 Harding Avenue in Bellmawr Borough, Camden County, New Jersey is a one-story, side-gabled, four-bay by four-bay industrial building constructed on grade. The rectangular, stuccoed structure has a large five bay by one bay gable-front addition attached to the west elevation. The north elevation retains its original three-light by three-light, metal sash. The upper two rows of lights tilt open as a single unit to allow for ventilation. The south elevation features a metal and glass entry door with sidelights and transom in the southwest corner. A flat metal door occupies the southeast corner. Metal sliding windows occupy the center two bays. A modern overhead door occupies the northeast corner of the north elevation; another flat metal door protected by a shed-roofed hood is located near the northwest corner of the elevation. Three small windows, one to the right of the flat metal door and the other two to the left, provide light to what appear to be mechanical spaces. A large modern addition with vinyl siding is attached to the west elevation.

112-116 Stanley Avenue

The property at 112-116 Stanley Avenue (Plate 27) is located on the west side of Stanley Avenue, south of Creek Road, in Bellmawr Borough, Camden County, New Jersey. The parcel is identified in tax records as Map 7, Block 58, Lot 5 and 6. The combined lots measure approximately 80.0 feet by 150.0 feet. A ca. 1955 dwelling is the only building on the property.

The dwelling at 112-116 Stanley Avenue in Bellmawr Borough, Camden County, New Jersey is a one-and-one-half-story, side-gabled, four-bay by three-bay, vernacular, Minimal Traditional dwelling constructed on a continuous, raised concrete block foundation. The main entrance stands left of center in the asymmetrical façade (east elevation). To the left of the entrance, in the southeast corner, is a double window. A triple window is set to the right of the entrance. Four concrete steps lead to the front door. A small, double louvered window is in the northeast corner. A Permastone course rises to the base of the window sills. Board and batten siding fills the rest of the façade from the base of the window sills to the eaves.

The south elevation contains a number of windows in various configurations. The majority of the north elevation is obscured by a one-bay by two-bay, shed-roofed addition sheathed in plywood. The west elevation could not be observed. The majority of the windows in the dwelling are metal, one-over-one, double-hung sash windows.

121 Stanley Avenue

The property at 121 Stanley Avenue (Plate 28) is located south of Creek Road between Stanley and Coolidge Avenues, in Bellmawr Borough, Camden County, New Jersey. The parcel is identified in tax records as Map 7, Block 59, Lot 5. The property consists of one ca. 1940 industrial building on a 200.0-foot by 120.0-foot lot.

The industrial building at 121 Stanley Avenue in Bellmawr Borough, Camden County, New Jersey is a one-story, gabled, rectangular, four bay by two bay industrial building constructed on grade. The parged structure has a large shed roofed addition attached to the south elevation. Glass block fills the window openings in the north elevation. A large modern overhead door is centered in the west elevation. Two banks of double modern replacement sash windows can be seen on the east elevation.

A large, one-bay by five-bay addition with a very shallow shed roof is attached to the south elevation of the main block. The south elevation contains a modern metal and glass entry set left of center. A modern two-light, sliding sash window is located to the right of the entry. The other three windows on the elevation contain glass block identical to that seen on the north elevation of the gabled block. A narrow, single-light fixed sash is set nearly abutting the gable block in the east elevation. The west elevation is blank.

Harrison-Glover House/New Saint Mary's Cemetery (515 West Browning Road)

The property occupying Bellmawr Borough Block 50, Lot 1.01, located at 515 West Browning Road, consists of a mid- to late-eighteenth-century dwelling known as the Harrison-Glover House and New Saint Mary's Cemetery, which was originally constructed by Saint Mary's Roman Catholic Church between 1921 and 1923. A portion of the former dwelling currently functions as the cemetery office. Additional buildings and structures located on the property

include numerous headstones, grave markers, and crypts dating from the early 1920s to the early twenty-first century; religious statuary dating from the early 1920s and the late twentieth century; a mid-twentieth-century maintenance building; and a late-twentieth-century mausoleum. The cemetery is laid out in a large rectangular grid consisting of eight blocks defined by six asphalt-paved vehicular paths through the cemetery. The Harrison-Glover House and the maintenance building are located at the northwest corner of the cemetery, and the mausoleum is located at the southwest corner. Two ca. 1923 religious statues are located near the intersection of the two central vehicular paths. Additional religious statuary and benches are located adjacent to the mausoleum and appear to have been constructed at the same time as this building (1980).

The brick dwelling (Harrison-Glover House) located at 515 West Browning Road was constructed in several stages. A representative of the NJDOT observed the following evidence related to the building's physical history during a building inspection conducted in March 2004:

Notes on Investigation of St. Mary's Cemetery Farmhouse

1. The order of construction of this house is problematic. While the two oldest sections are the Gambrel and 1764 sections, the exact order of construction is debatable. The rear of the Gambrel section (north) was added on later, as was the end single story shed on the east side. Since the 1920s, the east end shed has been completely rebuilt, and a front porch (on cinder block) added to the 1764 section. Another single story office section has been appended to the front of the Gambrel section.
2. The interior of the house has been extensively "modernized", with almost all interior detailing obscured behind modern wall and ceiling treatments. Fireplaces have been sealed and covered up. Some attic details of the 1764 section can be seen, but the roof and crawlspace of the Gambrel section have been completely hidden by post 1920s construction. However, much of the modernization appears to be reversible. The simple room plan is retained throughout, with the exception of the first floor of the Gambrel section.
3. Observed facts:
 - a. The present owners relate a family tradition that the 1764 section is the oldest house section.
 - b. Only the 1764 section has a fully excavated basement. The Gambrel section has only a crawl space, which is almost completely sealed off. The other three additions have no crawl space whatever.
 - c. The basement walls of the 1764 section are of a uniform thickness on all four sides. The Gambrel section has only three sides of uniform thickness, with no wall in common with the 1764 section.
 - d. There is no observable entry into a potential basement of the Gambrel section, either interior or exterior, and it appears never to have had a basement. The crawl

- space ground level appears to be the same as the exterior ground level.
- e. The groundfloor level of the Gambrel section is lower than the 1764 section. Any basement in the Gambrel section would have had to been excavated even deeper than the existing one in the 1764 section. Since there is no outside entrance to a possible basement under the Gambrel section, and any fill dirt to fill in a possible basement to its current level would have had to been carried in through the house and around to the other 1764 side's basement, a most unlikely scenario.
 - f. The cellar of the 1764 section drains amazingly well; I suspect that there is a cistern system under a much later basement brick flooring.
 - g. The 1764 section has a comer fireplace arrangement. The Gambrel roof section has a flat end fireplace.
 - h. The fireplace in the Gambrel section is only on the ground floor, with no opening on the second floor, an indication that it was primarily a cooking feature.
 - i. The chimney of the Gambrel section is constructed to clear the dormer of the 1764 section. It does not appear to have been extended to provide clearance if the 1764 section was added later.
 - j. The Gambrel section was constructed in two phases, as evidenced by the changed brick pattern.
 - k. The walls of the 1764 section are the thickest, the Gambrel section walls are thinner.
 - l. The fenestration framing in the 1764 section are 4X4, pegged at the comers. The window frames of the Gambrel section are smaller, and are not pegged, and are more modem in appearance.
 - m. The wooden beams of the 1764 section are saw cut (up and down). The wooden beams of the Gambrel section were unobserved. The wooden beams of the northern addition to the Gambrel section are sawn cut (circular).
 - n. The brick cladding appears to be least uniform in the 1764 section, more uniform in the Gambrel section, and most uniform in the north addition.
 - o. The north addition to the Gambrel section is clearly much newer, and exhibits almost no indications of 18th century construction. Its fenestration is clearly 19th century in style.
 - p. The north Gambrel addition has never had a fireplace, which is more typical of 19th century additions.
 - q. The present owners also relate that the house was a stop on the Underground Railroad.
4. In consideration of the above information, it appears the probable construction order of the existing structure is that the 1764 section was constructed first, and the gambrel section was an addition (possibly enclosing an earlier frame summer kitchen (which explains the single story end fireplace). An earlier HABS survey performed in 1937 states that the Gambrel section was constructed first, then the 1764 section. No reasoning for this order is given, although the gambrel style of construction is often interpreted as earlier than Georgian. It is curious that the present owners, who haven't changed since the HABS recordation, have a tradition that the 1764 section is the oldest section. The northern addition to the Gambrel section was added next (post 1810, due to the circular saw marks on the timber floor beams), and after that, the frame one story addition to the east end of the Gambrel section (later rebuilt as brick after the HABS recordation in 1937). At this time, the fireplace of the Gambrel

section was probably bricked off and the rear of the chimney (the outer face now enclosed by a one story shed frame addition) opened to use it as an oven. There has been a succession of front porches added to the 1764 section, with the latest resting on cinder-block piers. The final addition is a one-story frame office wing added to the front (southeast) section of the Gambrel section.

This order of construction is suggested by the facts that the 1764 section basement is complete on all four sides, but the Gambrel section only has three sides, the Gambrel section never appears to have had a basement, the ground story mimics the basement, in that the walls of the 1764 section are of uniform thickness, and the Gambrel section walls (only three, no common wall with 1764 section) are thinner. Thus it appears that either the Gambrel section was appended to the existing outer foundation and wall of the 1764 section, or that the Gambrel section wall and foundation facing the 1764 section was removed during the 1764 construction. The only other possibility, that the common wall between the Gambrel and 1764 sections was originally built thicker than the other three Gambrel section walls, and the thicker dimension carried over in a later 1764 construction is fairly remote. Also supporting the suggested construction order are that the window framing in the 1764 section appears older, the 1764 section has an older type of fireplace arrangement, the Gambrel section has no upper story fireplace, the Gambrel section chimney appears to have been constructed with the taller 1764 section in mind, and the bricks in the Gambrel section appear more uniform than the 1764 section. (Mudge 2006)

The brick two-and-one-half-story side-gabled western section of the dwelling was constructed in 1764. This section of the dwelling is three bays wide by three bays deep. Belt courses are visible across the first and second stories of the façade, west, and north elevations. The original, centered, transom-topped, wood-paneled door and two flanking windows, as well as two segmental-arched basement windows comprising the first-story façade, are no longer visible from the exterior of the building. The first-story façade is entirely obscured by a single-story enclosed frame porch that appears to date from the 1920s or 1930s, based on its form and materials. Historic American Buildings Survey (HABS) photographs and drawings dating from 1937 indicate that the porch was once open, and has been significantly altered since 1937 (Williams 1937). It is currently covered with asbestos siding and contains a louvered door in the central bay, flanked by paired, aluminum, one-over-one double-hung sash windows in the eastern and western bays. The wood steps formerly leading to the porch entrance have been replaced with concrete steps. The second story of the façade contains three evenly spaced window openings containing vinyl six-over-six, double-hung sash windows. A gabled dormer containing a replacement one-over-one double-hung sash window is centered in the front slope of the roof. The west elevation consists of three window openings in the first story, two window

openings in the second story, and one segmental-arched window opening in the attic level. The openings in the outer bays of the first and second stories are aligned vertically. The date 1764 is set with bricks in the attic level of this elevation. The date was painted after 1937, presumably to make it more visible. The north elevation consists of two evenly spaced vertically aligned bays in each story and two segmental-arched basement window openings. The western bay in the first story contains a segmental-arched entrance with a wood, two-light over multi-panel door. A frame deck with a wood balustrade was recently constructed in front of this entrance. The east elevation of this section of the dwelling contains an attic window opening and a large, interior brick chimney located slightly off-center and flush with the exterior wall. The east elevation is largely obscured by the attached gambrel roof building section.

All visible window openings in the first story of the section of the dwelling constructed in 1764 contain vinyl, nine-over-nine, double-hung sash windows, and all window openings in the second story contain vinyl, six-over-six, double-hung sash windows. HABS drawings and photographs indicate that the openings in the first story of this section of the dwelling formerly contained wood, nine-over-nine, double-hung sash windows, and all window openings in the second story contained wood, nine-over-six, double-hung sash windows. The dormer window opening in the façade historically contained a wood, six-over-six, double-hung sash window. Narrow attic window openings in the east and west elevations currently contain one-over-one, double-hung sash windows, but historically contained wood, four-over-four, double-hung sash windows (Williams 1937). The window openings in this section of the dwelling feature brick lintels. The windows and doors are surrounded by wood trim. The foundation of the entire eighteenth-century section of the dwelling is stone.

The brick one-and-one-half-story eastern section of the dwelling appears to date from ca. 1765 to 1800, and features a side gambrel roof and a large, brick, interior chimney flush with the east elevation. Two single-story, mid- to late-twentieth-century office additions to the south and east elevations obscure the historic bay configuration of this section of the dwelling; however, HABS drawings and photographs dating from 1937 indicate that it originally consisted of three bays in the façade (south elevation) and two bays in the east elevation. The first-story façade was comprised of a central entrance flanked by two window openings (ibid.). The southern addition

obstructs most of the first-story façade, with the exception of the eastern bay, which contains a vinyl, six-over-six, double-hung sash window. HABS drawings and photographs indicate that this and the western window opening in the façade formerly contained wood, nine-over-six, double-hung sash windows (ibid.). A vinyl-sided, shed-roofed dormer containing a vinyl, six-over-one, double-hung sash window is centered on the lower slope of the roof in the façade. The addition to the east elevation obstructs the entire first story of this elevation. A small window opening located slightly off-center in the attic level of the east elevation contains a vinyl, one-over-one, double-hung sash window. HABS drawings indicate that this opening formerly contained a wood, four-over-four, double-hung sash window (ibid.). Two vertical steel bracing rods located north and south of the window opening are visible in the attic level of the east elevation.

The brick, two-story, front-gable addition to the north elevation of the gambrel section of the dwelling appears to date from ca. 1850 to 1900, based on its form and materials. This addition is three bays wide by two bays deep. The fenestration pattern in the north elevation is irregular. The first story consists of an off-center entrance, situated closer to the west elevation of the addition than the east, flanked by two window openings. The entrance contains an early-twentieth-century, wood, four-light over two-panel door. The second story of the north elevation consists of three irregularly spaced window openings. The first story of the east elevation is entirely obstructed by a single-story, mid-twentieth-century office addition, and the second story consists of two window openings. All window openings in this section of the dwelling contain vinyl, six-over-one, double-hung sash windows. Wood trim surrounds the door and window openings. The bricks in this addition have been re-pointed with Portland cement.

The Harrison-Glover House is generally in good repair. One nineteenth-century addition and three twentieth-century additions detract from its architectural integrity. The eighteenth-century walls of the building remain intact behind the additions; however, the additions obscure much of the original building fabric. Additional alterations, including the replacement of windows and doors, further detract from the building's integrity. There were 37 extant, eighteenth-century, masonry dwellings within Camden County as of October 2003, and 18 of these dwellings retained similar or better integrity than the Harrison-Glover House.

Saint Mary's Roman Catholic Church constructed the cemetery located at 515 West Browning Road between 1921 and 1923. The cemetery is laid out in a large, rectangular grid consisting of eight blocks divided by six narrow, asphalt-paved vehicular paths. Three paths run north-south and three paths run east-west. The cemetery lacks an overall style, sense of design, or notable landscape features, indicating that the church most likely contracted an engineering firm to lay it out. The cemetery contains over 30,000 burials. Small, simple granite headstones mark the majority of these graves. Most of these are only a few inches tall and rectangular in shape, with flat sides, arched tops, and simple inscriptions consisting of a name flanked by two crosses. The four southern blocks of the cemetery, as well as the third block north of West Browning Road on the west side of the cemetery, are almost entirely comprised of this type of grave marker. The block located closest to the Harrison-Glover House and the block located at the southeast corner of the property contains the oldest graves in the cemetery. The far northeastern block contains flat grave markers slightly depressed in the ground, as well as simple, numbered lot markers standing approximately one to one-and-one-half feet tall. The central block located at the northern end of the cemetery contains a mixture of crypts and short, simple grave markers similar to others in the cemetery. The crypts, or private mausoleums, are situated in two rows along the northern and southern edges of the block. They are all very similar in material, size, form, and architectural detailing, and most contain few, if any, stylistic traits. With two exceptions, the crypts are constructed of granite, rectilinear in form, have flat roofs, and feature small, narrow entrances with one step. Many have gabled parapets topped by crosses in the façades. The doors to the crypts are the most elaborate elements, and most feature decorative metalwork. The entrances are frequently emphasized by simple, shallow, vertically oriented carvings in the stone flanking the door. The two crypts that differ noticeably from the others are located at the ends of the southern row. These feature rusticated stone exteriors, gable roofs, and more pronounced entrances, and exhibit Classical, Gothic, and Richardsonian Romanesque-style architectural influences. The crypt at the west end of the row is the more elaborate of the two, with a protruding entryway comprised of two Doric columns supporting an entablature bearing the inscribed name of the deceased. The entrance contains a patinated, metal double door with one narrow, stained glass light in each leaf. Two small, gothic-arched windows, also containing stained glass, flank the entrance. The remaining block, located three blocks north of West Browning Road on the east side of the cemetery, contains tall, narrow monolithic monuments

carved from granite and marble. The monuments stand atop square bases, and the tops of some are rounded. Most are simply inscribed, but some feature carved figures either in the façades or atop the markers.

The only historic, religious statues within the cemetery, both constructed ca. 1923, are located near the intersection of the two central vehicular paths through the cemetery. One of these figures, located in the center of the intersection, is a saint carved from marble. The other, located slightly northwest of the first, is a simple, marble cross. Both are situated atop rectangular, brick-covered pedestals.

The cemetery maintenance building located at 515 West Browning Road appears to have been constructed during the 1940s. The single-story, concrete block utilitarian building consists of five bays in the east and west elevations. In the west elevation, all of these bays consist of garage door openings, the center three of which contain replacement garage doors. The outer two bays do not contain doors. The bays in the east elevation consist of two garage openings at the northern and southern ends and three central window openings. The southern garage bay contains a replacement garage door and the northern opening does not contain a door. The central window opening contains a wooden, one-over-one, double-hung sash window and the two flanking window openings contain wooden, six-over-six, double-hung sash windows. All of the garage openings in the building have wooden lintels, and the windows are surrounded by wooden trim. The building has a hipped, asphalt-covered roof with a slightly overhanging eave. A brick interior chimney is located on the east slope, close to the south elevation. A metal vent is located near the center of the ridgeline.

Annunciation Church and School Complex (601-605 West Browning Road)

The Annunciation Church and School Complex at 601-605 West Browning Road (Plate 30) is located on the north side of West Browning Road in Bellmawr Borough, Camden County New Jersey. The property is identified in tax records as Map 6, Block 50.04, Lots 1.01 and 1.02. The property consists of a parish hall (formerly a church) constructed in 1951, an elementary school, convent, and rectory constructed ca. 1955 to 1965, and a modern church.

The Annunciation Church Parish Hall originally functioned as a church prior to the construction of the new Annunciation Blessed Virgin Mary (B.V.M.) Church at the southeast corner of the property. The parish hall is a vernacular, one-story, wooden frame building with a front gable roof. The building measures three bays wide and nine bays deep, and rests on a parged concrete foundation. Vinyl siding clads the exterior of the building, and asphalt shingles cover the roof. An aluminum-clad steeple tops the roof ridge near the façade (south elevation). The façade features a central entrance containing a replacement double door flanked by two window openings. The windows in the façade and throughout the building contain vinyl, one-over-one, double-hung sash windows. A small entry porch comprised of a gabled door hood supported by thin wooden columns shelters the entrance. Brick and concrete steps provide access to the entrance. The façade also features three small, round window openings containing stained glass; two flanking the entrance above the other window openings, and one is centered in the apex of the gable.

The building's west and east elevations are unadorned, and contain only window openings. Small, one-story flat-roofed entry porch additions are attached to the north ends of both side elevations. Both additions contain entrances with replacement doors in the south elevations, and brick and concrete steps provide access to the entrances.

The Annunciation School, located northwest of the parish hall, is a brick, two-story, vernacular elementary school with a rectangular form and flat roof. The building measures 12 bays wide and ten bays deep, and rests upon a brick foundation. The façade (south elevation) and side elevations predominantly consist of large window openings containing multi-light, louver windows. The section of the building at the southeast corner projects outward from the main block to the south and east. The portion of the façade containing the main entrance is located immediately west of the projecting section. The bay containing the entrance is clad in Permastone in both stories. The entrance contains a metal and glass door. A cantilevered roof supported by metal posts projects southward from the façade to shelter the main entrance. Three evenly spaced entrances are located in the east elevation of the building. The side entrances each contain a single metal door, and are sheltered by a small, metal, cantilevered awning. Side walls clad in Permastone further shelter the central entrance in the east elevation.

The Annunciation Church Convent, located immediately north of the parish hall, is a brick, three-story, vernacular building with a hipped roof. The building measures ten bays wide and one bay deep and rests on a brick foundation. Window openings throughout the building contain six-light louver windows. The façade (south elevation) features a central entrance sheltered by an open porch with a hipped roof and metal posts. A small addition with a hipped roof is attached to the east end of the façade. Secondary entrances are centered in the side elevations. An interior brick chimney is centered in the west elevation.

The Annunciation Church Rectory, located immediately east of the parish hall, is a brick, two-story, vernacular building with a hipped roof. The building measures three bays wide and three bays deep, and rests on a brick foundation. Window openings throughout the building vary in size and contain vinyl, one-over-one, double-hung sash windows. Fabric awnings shelter the windows in the façade (south elevation). The façade features a central entrance with an arched, Colonial Revival-style wooden surround. The entrance contains a replacement door. A one-bay section of the building at the southeast corner projects from the main block to the south. A small, frame, vinyl-clad, enclosed porch addition is attached to the south end of the west elevation. A raised concrete block patio with concrete block steps provides access to the main entrance and the entrance on the porch addition. An exterior brick chimney is located slightly off-center in the east elevation.

834 West Browning Road (Johnnie's Liquor Store)

The property at 834 West Browning Road (Plate 31) is located at the southwest corner of West Browning Road and Princeton Avenue, in Bellmawr Borough, Camden County, New Jersey. The parcel is identified in tax records as Map 3, Block 31, Lot 19. The rectangular lot measures approximately 60.0 feet by 125.0 feet. A small, ca. 1950 commercial building is the only building on the property.

The building at 834 West Browning Road in Bellmawr Borough, Camden County, New Jersey is a small, one-story, rectangular, concrete block commercial building. The façade (north elevation) is clad in brick. The building rests on a concrete block foundation. The building features a flat roof with brick parapets on the front and rear elevations. The parapets are capped with tile

coping. The building measures five bays wide by one bay deep. The building is lit by fixed picture windows that are located on the façade. A commercial aluminum and glass door is located on the façade under a recessed entryway.

846-856 West Browning Road

The property at 846-856 West Browning Road (Plate 32) is located at the southwest corner of West Browning Road and Warren Avenue, in Bellmawr Borough, Camden County, New Jersey. The parcel is identified in tax records as Map 3, Block 31, Lot 18. The rectangular lot measures approximately 100.0 feet by 125.0 feet. A small, ca. 1950 commercial building is the only building on the property.

The building at 846-856 West Browning Road in Bellmawr Borough, Camden County, New Jersey is a one-story commercial strip of small stores. The rectangular building is constructed of concrete block and rests on a concrete block foundation. The façade of the building is clad with Permastone. The building features a flat roof with a pent eave that runs the length of the façade (north elevation). The pent roof is sheathed in asphalt shingles. The building features approximately five storefronts that each feature fixed, commercial bay windows, as well as commercial aluminum/wood-framed glass doors. The far east end of the building features a rectangular second story addition that appears to be an apartment. This addition is clad in vinyl siding and features modern windows and a modern door. A parged chimney is attached to the rear elevation of the addition.

4.2.3 Individual Properties in Mount Ephraim Borough

39 Adams Avenue

The property at 39 Adams Avenue (Plate 33) is located at the northwest corner of Adams and Linwood Avenues, in Mount Ephraim Borough, Camden County, New Jersey. The parcel is identified in tax records as Map 10, Block 81, Lot 1.05. The property consists of a 50.0-foot by 100.0-foot lot in a residential neighborhood. Buildings on the property include a ca. 1940 to 1946 vernacular dwelling and a modern shed.

The dwelling at 39 Adams Avenue in Mount Ephraim Borough, Camden County, New Jersey is a two story, side-gabled, two-bay by two-bay, vernacular dwelling constructed on a continuous, poured, concrete block foundation. The wooden frame building is clad in vinyl siding, and the roof is covered with asphalt shingles. A gable-front wall dormer is located on the façade. The main entrance is located left of center and is accessed via a six-step concrete stoop with a wrought iron railing. A one-bay-wide, gabled hood protects the entrance, and an aluminum awning extends the entire width of the façade. A brick, exterior, gable-end chimney projects above the roofline in the north elevation. All windows and doors are modern replacements.

202-206 Baird Avenue

The property at 202-206 Baird Avenue (Plate 34) is located at the east corner of Baird and Winthrop Avenues, in Mount Ephraim Borough, Camden County, New Jersey. The parcel is identified in tax records as Map 11, Block 107, Lots 1.02 and 1.06. The property consists of an irregularly shaped corner lot in a residential neighborhood. Buildings on the property include a ca. 1900 to 1934 multi-family dwelling, and a large, modern garage.

The building at 202-206 Baird Avenue in Mount Ephraim Borough, Camden County, New Jersey is a two-story, flat roofed, brick, four-bay by four-bay, multi-family vernacular dwelling with an irregular form. The building rests on a continuous brick foundation. The building features alternating headers and stretchers every eight rows. The building is lit by a mixture of historic and modern, single and paired, one-over-one, double-hung sash windows. The building features three entrances, one in the west corner (historically a commercial entrance to a first-story store), one in the southwest elevation, and one in the northwest elevation. The west entrance features a recessed door and a copper clad pent roof across the first story. Large window openings containing three windows each flank the entrance. The window openings feature single pane transoms and brick sills. A concrete stoop and sidewalk provide access to the entrance. The entrance in the southwest elevation contains a single wooden, replacement door. A one-story, open wooden porch extends the width of this section of the elevation. The entrance in the northwest elevation also contains a single wooden, replacement door, and is sheltered by an open brick porch supported by square brick columns. An exterior brick chimney is attached to the northeast elevation of the building. A two-story, frame addition is attached to the east corner

of the building. This modern addition features vinyl or aluminum siding, and modern windows and doors. A large, modern garage is located east of the building, at the rear of the lot.

713 Bell Road

The property at 713 Bell Road (Plate 35) is located on the west side of Bell Road, between Baird and Lowell Avenues, in Mount Ephraim Borough, Camden County, New Jersey. The parcel is identified in tax records as Map 11, Block 114, Lot 2. The property consists of a 50.0-foot by 125.0-foot lot in a residential neighborhood. A ca. 1928 to 1939 vernacular bungalow is the only building on the property.

The dwelling at 713 Bell Road in Mount Ephraim Borough, Camden County, New Jersey is a one-and-one-half-story, side-gabled, three-bay by three-bay, vernacular bungalow constructed on a continuous, raised rusticated concrete block foundation. The wooden frame building is clad in aluminum siding and its roof is covered with asphalt shingles. A shed dormer pierces the roof of the façade. The main entrance is situated in the center bay, and is accessed via a five-step brick stoop with a wrought iron railing. Shed-roofed, enclosed porches are attached to the façade (east elevation) and the west elevation. All windows and doors are modern replacements. A modern wooden deck with handicap access is located to the rear of the building.

715 Bell Road

The property at 715 Bell Road (Plate 36) is located at the northwest corner of Lowell Avenue and Bell Road in Mount Ephraim Borough, Camden County, New Jersey. The parcel is identified in tax records as Map 1, Block 114, Lot 1.04. The property consists of a 50.0-foot by 125.0-foot lot in a residential neighborhood. A ca. 1939 to 1949 vernacular dwelling with an attached garage is the only building on the property.

The dwelling at 715 Bell Road in Mount Ephraim Borough, Camden County, New Jersey is a heavily altered, one-and-one-half-story, side-gabled, three-bay by two-bay, vernacular dwelling constructed on a continuous, parged concrete block foundation. The wooden frame building is clad in vinyl siding, and its roof is covered with asphalt shingles. The roof features two gabled dormers with aluminum awnings. The main entrance is situated in the center bay and is accessed

via a concrete walkway and stoop with a wrought iron railing. Aluminum awnings protect the window and door openings. All windows and doors are modern replacements. A screened, hipped-roofed porch is attached to the east elevation. A side-gabled addition to the west elevation connects the dwelling to a side-gabled, two-car garage.

101 Cleveland Avenue

The property at 101 Cleveland Avenue (Plate 37) is located on the west side of Cleveland Avenue, south of Linwood Avenue, in Mount Ephraim Borough, Camden County, New Jersey. The parcel is identified in tax records as Map 10, Block 100, Lot 2. The property consists of a 100.0-foot by 50.0-foot corner lot in a residential neighborhood. Buildings on the property include a ca. 1918 vernacular bungalow and a ca. 1950 garage.

The dwelling at 101 Cleveland Avenue in Mount Ephraim Borough, Camden County, New Jersey is a one-story, front-gabled, three-bay by three-bay, vernacular bungalow constructed on a continuous, raised, parged concrete foundation. An earthen berm against the foundation gives the building the appearance of sitting on a small hill. The wooden frame structure is clad in vinyl siding, and the roof is covered with asphalt shingles. The enclosed, full-width, hipped-roofed front porch sits on a concrete foundation. The entry door in the façade (east elevation) is set in the porch to the right of center, and is accessed via two sets of three concrete steps. A one-bay by two-bay, shed roofed appendage in the north corner of the west (rear) elevation contains a second door. A concrete block interior chimney projects from the center of the peak, approximately two-thirds of the way toward the rear of the house. A one-bay by one-bay cross gable addition has been added to the south elevation.

Windows are a combination of modern one-over-one replacement sash and two vertical-light over two vertical-light wood sash. Both types are double-hung. The historic wooden sash windows are protected by aluminum triple track storm windows. A small two-light by two-light, double-hung, fixed-sash window occupies the front gable. A modern, faux-panel wooden entry door is protected by an aluminum storm door, as is a historic light-and-panel wooden rear door.

102 Cleveland Avenue

The property at 102 Cleveland Avenue (Plate 38) is located on the east side of Cleveland Avenue, south of Linwood Avenue, in Mount Ephraim Borough, Camden County, New Jersey. The parcel is identified in tax records as Map 10, Block 99, Lot 1.01. The property consists of a 50.0-foot by 100.0-foot corner lot in a residential neighborhood. A ca. 1926 dwelling is the only building on the property.

The dwelling at 102 Cleveland Avenue in Mount Ephraim Borough, Camden County, New Jersey is a one-and-one-half story, side-gabled, three-bay by two-bay vernacular Cape Cod dwelling constructed on a continuous, raised, rusticated concrete block foundation. The wooden frame structure is clad in vinyl siding, and the gabled roof is covered with asphalt shingles. The rear of the roof has a shallower pitch than the front. A brick, four-step stoop with a wooden rail provides access to the central main entrance in the façade (west elevation). A parged chimney projects from the peak of the roof, just to the right of center. A large, three-bay by one-bay gabled addition is attached to the rear of the building.

The windows in the main block are predominantly one-over-one, double-hung wooden sash with wooden sills. Aluminum, triple track storm windows protect the sash. To the right of the front door is a modern, triple casement bow window. A modern, aluminum screen door protects a modern, vinyl or metal faux panel door in the main entrance. The addition has modern French door and casement windows.

106 Cleveland Avenue

The property at 106 Cleveland Avenue (Plate 39) is located on the east side of Cleveland Avenue, south of Linwood Avenue, in Mount Ephraim Borough, Camden County, New Jersey. The parcel is identified in tax records as Map 10, Block 99, Lot 5. The property consists of a 50.0-foot by 100.0-foot lot in a residential neighborhood. Buildings on the property include a ca. 1926 vernacular bungalow and a ca. 1926 garage/shed.

The dwelling at 106 Cleveland Avenue in Mount Ephraim Borough, Camden County, New Jersey is a heavily altered, one-story, gable-front, three-bay by three-bay, vernacular bungalow

constructed on a continuous, raised, rusticated concrete block foundation. The wooden frame structure is clad in vinyl siding, and the gabled roof is covered with asphalt shingles. The main entry door is set in the far left bay in the façade (west elevation), and accessed via a six-step concrete stoop with a wrought iron railing. A one-bay wide, shed roofed hood supported by wrought iron posts shelters the entrance. A concrete block exterior end chimney projects above the roofline in the southeast corner of the east elevation. All windows and doors are modern replacements.

110 Cleveland Avenue

The property at 110 Cleveland Avenue (Plate 40) is located on the east side of Cleveland Avenue, south of Linwood Avenue, in Mount Ephraim Borough, Camden County, New Jersey. The parcel is identified in tax records as Map 10, Block 99, Lot 8. The property consists of a 50.0-foot by 100.0-foot lot in a residential neighborhood. A ca. 1926 vernacular bungalow is the only building on the property.

The dwelling at 110 Cleveland Avenue in Mount Ephraim Borough, Camden County, New Jersey is a one-story, gable-front, three-bay by three-bay, vernacular bungalow constructed on a continuous, raised, parged foundation. The wooden frame structure is clad in vinyl siding, and the gabled roof is covered with asphalt shingles. Shallow shed dormers project from each side of the roof. The full-width, hipped roofed front porch sits on a concrete block foundation and is reached via four pre-cast concrete steps. The entry door is set in the center of the façade (west elevation). A concrete block exterior chimney projects from near the southeast corner of the south elevation.

Windows in the north and south elevations are one-over-one, double-hung wooden sash. In the gable and dormers, the windows are small, three-light, wooden awning sash. In the façade, the windows and entry door are modern replacements.

328 Emerson Avenue

The property at 328 Emerson Avenue (Plate 41) is located on the north side of Emerson Avenue, west of Bell Road, in Mount Ephraim Borough, Camden County, New Jersey. The parcel is

identified in tax records as Map 11, Block 115, Lot 1.02. The property consists of a 110.0-foot by 114.0-foot lot in a residential neighborhood. A ca. 1928 vernacular bungalow is the only building on the property.

The dwelling at 328 Emerson Avenue in Mount Ephraim Borough, Camden County, New Jersey is a one-story, gable-front, one-bay by two-bay, vernacular bungalow constructed on a continuous, parged, concrete block foundation. A one-story shed roof addition is attached to the façade (west elevation). The wooden frame building is clad in asbestos siding, and the roof is covered with asphalt shingles. The main entrance is located in the addition to the façade, and accessed by a concrete stoop. All windows and doors are modern replacements.

101 Harding Avenue

The property at 101 Harding Avenue (Plate 42) is located at the southwest corner of Linwood and Harding Avenues, in Mount Ephraim Borough, Camden County, New Jersey. The parcel is identified in tax records as Map 10, Block 97, Lot 1.02. The property consists of a 50-foot by 100.0-foot lot in a residential neighborhood. A ca. 1946 to 1949 vernacular dwelling is the only building on the property.

The dwelling at 101 Harding Avenue in Mount Ephraim Borough, Camden County, New Jersey is a one-story, side-gabled, five-bay by two-bay, vernacular dwelling constructed on a continuous, parged, concrete block foundation. The wooden frame building is clad in aluminum siding, and its roof is sheathed in asphalt shingles. An exterior brick chimney runs along the north elevation. The interior is lit by a mixture of modern, tripartite bay windows and aluminum, one-over-one, double-hung sash windows. A modern aluminum panel door, located on the façade, is accessed by a concrete stoop with wooden railings.

102 Harding Avenue

The property at 102 Harding Avenue (Plate 43) is located at the southeast corner of Linwood and Harding Avenues, in Mount Ephraim Borough, Camden County, New Jersey. The parcel is identified in tax records as Map 10, Block 96, Lot 1. The property consists of a 50.0-foot by

100.0-foot lot in a residential neighborhood. A ca. 1930s vernacular bungalow is the only building on the property.

The dwelling at 102 Harding Avenue in Mount Ephraim Borough, Camden County, New Jersey is a one-story, cross-gabled, five-bay by-two bay, vernacular bungalow constructed on a continuous, parged, concrete block foundation. The wooden frame building is clad in vinyl siding and its roof is sheathed in asphalt shingles. An interior, asphalt clad chimney protrudes from a small, shed-roofed addition to the south elevation of the dwelling. The building features modern, one-over-one, double-hung sash windows. Small concrete stoops provide access to the front and rear entrances, which contain pane-and-panel doors.

105 Harding Avenue

The property at 105 Harding Avenue (Plate 44) is located on the west side of Harding Avenue in Mount Ephraim Borough, Camden County, New Jersey. The parcel is identified in tax records as Map 10, Block 97, Lot 2. The property consists of a 50.0-foot by 100.0-foot lot in a residential neighborhood. A ca. 1946 to 1949 vernacular dwelling is the only building on the property.

The dwelling at 105 Harding Avenue in Mount Ephraim Borough, Camden County, New Jersey is a one-story, gable-front, two-bay by four-bay, vernacular dwelling constructed on a continuous, parged brick foundation. The wooden frame building is clad in vinyl siding, and its roof is sheathed in asphalt shingles. An interior brick chimney pierces the roof ridge. A gable-front entryway is located at the eastern end of the north elevation (façade). This modern wooden panel door is accessed by a brick stoop with wrought-iron railings. The house is lit by multiple, modern, one-over-one, double-hung windows. Small, single-story additions are attached to the south and east elevations of the dwelling.

106 Harding Avenue

The property at 106 Harding Avenue (Plate 45) is located on the east side of Harding Avenue, between Linwood and Winthrop Avenues, in Mount Ephraim Borough, Camden County, New Jersey. The parcel is identified in tax records as Map 10, Block 96, Lot 11. The property consists

of a 50.0-foot by 100.0-foot lot in a residential neighborhood. The only building on the property is a ca. 1930s vernacular bungalow.

The dwelling at 106 Harding Avenue in Mount Ephraim Borough, Camden County, New Jersey is a one-and-one-half-story, side-gabled, four-bay by three-bay vernacular bungalow constructed on a continuous, parged concrete block foundation. The wooden frame building is clad in wooden shingles, and its roof is sheathed in asphalt shingles. Three modern skylights pierce the west slope of the roof. A small, wooden front deck provides access to a modern, aluminum pane-and-panel door in the façade. All windows and doors are modern replacements.

115 Harding Avenue

The property at 115 Harding Avenue (Plate 46) is located on the west side of Harding Avenue in Mount Ephraim Borough, Camden County, New Jersey. The parcel is identified in tax records as Map 10, Block 97, Lot 3.03. The property consists of a 65-foot by 100.0-foot lot in a residential neighborhood. A ca. 1946 to 1949 vernacular dwelling is the only building on the property.

The dwelling at 115 Harding Avenue in Mount Ephraim Borough, Camden County, New Jersey is a one story, gable-front, two-bay by four-bay vernacular dwelling constructed on a continuous, parged, concrete block foundation. The wooden frame building is clad in vinyl siding and its roof is sheathed in asphalt shingles. An exterior parged chimney rises along the west elevation. The dwelling is lit by a mixture of modern, six-over-six and one-over-one, double-hung sash windows. A gable-front recessed porch is located on the façade. The porch shelters the main entrance, which contains a modern, wooden, pane-and-panel door. The dwelling is accessed by a concrete walkway.

116 Harding Avenue

The property at 116 Harding Avenue (Plate 47) is located on the east side of Harding Avenue, between Linwood and Winthrop Avenues, in Mount Ephraim Borough, Camden County, New Jersey. The parcel is identified in tax records as Map 10, Block 96, Lot 4.03. The property consists of a 50.0-foot by 100.0-foot lot in a residential neighborhood. A ca. 1946 to 1950 vernacular bungalow is the only building on the property.

The dwelling at 116 Harding Avenue in Mount Ephraim Borough, Camden County, New Jersey is a one-story, hipped-roofed, two-bay by three-bay, vernacular bungalow constructed on a continuous, parged, concrete block foundation. The wooden frame building is clad in vinyl siding and its roof is sheathed in asphalt shingles. An enclosed, shed-roofed porch is attached to the north elevation. Two entrances are located in the façade (west elevation), and an additional entrance is located in the south elevation. An interior chimney clad in asphalt shingles projects from the roof along the south elevation. All windows and doors are modern replacements.

Mount Ephraim Borough Department of Public Works (33 Linden Avenue)

The Mount Ephraim Borough Department of Public Works property (Plate 48) is located on the west side of Linden Avenue in Mount Ephraim Borough, Camden County, New Jersey. The property is comprised of two parcels, identified in tax records as Map 13, Block 123.01, Lots 3.03 and 3.06. The property is irregularly shaped and approximately 4.5 acres in size. The property was constructed ca. 1925 to 1950, and includes two public works buildings, a softball field surrounded by a chain-link fence, a press box, and asphalt-paved parking lots.

The Mount Ephraim Borough Department of Public Works building 1 is a one-story, masonry, utilitarian building measuring four bays wide and four bays deep. The building is constructed out of concrete block and features a common bond brick façade. An oversized concrete block interior chimney pierces the flat roofline. Fixed, twelve-light, industrial windows in the south elevation light the interior of the building. An industrial panel door located in the northernmost bay of the façade (east elevation) provides access to the building. The remaining bays in the façade and south elevation contain oversized, metal garage doors. Decorative brickwork is visible in the façade. A secondary building constructed out of concrete block is located to the south of building 1. Asphalt-paved parking lots abut the building to the east and north. A softball field is located immediately west of the building.

The Mount Ephraim Borough Department of Public Works building 2 is a one-story, concrete block, utilitarian building located immediately south of building 1. The building is unadorned, with only a single pedestrian entrance centered in the east elevation.

The press box is a small, two-story building with a concrete block first story and a frame second story. The first story is clad in stucco, and the second story is clad in vinyl siding. A number of modern windows light the interior of the building. Modern industrial doors are located in the first story, and provide access to the building.

The Mount Ephraim Borough Department of Public Works softball field is located immediately west of the public works building 1. A chain link fence surrounds the dirt-covered field, and grass covers the grounds surrounding the playing field. The property does not display any planned landscape features, including plantings, landforms, or circulation paths.

128 Roosevelt Avenue

The property at 128 Roosevelt Avenue (Plate 49) is located on the east side of Roosevelt Avenue, in Mount Ephraim Borough, Camden County, New Jersey. The parcel is identified in tax records as Map 10, Block 97, Lot 4.02. The property consists of a 50.0-foot by 100.0-foot lot in a residential neighborhood. A ca. 1955 dwelling is the only building on the property.

The dwelling at 128 Roosevelt Avenue in Mount Ephraim Borough, Camden County, New Jersey is a one-story, side-gabled, three-bay by two-bay, vernacular Minimal Traditional dwelling constructed on a continuous, parged concrete block foundation. The wooden frame structure is clad in vinyl siding, and its roof is sheathed in asphalt shingles. An exterior concrete block chimney is located along the north elevation. The dwelling is lit by modern, one-over-one, double-hung sash windows and bay windows. The modern, aluminum, pane-and-panel door is accessed by a concrete stoop.

129 Roosevelt Avenue

The property at 129 Roosevelt Avenue (Plate 50) is located on the west side of Roosevelt Avenue, in Mount Ephraim Borough, Camden County, New Jersey. The parcel is identified in tax records as Map 10, Block 98, Lot 5. The property consists of a 75.0-foot by 100.0-foot lot in a residential neighborhood. A ca. 1926 vernacular bungalow is the only building on the property.

The dwelling at 129 Roosevelt Avenue in Mount Ephraim Borough, Camden County, New Jersey is a one-story, gable-front, vernacular bungalow. The dwelling measures three bays wide by three bays deep with a one-bay, gable-front, enclosed porch. The vernacular dwelling rests on a rusticated concrete block foundation. The wooden frame structure is clad in vinyl siding and its roof is sheathed in asphalt shingles. The building is lit by one-over-one, double-hung sash windows with aluminum/vinyl surrounds. The modern, wooden, pane-and-panel door is located in the enclosed front porch and protected by an aluminum awning. A wooden staircase provides access to the entrance.

135 Roosevelt Avenue

The property at 135 Roosevelt Avenue (Plate 51) is located on the west side of Roosevelt Avenue, in Mount Ephraim Borough, Camden County, New Jersey. The parcel is identified in tax records as Map 10, Block 98, Lot 4.05. The property consists of a 225.0-foot by 100.0-foot lot in a residential neighborhood. Buildings on the property include a ca. 1918 to 1925 vernacular dwelling and two modern sheds.

The house at 135 Roosevelt Avenue in Mount Ephraim Borough, Camden County, New Jersey is a two story, vernacular dwelling with a Four Square form. The building measures three bays wide by three bays deep, with a two-bay, hipped-roofed front porch. The dwelling rests on a rusticated concrete block foundation. The wooden frame building is clad in vinyl siding, and its roof is sheathed in asphalt shingles. An interior brick chimney pierces the hipped roofline. The building is lit by modern, one-over-one, double-hung sash windows with aluminum/vinyl surrounds. The modern, pane-and-panel door is shielded by the front porch and can be accessed by concrete steps.

5.0 Application of the Definition of Effect and the Criteria of Adverse Effect

5.0 APPLICATION OF THE DEFINITION OF EFFECT AND THE CRITERIA OF ADVERSE EFFECT

5.1 Application of the Definition of Effect

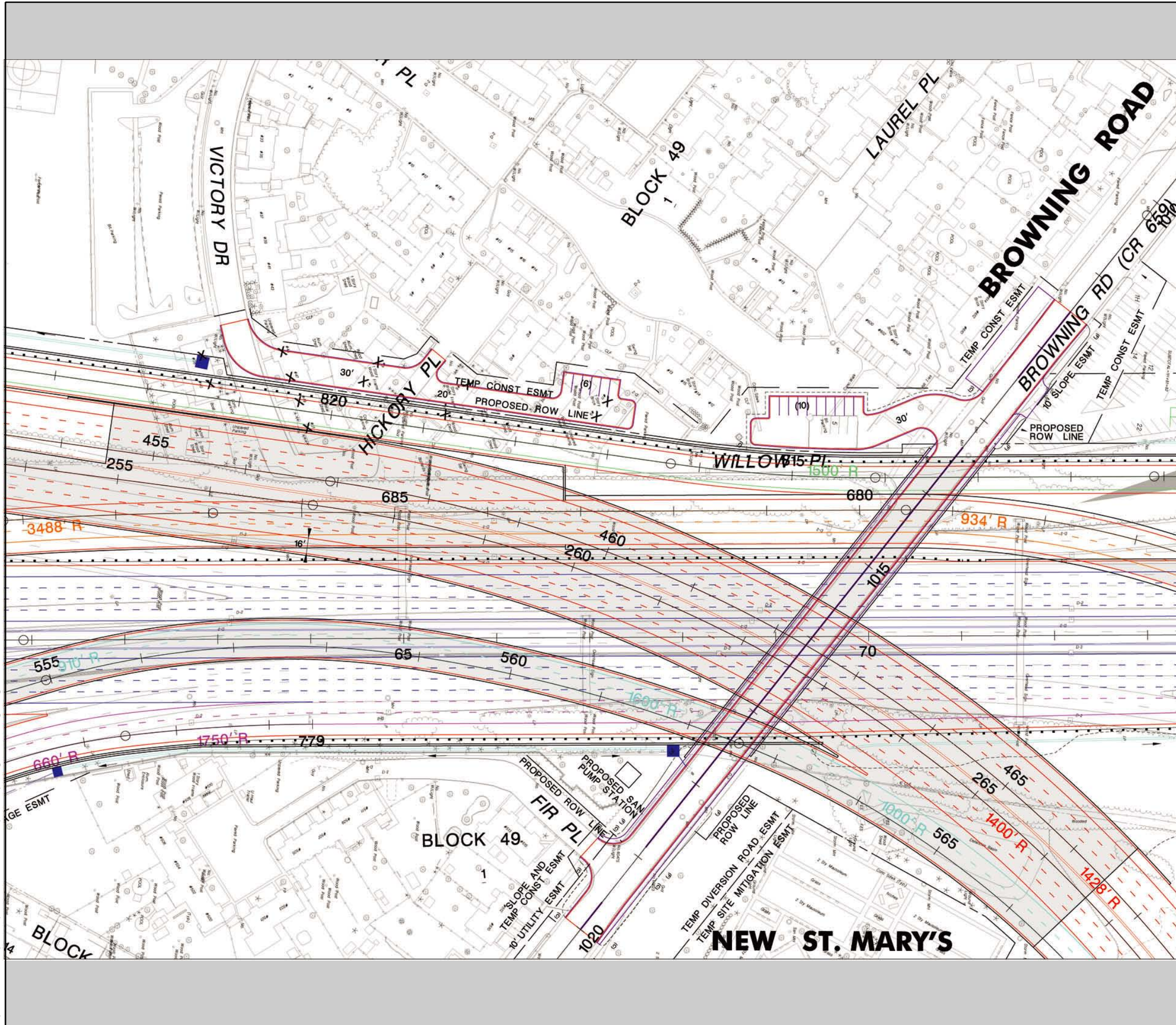
One historic property (the Bellmawr Park Mutual Housing Historic District, National Register-eligible) exists within the APE. Application of the Definition of Effect indicates that the proposed project would have an *Effect* on the Bellmawr Park Mutual Housing Historic District because it would alter the characteristics of the property that qualify it for inclusion in the National Register. The effect analyses for the resource under each proposed build alternative are included in Sections 5.1.1 to 5.1.3. A comparison summary of the effects under all alternatives follows in Section 5.1.4. Figures 25 to 27 represent the direct impacts to the Bellmawr Park Mutual Housing Historic District under each alternative, and Figure 28 represents potential new construction sites within the district.

5.1.1 Alternatives D and D1

Table 7. Results of Effect Evaluation for the Bellmawr Park Mutual Housing Historic District under Alternatives D and D1.

Definition of Effect	Evaluation
An Effect may occur when there is alteration to the characteristics of a historic property qualifying it for inclusion in or eligible for the National Register as defined in Section 800.16(i).	The National Register characteristics of the Bellmawr Park Mutual Housing Historic District would be altered by the proposed alternatives.
Finding:	The proposed alternatives would have an <i>Effect</i> on the Bellmawr Park Mutual Housing Historic District because they would directly alter physical features that contribute to the district's significance (five contributing buildings [12 dwelling units] would be demolished; Figure 25). The alternatives would also alter the setting of the resource through the introduction of new construction (Figure 28), right-of-way acquisition, and visual and audible impacts within the district. Pursuant to 36 CFR § 800.11(e), the Criteria of Adverse Effect must be applied.

Figure 25
Direct Impacts to Bellmawr Park Mutual Housing Historic District Under Alternatives D and DI
 I-295/I-76/Route 42 Direct Connection
 Camden County, New Jersey



X Proposed Demolition



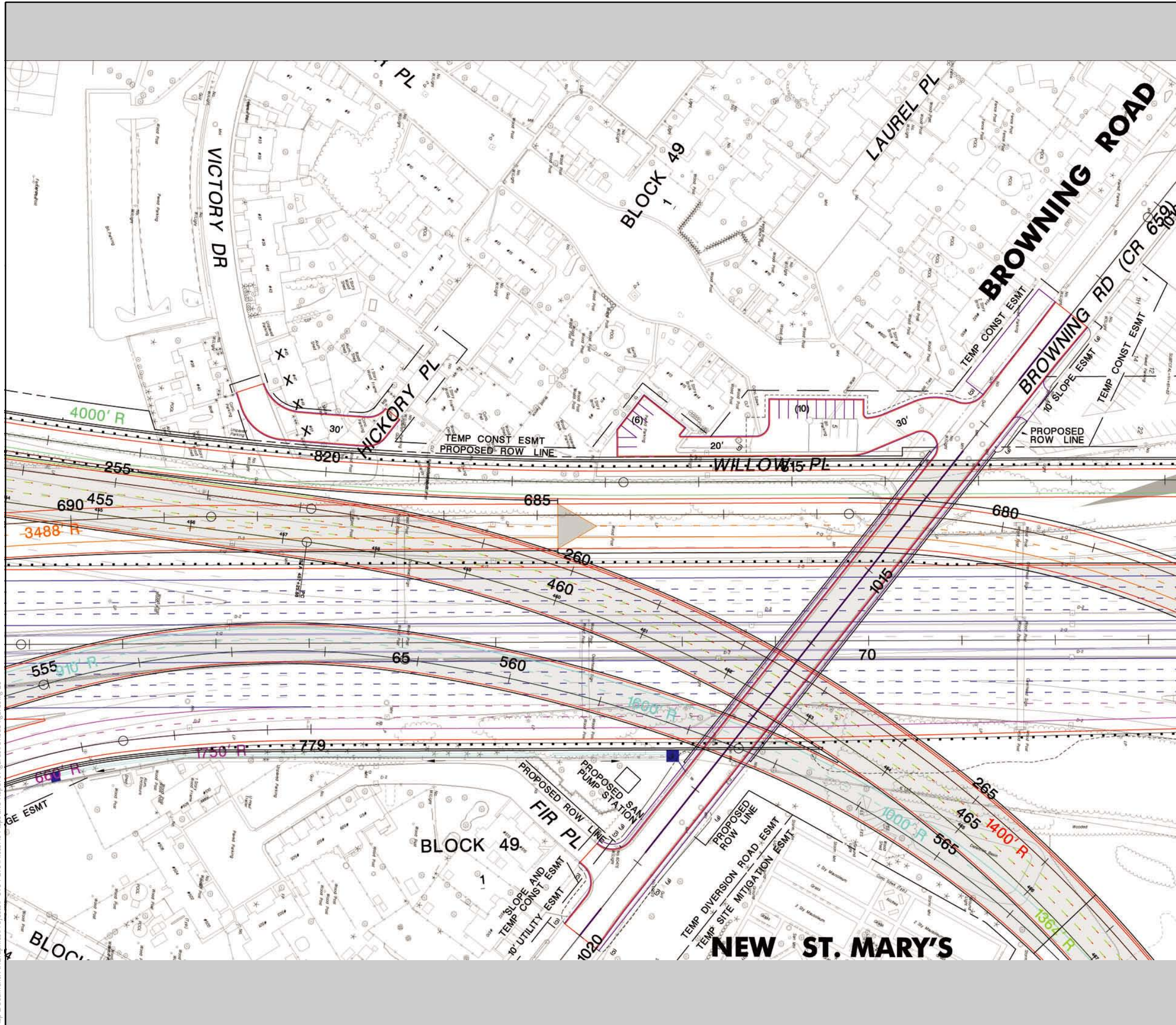
Not to Scale

Historic Architectural Resources Technical Environmental Study
 I-295/I-76/Route 42 Direct Connection, Camden County

Sources: Dewberry-Goodkind, Inc., 2006.

Map Documents\X:\Graphics\Projects\I-295\Historic Maps and Report Figures\revised figures\fig_25

Figure 26
Direct Impacts to Bellmawr Park Mutual Housing Historic District Under Alternatives G2 and H1
 I-295/I-76/Route 42 Direct Connection
 Camden County, New Jersey



X Proposed Demolition



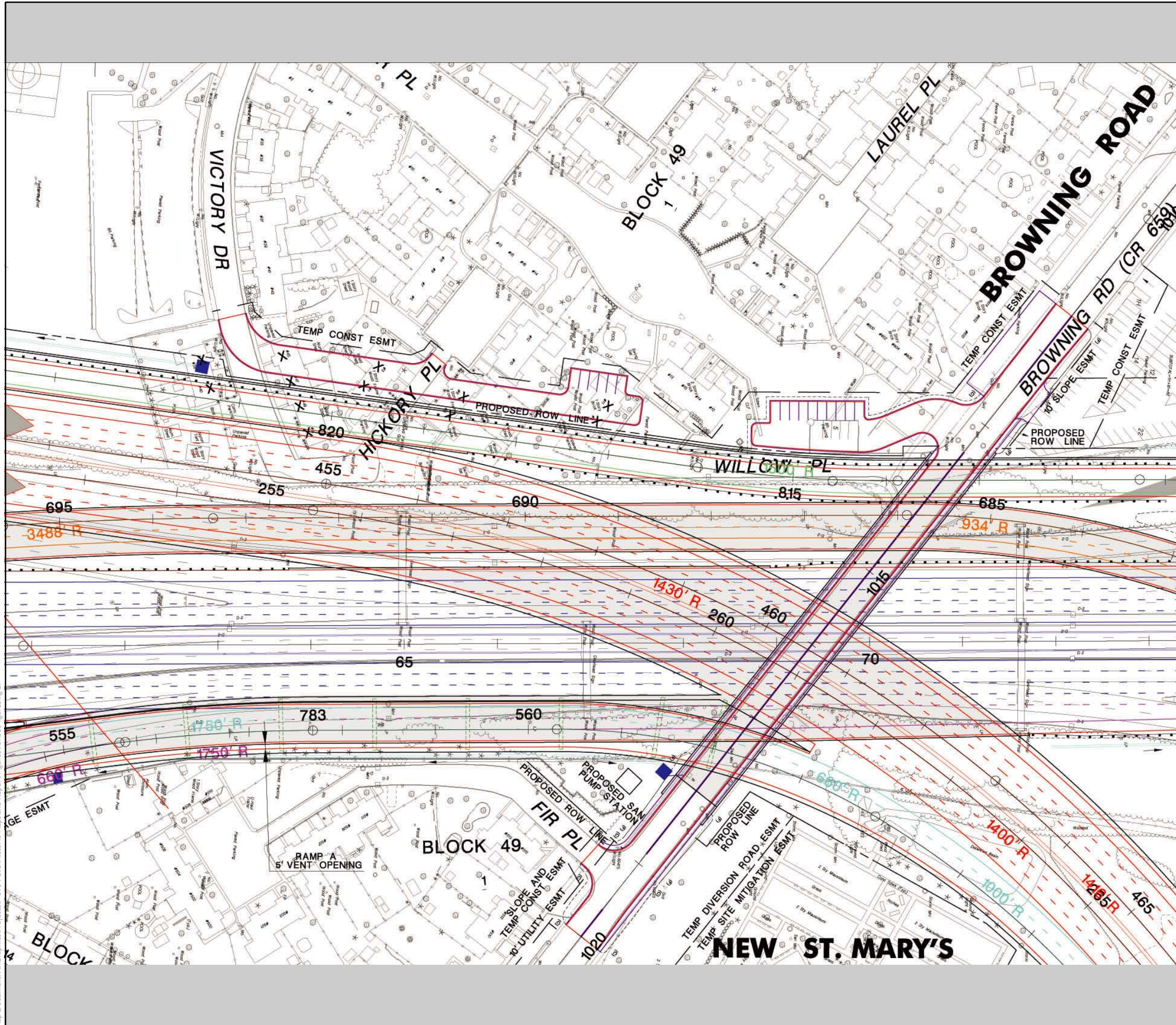
Not to Scale

Historic Architectural Resources Technical Environmental Study
 I-295/I-76/Route 42 Direct Connection, Camden County

Sources: Dewberry-Goodkind, Inc., 2006.

Map Document: X:\Graphics\Projects\I-295\Historic Maps and Report Figures\revised figures\fig 26

Figure 27
Direct Impacts to Bellmawr Park Mutual Housing Historic District Under Alternative K
 I-295/I-76/Route 42 Direct Connection
 Camden County, New Jersey



X Proposed Demolition



Not to Scale

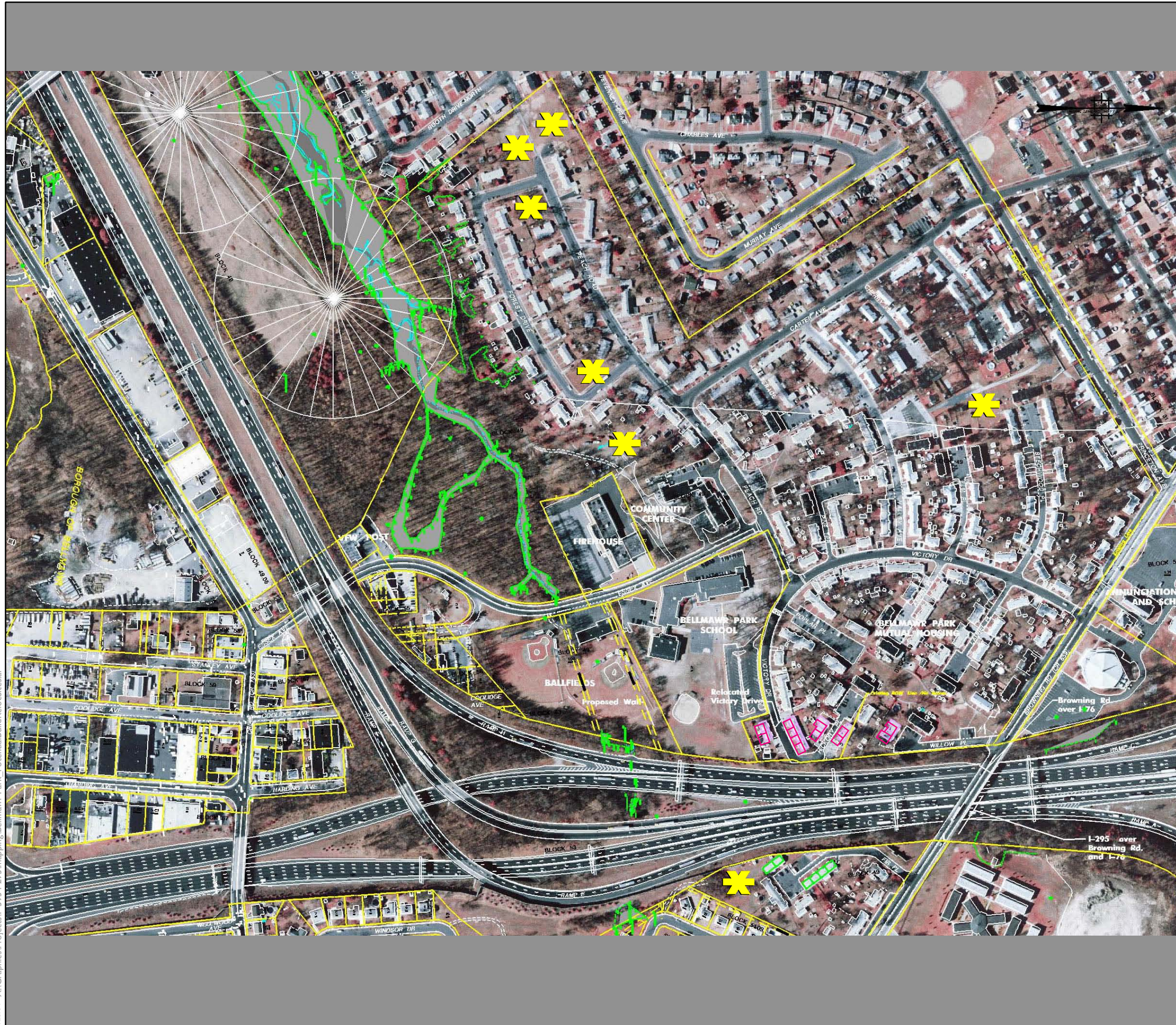
Historic Architectural Resources Technical Environmental Study
 I-295/I-76/Route 42 Direct Connection, Camden County

Sources: Dewberry-Goodkind, Inc., 2006.

Figure 28
Bellmawr Park
Mutual Housing Historic District
Potential New Construction Sites

I-295 / I-76 / Route 42 Direct Connection
 Camden County, New Jersey

 Potential New Construction Sites



Historic Architectural Resources Technical Environmental Study
 I-295/I-76/Route 42 Direct Connection, Camden County

Source: Dewberry-Goodkind, Inc., 2006.

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5.1.2 Alternatives G2 and H1

Table 8. Results of Effect Evaluation for the Bellmawr Park Mutual Housing Historic District under Alternatives G2 and H1.

Definition of Effect	Evaluation
An Effect may occur when there is alteration to the characteristics of a historic property qualifying it for inclusion in or eligible for the National Register as defined in Section 800.16(i).	The National Register characteristics of the Bellmawr Park Mutual Housing Historic District would be altered by the proposed alternatives.
Finding:	The proposed alternatives would have an <i>Effect</i> on the Bellmawr Park Mutual Housing Historic District because they would directly alter physical features that contribute to the district’s significance (one contributing building [four dwelling units] would be demolished; Figure 26). The alternatives would also alter the setting of the resource through the introduction of new construction (Figure 28), right-of-way acquisition, and visual and audible impacts within the district. Pursuant to 36 CFR § 800.11(e), the Criteria of Adverse Effect must be applied.

5.1.3 Alternative K

Table 9. Results of Effect Evaluation for the Bellmawr Park Mutual Housing Historic District under Alternative K.

Definition of Effect	Evaluation
An Effect may occur when there is alteration to the characteristics of a historic property qualifying it for inclusion in or eligible for the National Register as defined in Section 800.16(i).	The National Register characteristics of the Bellmawr Park Mutual Housing Historic District would be altered by the proposed alternative.
Finding:	The proposed alternative would have an <i>Effect</i> on the Bellmawr Park Mutual Housing Historic District because it would directly alter physical features that contribute to the district’s significance (five contributing buildings [12 dwelling units] would be demolished; Figure 27). The alternative would also alter the setting of the resource through the introduction of new construction (Figure 28), right-of-way acquisition, and visual and audible impacts within the district. Pursuant to 36 CFR § 800.11(e), the Criteria of Adverse Effect must be applied.

5.1.4 Comparison Summary

Table 10. Comparison of Results of Effect Evaluations for All Build Alternatives.

Alternative	Result of Effect Evaluation	Explanation of Effect
D and D1	Effect	Five contributing buildings (12 dwelling units) would be demolished
		Five new buildings would be constructed within the district
		Right-of-way acquisition would occur within the district
		Visual impacts would be introduced to the district
		Audible impacts would be introduced to the district
G2 and H1	Effect	One contributing building (four dwelling units) would be demolished
		One new building would be constructed within the district
		Right-of-way acquisition would occur within the district
		Visual impacts would be introduced to the district
		Audible impacts would be introduced to the district
K	Effect	Five contributing buildings (12 dwelling units) would be demolished
		Five new buildings would be constructed within the district
		Right-of-way acquisition would occur within the district
		Visual impacts would be introduced to the district
		Audible impacts would be introduced to the district

5.2 Application of the Criteria of Adverse Effect

Application of the Criteria of Adverse Effect indicates that the proposed project would have an *Adverse Effect* on the Bellmawr Park Mutual Housing Historic District because it would diminish the resource’s integrity of location, design, and feeling. A brief synopsis of the contributing elements and important aspects of integrity for the district follows. The Adverse Effect analyses for the resource under each proposed build alternative are summarized in Sections 5.2.1 to 5.2.3. A comparison summary of the adverse effects under all alternatives follows in Section 5.2.4. Figures 25 to 27 represent the direct impacts to the Bellmawr Park Mutual Housing Historic District under each alternative, and Figure 28 represents potential new construction sites within the district.

The NJSHPO rendered an opinion on July 6, 2005 that the Bellmawr Park Mutual Housing Historic District is eligible for listing in the National Register (Appendix A). FHWA concurred with that opinion and determined that the resource is eligible on July 18, 2005 (Appendix A). The district is significant under National Register Criterion A for its association with the development of the mutual housing concept associated with World War II-era defense housing projects and under Criterion C for its embodiment of the distinctive characteristics of an architectural type (functional military worker housing of the 1940s). The district's period of significance is 1942 to 1945. Contributing elements to the district include all dwellings and communal open space dating from within the period of significance, the Bellmawr Park Mutual Housing Corporation office building, and the Bellmawr Park School. The aspects of integrity that are most important to the district are location, design, setting, feeling, and association.

5.2.1 Alternatives D and D1

Table 11. Results of Criteria of Adverse Effect Evaluation for the Bellmawr Park Mutual Housing Historic District under Alternatives D and D1.

<p>An Adverse Effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Consideration shall be given to all qualifying characteristics of a historic property, including those that may have been identified subsequent to the original evaluation of the property's eligibility for the National Register. Adverse Effects may include reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance, or be cumulative.</p>	
Criteria of Adverse Effect	Evaluation
<p>Adverse Effects on historic properties include but may not be limited to:</p>	
<p>(i) Physical destruction of or damage to all or part of the property;</p>	<p>The alternatives would diminish the resource's integrity of materials because they would involve the demolition of five contributing buildings (12 dwelling units at 1-3 Hickory Place, 6-8 Hickory Place, 9-11 Willow Place, 38-40 Victory Drive, and 45-51 Victory Drive) (Figure 25). In addition, five new buildings would be constructed within the district boundaries (Figure 28). The alternatives would also involve the acquisition of 2.11 acres of land in the district for proposed right-of-way. The total acreage of the district is 23.78, and 8.87% of this total would be acquired under Alternatives D and D1. These alterations would diminish the district's integrity of design by altering its original layout.</p>
<p>(ii) Alteration of a property, including restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation, and provision for handicapped access that is not consistent with the Secretary's Standards for the Treatment of Historic Properties (36 CFR part 68) and applicable guidelines;</p>	<p>The alternatives would involve alteration of the property that is inconsistent with the Secretary's Standards due to the proposed demolition of five contributing buildings (Figure 25), the construction of five new buildings within the district boundaries (Figure 28), and the acquisition of 2.11 acres of land in the district for proposed right-of-way. These alterations would detract from the district's integrity of design because they would alter the layout of the district, which is a significant feature of its design.</p>
<p>(iii) Removal of the property from its historic location;</p>	<p>The alternatives would detract from the resource's integrity of location because it would involve the demolition of five contributing buildings (12 dwelling units) (Figure 25).</p>
<p>(iv) Change of the character of the property's use or of physical features within the property's setting that contribute to its historic significance;</p>	<p>The alternatives would result in a change of a portion of the district's use. A portion of the district (2.11 acres) would be acquired for proposed highway right-of-way, resulting in a change of use from private residential to public transportation. The alternatives would also diminish the district's setting because five buildings that contribute to the district's setting would be demolished to accommodate new highway features (Figure 25), and five new buildings would be constructed within the district boundaries (Figure 28).</p>

Table 11 Continued.

Criteria of Adverse Effect	Evaluation
<p>(v) Introduction of visual, atmospheric, or audible elements that diminish the integrity of the property’s significant historic features;</p>	<p>The alternatives would diminish the resource’s integrity of feeling because they would introduce visual and audible elements that are not sympathetic to the significant historic features of the district. The district primarily functions as a residential community. It is served by small, curvilinear roads, and the dwellings are connected physically and aesthetically by sidewalks, walkways, grassy lawns, and trees. The introduction of a modern highway ramp and associated highway features within or immediately adjacent to the district would result in adverse visual effects, with or without noise walls (see Appendix C for photo simulations). Noise levels would also increase within the district as a result of the project, resulting in adverse audible effects. If left unmitigated, 32 contributing buildings would approach or exceed FHWA’s noise abatement criteria (NAC) by the year 2030 under Alternatives D and D1, compared to 24 buildings under the No Build Alternative. If mitigated with noise walls, 17 contributing buildings would approach or exceed FHWA’s noise abatement criteria (NAC) by the year 2030, compared to 24 buildings under the No Build Alternative (see Appendix D for noise contours). *Note, noise walls have been deemed feasible, and adverse noise impacts would not occur if noise walls were used for these alternatives; however, visual impacts would increase with the use of noise walls.</p>
<p>(vi) Neglect of a property which causes its deterioration, except where such neglect and deterioration are recognized qualities of a property of religious and cultural significance to an Indian tribe or Native Hawaiian organization; and</p>	<p>The project would not result in the neglect of the property.</p>
<p>(vii) Transfer, lease, or sale of property out of Federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property’s historic significance.</p>	<p>The project would not result in the transfer, lease, or sale of this property out of Federal ownership.</p>
<p>Finding: The proposed alternatives would have an <i>Adverse Effect</i> on the Bellmawr Park Mutual Housing Historic District.</p>	

5.2.2 Alternatives G2 and H1

Table 12. Results of Criteria of Adverse Effect Evaluation for the Bellmawr Park Mutual Housing Historic District under Alternatives G2 and H1.

<p>An Adverse Effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property’s location, design, setting, materials, workmanship, feeling, or association. Consideration shall be given to all qualifying characteristics of a historic property, including those that may have been identified subsequent to the original evaluation of the property’s eligibility for the National Register. Adverse Effects may include reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance, or be cumulative.</p>	
Criteria of Adverse Effect	Evaluation
<p>Adverse Effects on historic properties include but may not be limited to:</p>	
<p>(i) Physical destruction of or damage to all or part of the property;</p>	<p>The alternatives would diminish the resource’s integrity of materials because they would involve the demolition of one contributing building (four dwelling units at 45-51 Victory Drive) (Figure 26). In addition, one new building would be constructed within the district boundaries (Figure 28). The alternatives would also involve the acquisition of 1.05 acres of land in the district for proposed right-of-way. The total acreage of the district is 23.78, and 4.40% of this total would be acquired under Alternatives G2 and H1. These alterations would diminish the district’s integrity of design by altering its original layout.</p>
<p>(ii) Alteration of a property, including restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation, and provision for handicapped access that is not consistent with the Secretary’s Standards for the Treatment of Historic Properties (36 CFR part 68) and applicable guidelines;</p>	<p>The alternatives would involve alteration of the property that is inconsistent with the Secretary’s Standards due to the proposed demolition of one contributing building (Figure 26), the construction of one new building within the district boundaries (Figure 28), and the acquisition of 1.05 acres of land in the district for proposed right-of-way. These alterations would detract from the district’s integrity of design because they would alter the layout of the district, which is a significant feature of its design.</p>
<p>(iii) Removal of the property from its historic location;</p>	<p>The alternatives would detract from the resource’s integrity of location because it would involve the demolition of one contributing building (four dwelling units) (Figure 26).</p>
<p>(iv) Change of the character of the property’s use or of physical features within the property’s setting that contribute to its historic significance;</p>	<p>The alternatives would result in a change of a portion of the district’s use. A portion of the district (1.05 acres) would be acquired for proposed highway right-of-way, resulting in a change of use from private residential to public transportation. The alternatives would also diminish the district’s setting because one building that contributes to the district’s setting would be demolished to accommodate new highway features (Figure 26), and one new building would be constructed within the district boundaries (Figure 28).</p>

Table 12 Continued.

Criteria of Adverse Effect	Evaluation
<p>(v) Introduction of visual, atmospheric, or audible elements that diminish the integrity of the property’s significant historic features;</p>	<p>The alternatives would diminish the resource’s integrity of feeling because they would introduce visual and audible elements that are not sympathetic to the significant historic features of the district. The district primarily functions as a residential community. It is served by small, curvilinear roads, and the dwellings are connected physically and aesthetically by sidewalks, walkways, grassy lawns, and trees. The introduction of a modern highway ramp and associated highway features immediately adjacent to the district would result in adverse visual effects, with or without noise walls (see Appendix C for photo simulations). Noise levels would also increase within the district as a result of the project, resulting in adverse audible effects. If left unmitigated, 38 contributing buildings would approach or exceed FHWA’s noise abatement criteria (NAC) by the year 2030 under Alternatives G2 and H1, compared to 24 buildings under the No Build Alternative. If mitigated with noise walls, 20 contributing buildings would approach or exceed FHWA’s noise abatement criteria (NAC) by the year 2030 under Alternatives G2 and H1, compared to 24 buildings under the No Build Alternative (see Appendix D for noise contours). *Note, noise walls have been deemed feasible, and adverse noise impacts would not occur if noise walls were used for these alternatives; however, visual impacts would increase with the use of noise walls.</p>
<p>(vi) Neglect of a property which causes its deterioration, except where such neglect and deterioration are recognized qualities of a property of religious and cultural significance to an Indian tribe or Native Hawaiian organization; and</p>	<p>The alternatives would not result in the neglect of the property.</p>
<p>(vii) Transfer, lease, or sale of property out of Federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property’s historic significance.</p>	<p>The alternatives would not result in the transfer, lease, or sale of this property out of Federal ownership.</p>
<p>Finding: The proposed alternatives would have an <i>Adverse Effect</i> on the Bellmawr Park Mutual Housing Historic District.</p>	

5.2.3 *Alternative K*

Table 13. Results of Criteria of Adverse Effect Evaluation for the Bellmawr Park Mutual Housing Historic District under Alternative K.

<p>An Adverse Effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property’s location, design, setting, materials, workmanship, feeling, or association. Consideration shall be given to all qualifying characteristics of a historic property, including those that may have been identified subsequent to the original evaluation of the property’s eligibility for the National Register. Adverse Effects may include reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance, or be cumulative.</p>	
Criteria of Adverse Effect	Evaluation
<p>Adverse Effects on historic properties include but may not be limited to:</p>	
<p>(i) Physical destruction of or damage to all or part of the property;</p>	<p>The alternative would diminish the resource’s integrity of materials because it would involve the demolition of five contributing buildings (12 dwelling units at 1-3 Hickory Place, 6-8 Hickory Place, 9-11 Willow Place, 38-40 Victory Drive, and 45-51 Victory Drive) (Figure 27). In addition, five new buildings would be constructed within the district boundaries (Figure 28). The alternative would also involve the acquisition of 2.20 acres of land in the district for proposed right-of-way. The total acreage of the district is 23.78, and 9.27% of this total would be acquired under Alternative K. These alterations would diminish the district’s integrity of design by altering its original layout.</p>
<p>(ii) Alteration of a property, including restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation, and provision for handicapped access that is not consistent with the Secretary’s Standards for the Treatment of Historic Properties (36 CFR part 68) and applicable guidelines;</p>	<p>The alternatives would involve alteration of the property that is inconsistent with the Secretary’s Standards due to the proposed demolition of five contributing buildings (Figure 27), the construction of five new buildings within the district boundaries (Figure 28), and the acquisition of 2.20 acres of land in the district for proposed right-of-way. These alterations would detract from the district’s integrity of design because they would alter the layout of the district, which is a significant feature of its design.</p>
<p>(iii) Removal of the property from its historic location;</p>	<p>The alternatives would detract from the resource’s integrity of location because it would involve the demolition of five contributing buildings (12 dwelling units) (Figure 27).</p>
<p>(iv) Change of the character of the property’s use or of physical features within the property’s setting that contribute to its historic significance;</p>	<p>The alternatives would result in a change of a portion of the district’s use. A portion of the district (2.20 acres) would be acquired for proposed highway right-of-way, resulting in a change of use from private residential to public transportation. The alternatives would also diminish the district’s setting because five buildings that contribute to the district’s setting would be demolished to accommodate new highway features (Figure 27), and five new buildings would be constructed within the district boundaries (Figure 28).</p>

Table 13 Continued.

Criteria of Adverse Effect	Evaluation
<p>(v) Introduction of visual, atmospheric, or audible elements that diminish the integrity of the property’s significant historic features;</p>	<p>The alternative would diminish the resource’s integrity of feeling because it would introduce visual and audible elements that are not sympathetic to the significant historic features of the district. The district primarily functions as a residential community. It is served by small, curvilinear roads, and the dwellings are connected physically and aesthetically by sidewalks, walkways, grassy lawns, and trees. The introduction of a modern highway ramp and associated highway features within or immediately adjacent to the district would result in adverse visual effects, with or without noise walls (see Appendix C for photo simulations). Noise levels would also increase within the district as a result of the project, resulting in adverse audible effects. If left unmitigated, 26 contributing buildings would approach or exceed FHWA’s noise abatement criteria (NAC) by the year 2030 under Alternative K, compared to 24 buildings under the No Build Alternative. If mitigated with noise walls, 13 contributing buildings would approach or exceed FHWA’s noise abatement criteria (NAC) by the year 2030 under Alternative K, compared to 24 buildings under the No Build Alternative (see Appendix D for noise contours). *Note, noise walls have been deemed feasible, and adverse noise impacts would not occur if noise walls were used for this alternative; however, visual impacts would increase with the use of noise walls.</p>
<p>(vi) Neglect of a property which causes its deterioration, except where such neglect and deterioration are recognized qualities of a property of religious and cultural significance to an Indian tribe or Native Hawaiian organization; and</p>	<p>The alternative would not result in the neglect of the property.</p>
<p>(vii) Transfer, lease, or sale of property out of Federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property’s historic significance.</p>	<p>The alternative would not result in the transfer, lease, or sale of this property out of Federal ownership.</p>
<p>Finding: The proposed alternative would have an <i>Adverse Effect</i> on the Bellmawr Park Mutual Housing Historic District.</p>	

5.2.4 Comparison Summary

Table 14. Comparison of Criteria of Adverse Effect Evaluations for All Build Alternatives.

Alternative	Summary of Adverse Effect Evaluation	Explanation of Adverse Effect
D and D1	Adverse Effect	<p>Five contributing buildings (12 dwelling units) would be demolished, diminishing the district’s integrity of materials, design, location, and setting (Figure 25).</p> <p>Five new buildings would be constructed, diminishing the district’s integrity of materials, design, and setting (Figure 28).</p> <p>2.11 acres (8.87% of the district’s total acreage) would be acquired for right-of-way, diminishing the district’s integrity of design and setting.</p> <p>The introduction of a modern highway ramp and associated highway features within or immediately adjacent to the district would result in adverse visual effects, diminishing the resource’s integrity of feeling. Noise walls have been deemed feasible, and adverse visual impacts would increase if noise walls were used for these alternatives. The visual impacts of Alternatives D and D1 on the district, with or without noise walls, would be lesser than the visual impacts of Alternatives G2 and H1, but greater than the visual impacts of Alternative K (Appendix C).</p> <p>If left unmitigated, 32 contributing buildings would approach or exceed FHWA’s noise abatement criteria (NAC) by the year 2030 under Alternatives D and D1, compared to 24 buildings under the No Build Alternative, diminishing the resource’s integrity of feeling (Appendix D). Noise walls have been deemed feasible, and adverse noise impacts would not occur if noise walls were used for these alternatives.</p>
G2 and H1	Adverse Effect	<p>One contributing building (four dwelling units) would be demolished, diminishing the district’s integrity of materials, design, location, and setting (Figure 26).</p> <p>One new building would be constructed, diminishing the district’s integrity of materials, design, and setting (Figure 28).</p> <p>1.05 acres (4.40% of the district’s total acreage) would be acquired for right-of-way, diminishing the district’s integrity of design and setting.</p> <p>The introduction of a modern highway ramp and associated highway features within or immediately adjacent to the district would result in adverse visual effects, diminishing the resource’s integrity of feeling. Noise walls have been deemed feasible, and adverse visual impacts would increase if noise walls were used for these alternatives. The visual impacts of Alternatives G2 and H1 on the district, with or without noise walls, would be greater than the visual impacts of Alternatives D, D1, or K (Appendix C).</p> <p>If left unmitigated, 38 contributing buildings would approach or exceed FHWA’s noise abatement criteria (NAC) by the year 2030 under Alternatives G2 and H1, compared to 24 buildings under the No Build Alternative, diminishing the resource’s integrity of feeling (Appendix D). Noise walls have been deemed feasible, and adverse noise impacts would not occur if noise walls were used for these alternatives.</p>

Table 14 Continued.

Alternative	Summary of Adverse Effect Evaluation	Explanation of Adverse Effect
K	Adverse Effect	<p>Five contributing buildings (12 dwelling units) would be demolished, diminishing the district’s integrity of materials, design, location, and setting (Figure 27).</p>
		<p>Five new buildings would be constructed, diminishing the district’s integrity of materials, design, and setting (Figure 28).</p>
		<p>2.20 acres (9.27% of the district’s total acreage) would be acquired for right-of-way, diminishing the district’s integrity of design and setting.</p>
		<p>The introduction of a modern highway ramp and associated highway features within or immediately adjacent to the district would result in adverse visual effects, diminishing the resource’s integrity of feeling. Noise walls have been deemed feasible, and adverse visual impacts would increase if noise walls were used for these alternatives. The visual impacts of Alternative K on the district, with or without noise walls, would be lesser than the visual impacts of Alternatives D, D1, G2, or H1 (Appendix C).</p>
<p>If left unmitigated, 26 contributing buildings would approach or exceed FHWA’s noise abatement criteria (NAC) by the year 2030 under Alternative K, compared to 24 buildings under the No Build Alternative, diminishing the resource’s integrity of feeling (Appendix D). Noise walls have been deemed feasible, and adverse noise impacts would not occur if noise walls were used for these alternatives.</p>		

6.0 Mitigation of Adverse Effects

6.0 MITIGATION OF ADVERSE EFFECTS

The project would have an *Adverse Effect* on the Bellmawr Park Mutual Housing Historic District under all alternatives; therefore, mitigation of adverse effects is necessary. Mitigation measures will be established through consultation between NJDOT, NJSHPO, FHWA, and other consulting parties and will be outlined in an MOA. Potential mitigation measures include, but are not limited to, the actions listed below.

- Preparation of a National Register nomination form for the district.
- Development of a sign or display illustrating the original layout and architectural features of the district, as well as the changes that have occurred over time. The sign/display could be mounted within the district or at a local community center or library. Brief text explaining the district's significance could be incorporated into the design.
- Collection of primary documentation of the community's history through oral interviews with long-time residents, original architects/builders, and/or community administrators. The investigation would be prepared in the context of a focused research effort, such as determining how the design intentions of the architects/builders translated into the everyday use of the community. Information generated from interviews could be disseminated using one or more of a variety of methods, including the following:
 - Video (possibly presented with graphics and a narrator)
 - CD ROM
 - Electronic text and/or graphics on a website
 - Display boards in a public location within the community
- Development of strategies to help the community ensure the cohesiveness and stability of the Bellmawr Park Mutual Housing Corporation. Specific mitigation measures would be developed in coordination with the Bellmawr Park community.

As a minimization measure, the design of the proposed new buildings (replacement dwellings) within the Bellmawr Park Mutual Housing Corporation Historic District should be sympathetic to the original design and character of the district.

7.0 Public Involvement

7.0 PUBLIC INVOLVEMENT

Five Public Information Center (PIC) meetings have been held to date, on April 24, 2002; July 24, 2003; January 28, 2004; November 30, 2004; and June 13, 2005. The purpose of the meetings was to introduce the project to the public and to discuss the process that must be followed in order to select a preferred alternative and achieve environmental compliance for the project. PIC meeting attendees included the general public; local elected officials and/or their representatives; FHWA; state and county agencies such as NJ Transit, New Jersey Department of Environmental Protection (NJDEP), Camden County Department of Public Works (DPW), Port Authority Transit Corporations (PATCO)/Delaware River Port Authority (DRPA), and South Jersey Transit Authority; utilities representatives; and board members of Bellmawr Park Mutual Housing Corporation. The project need, alternatives, design, construction, and environmental constraints (including historic architecture and archaeology) were among the topics discussed during the meetings. Handouts and comment forms were provided to all PIC meeting attendees. A copy of the flyer advertising the most recent PIC meeting is located in Appendix B.

Nine Agency Coordination Meetings (ACMs) have also been held to date, on November 18, 2002; December 17, 2002; February 2, 2003; March 26, 2003; May 13, 2003; June 4, 2003; September 30, 2003; October 15, 2003; and June 7, 2005. Historic architecture has been discussed within the ACMs and NJSHPO representatives have actively participated in the ACM process.

In addition to the PIC meetings and ACMs, NJDOT produces project newsletters and maintains a publicly accessible project website. The newsletters provide information and updates related to the project, and are distributed to Bellmawr, Mt. Ephraim, and Gloucester City residents within the project area, as well as various local, state, and federal groups and organizations. Appendix B includes all project newsletters prepared to date. The website includes the following information: a project overview; a project schedule; a description of the study area; a summary of the background studies being conducted; an explanation of the project purpose and need; an explanation of the public participation process; descriptions of the environmental constraints; descriptions of the alternatives; an explanation of the EIS process; frequently asked questions; a

summary of the various meetings held (Community Advisory Committee [CAC], ACM, PIC, local public official, and partnering meetings); and newsletters produced to date. The website also provides an on-line comment form and contact information for individuals with questions/concerns related to the project.

Efforts were made to identify potential Section 106 consulting parties. Historical organizations that may have interest in participating as consulting parties are listed in Appendix B. Additional coordination with consulting parties and the public will occur as the project progresses.

8.0 Conclusions and Recommendations

8.0 CONCLUSIONS AND RECOMMENDATIONS

No historic architectural resources within the APE are currently listed in the National Register. The following properties within the APE were recommended potentially eligible for listing in the National Register in “Sites and Structures: The Camden County Inventory of Historic Places” (Greenberg 1992): the Bell Farm, the Harrison House (Harrison-Glover House), and Bellmawr Park (also known as the Bellmawr Park Mutual Housing Historic District). No additional resources within the APE were identified during previous cultural resources investigations.

The historic architectural survey conducted in 2004 revealed that one previously identified resource, the Bell Farm, is no longer extant. A total of 51 historic architectural resources aged 50 years or older were identified within the APE during the intensive-level survey, including two extant, previously documented resources (the Harrison-Glover House and Bellmawr Park). The resources identified include eight residential historic districts and 43 individual properties, all of which are listed in Table 6 and shown in Figure 24. One resource, Bellmawr Park, was recommended eligible for listing in the National Register of Historic Places. The Harrison-Glover House was recommended not eligible for listing in the National Register due to its lack of architectural integrity and subsequent inability to convey its historical and architectural significance.

The NJSHPO concurred with the recommendations of eligibility in a letter dated July 6, 2005 (Appendix A). The NJSHPO’s project review resulted in one new opinion of eligibility for the Bellmawr Park Mutual Housing Historic District, which is eligible for listing in the National Register under Criteria A and C. It was originally recommended that the Bellmawr Park School be excluded from the National Register boundaries of the district due to a current lack of association with the Bellmawr Park Mutual Housing Corporation; however, the NJSHPO opinion letter states that the school should be included as a contributing element to the district because it was constructed during the period of significance and was historically associated with Bellmawr Park. NJDOT and the Federal Highway Administration (FHWA) concurred with the SHPO’s opinion in a letter dated July 18, 2005 (Appendix A).

Application of the Definition of Effect and the Criteria of Adverse Effect indicate that the project would have an *Adverse Effect* on the Bellmawr Park Mutual Housing Historic District under all alternatives because it would alter the characteristics that qualify the resource for inclusion in the National Register in a manner that would diminish the resource's integrity. Table 15 summarizes the results of the effect and adverse effect evaluations. As a minimization measure, the design of the proposed new buildings (replacement dwellings) within the Bellmawr Park Mutual Housing Corporation Historic District should be sympathetic to the original design and character of the district.

(Table on following page.)

Table 15. Summary of Project Effects and Adverse Effects.

Alternative	Result of Effect Evaluation	Result of Adverse Effect Evaluation	Explanation of Adverse Effect
D and D1	Effect	Adverse Effect	<p>Five contributing buildings (12 dwelling units) would be demolished, diminishing the district’s integrity of materials, design, location, and setting (Figure 25).</p> <p>Five new buildings would be constructed, diminishing the district’s integrity of materials, design, and setting (Figure 28).</p> <p>2.11 acres (8.87% of the district’s total acreage) would be acquired for right-of-way, diminishing the district’s integrity of design and setting.</p> <p>The introduction of a modern highway ramp and associated highway features within or immediately adjacent to the district would result in adverse visual effects, diminishing the resource’s integrity of feeling. Noise walls have been deemed feasible, and adverse visual impacts would increase if noise walls were used for these alternatives. The visual impacts of Alternatives D and D1 on the district, with or without noise walls, would be lesser than the visual impacts of Alternatives G2 and H1, but greater than the visual impacts of Alternative K (Appendix C).</p> <p>If left unmitigated, 32 contributing buildings would approach or exceed FHWA’s noise abatement criteria (NAC) by the year 2030 under Alternatives D and D1, compared to 24 buildings under the No Build Alternative, diminishing the resource’s integrity of feeling (Appendix D). Noise walls have been deemed feasible, and adverse noise impacts would not occur if noise walls were used for these alternatives.</p>
G2 and H1	Effect	Adverse Effect	<p>One contributing building (four dwelling units) would be demolished, diminishing the district’s integrity of materials, design, location, and setting (Figure 26).</p> <p>One new building would be constructed, diminishing the district’s integrity of materials, design, and setting (Figure 28).</p> <p>1.05 acres (4.40% of the district’s total acreage) would be acquired for right-of-way, diminishing the district’s integrity of design and setting.</p> <p>The introduction of a modern highway ramp and associated highway features within or immediately adjacent to the district would result in adverse visual effects, diminishing the resource’s integrity of feeling. Noise walls have been deemed feasible, and adverse visual impacts would increase if noise walls were used for these alternatives. The visual impacts of Alternatives G2 and H1 on the district, with or without noise walls, would be greater than the visual impacts of Alternatives D, D1, or K (Appendix C).</p> <p>If left unmitigated, 38 contributing buildings would approach or exceed FHWA’s noise abatement criteria (NAC) by the year 2030 under Alternatives G2 and H1, compared to 24 buildings under the No Build Alternative, diminishing the resource’s integrity of feeling (Appendix D). Noise walls have been deemed feasible, and adverse noise impacts would not occur if noise walls were used for these alternatives.</p>

Table 15 Continued.

Alternative	Result of Effect Evaluation	Result of Adverse Effect Evaluation	Explanation of Adverse Effect
K	Effect	Adverse Effect	<p>Five contributing buildings (12 dwelling units) would be demolished, diminishing the district's integrity of materials, design, location, and setting (Figure 27).</p> <p>Five new buildings would be constructed, diminishing the district's integrity of materials, design, and setting (Figure 28).</p> <p>2.20 acres (9.27% of the district's total acreage) would be acquired for right-of-way, diminishing the district's integrity of design and setting.</p> <p>The introduction of a modern highway ramp and associated highway features within or immediately adjacent to the district would result in adverse visual effects, diminishing the resource's integrity of feeling. Noise walls have been deemed feasible, and adverse visual impacts would increase if noise walls were used for these alternatives. The visual impacts of Alternative K on the district, with or without noise walls, would be less than the visual impacts of Alternatives D, D1, G2, or H1 (Appendix C).</p> <p>If left unmitigated, 26 contributing buildings would approach or exceed FHWA's noise abatement criteria (NAC) by the year 2030 under Alternative K, compared to 24 buildings under the No Build Alternative, diminishing the resource's integrity of feeling (Appendix D). Noise walls have been deemed feasible, and adverse noise impacts would not occur if noise walls were used for these alternatives.</p>

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Appendix A:
Project Documents



HPO-G2005 079 PROD

Log # 03-0254-03

State of New Jersey

Department of Environmental Protection
 Natural and Historic Resources, Historic Preservation Office
 PO Box 404, Trenton, NJ 08625
 TEL: (609) 292-2023 FAX: (609) 984-0578
 www.state.nj.us/dep/hpo

Richard J. Codey
 Acting Governor

Bradley M. Campbell
 Commissioner

July 6, 2005

Mr. Nick Caiazza
 Supervising Environmental Specialist
 Division of Environmental Resources
 New Jersey Department of Transportation
 1035 Parkway Avenue
 Post Office Box 600
 Trenton, New Jersey 08625-0600

Dear Mr. Caiazza:

As Deputy State Historic Preservation Officer for New Jersey, in accordance with 36 CFR Part 800: Protection of Historic Properties, as published with amendments in the Federal Register on 6 July 2004 (69 FR 40553-40555), I am providing Consultation Comments for the following proposed undertaking:

**I-295/I-76/Route 42 Direct Connection
 Boroughs of Bellmawr and Mount Ephraim, and Gloucester City
 Camden County
 Historic Architectural Review**

SUMMARY: This project review has resulted in the creation of **one (1) new SHPO Opinion of eligibility for Bellmawr Park Mutual Housing Historic District.** The proposed project will have a direct effect on the **Bellmawr Park Mutual Housing Historic District.** The effect to the historic district will be reviewed once an initially preferred alternative is selected.

These comments are in response to your cover letter dated June 3, 2005 received at the Historic Preservation Office (HPO) on June 8, 2005, with *I-295/I-76/Route 42 Direct Connection Camden County Historic Architectural Resources Technical Environmental Study, Volume I, II, & III* (A. D. Marble & Company May 2005) attached, requesting review and comments under the National Historic Preservation Act (NHPA) of 1966 as amended.

Ms. Nick Calazza
I-295/I-76/Route 42 Direct Connect
Boroughs of Bellmawr and Mount Ephraim, and Gloucester City
Camden County
Log # 03-0254-03, HPO-G2005-079 PROD
July 6, 2005
Page 2 of 3

800.4 Identification of Historic Properties

Fifty-one (51) architectural resources were intensively surveyed within the established architectural Area of Potential Effects (APE) for this project. These resources included eight residential historic districts with multiple residential types. No resources among the surveyed resources were previously determined eligible for or had been previously listed on the National Register of Historic Places.

Based solely upon the information in the submitted report and without the benefit of input from any of the consulting parties, I concur with the consultant's findings that the **Bellmawr Park Mutual Housing Historic District, Block 49, Lot 1, in the Borough of Bellmawr** is eligible for inclusion on the National Register of Historic Places (NRHP) under Criterion A for its association with the development of the mutual park housing concept associated with World War II-era defense housing projects. The historic district retains its overall integrity of feeling and association through the architecture and its ability to convey the history of the community. The historic district, with the exception of the school, continues to operate under the direction of the Bellmawr Park Mutual Housing Corporation. HPO staff has carefully reviewed the argument for the exclusion of the Bellmawr Park School from the Historic District and respectfully **disagrees with the report findings regarding the school, because the school was constructed within the period of significance (1942-1945) and was historically part of the Bellmawr Park Mutual Housing Historic District.** In addition, the Bellmawr Park Mutual Housing Historic District is eligible under Criterion C as a resource that exhibits distinctive characteristics of an architectural type: functional military workers housing from the 1940s. The Bellmawr Park Mutual Housing Historic District retains integrity of materials, design, and setting through intact residential and institutional structures.

800.5 Assessing Adverse Effects

The proposed project will have a direct effect on the **Bellmawr Park Mutual Housing Historic District.** The effect to the historic district will be reviewed once an initially preferred alternative is selected.

Report Comments

The HPO would like to commend the cultural resources consultant for thoroughly presenting and addressing difficult issues associated with this project in the cultural resource report. The HPO suggests that the New Jersey Department of Transportation (NJDOT) should make digital versions of the regional and local histories available for the county and municipalities to post on their respective digital forums for educational purposes

Ms. Nick Caiazza
1-295/1-76/Route 42 Direct Connect
Boroughs of Bellmawr and Mount Ephraim, and Gloucester City
Camden County
Log # 03-0254-03, HPO-G2005-079 PROD
July 6, 2005
Page 3 of 3

The HPO continues to look forward to working cooperatively and collaboratively with the NJDOT and all of the consulting parties to assess the effects of the project on the **Bellmawr Park Mutual Housing Historic District** in accordance with 36 CFR Part 800.5 Assessing Adverse Effects and, if necessary, resolve adverse effects in accordance with 36 CFR Part 800.6 Resolution of Adverse Effects. In addition, the HPO requests that all future submissions concerning this project reference **HPO Log # 03-0245**. If you have questions concerning this project review, please contact HPO staff Steven Hardegen at (609) 984-0141.

Sincerely,



Dorothy P. Guzzo
Deputy State Historic
Preservation Officer

DPG/seh

HPO-G2005-079 PROD rt295rt42176 architecture

C: Jeanette Mar, FHWA
Lourdes Castaneda, FHWA
Elkins Green, NJDOT
Clerk, Bellmawr Borough
Clerk, Mount Ephraim Borough
Clerk, Gloucester City
Gloucester City Historical Society
Camden County Historical Society
Camden County Cultural and Heritage Commission
Camden County
Bellmawr Park Mutual Housing Corporation
Bob Cubberly, NJDEP LUR
Sam Reynolds, USACOE
David Carlson, EPA



U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

New Jersey Division Office
840 Bear Tavern Road, Suite 310
West Trenton, New Jersey 08628-1019

July 18, 2005

IN REPLY REFER TO:

HPO-NJ

I-295/I-76/Route 42 Direct Connection Project
Camden County

Nick Caiazza
Environmental Team Supervisor
Division of Project Management
New Jersey Department of Transportation
1035 Parkway Avenue, P.O. Box 600
Trenton, New Jersey 08625-0600

Dear Mr. Caiazza:

We have completed our review of the Historic Architectural Resources Technical Environmental Study for the I-295/I-76/Route 42 Direct Connection Project in Bellmawr and Mount Ephraim boroughs, Camden County. We concur with the recommendation of this report, one resource, Bellmawr Park, is eligible for listing in the National Register of Historic Places. If you have any questions, please contact me at (609) 637-4236.

Sincerely yours,

A handwritten signature in black ink, appearing to read "D. Mott".

Daniel M. Mott
Area Engineer

cc: J. Barankin





A. D. MARBLE & COMPANY

Environmental Planning &
Studies

347 High Street
Suite 2C
Burlington, NJ 08016
Telephone: (609) 239-8911
Fax: (609) 239-8914

May 28, 2004

Ms. Lorraine Pennino
Dewberry-Goodkind, Inc.
299 Webro Road
Parsippany, NJ 07054

**Re: I-295/I-76/Rt. 42 Direct Connection
Balloon Test Summary and Historic Architecture Area of Potential Effects (APE)
Recommendations**

Dear Ms. Pennino:

Representatives of A.D. Marble & Company participated in the I-295/I-76/Rt. 42 Direct Connection balloon test on April 27, 2004. The goal of the test was to estimate the potential visual impacts that the proposed undertaking may have on historic architectural resources, as well as other environmental resources. Dewberry floated a total of ten balloons at four locations within the proposed interchange alignment. The balloons were color-coded to represent the ramp heights of various alternatives at specific locations (see Attachment A: Balloon Locations, Color-Coding, and Heights). Two A.D. Marble & Company crews, each comprised of one Architectural Historian and one Research Assistant, conducted a windshield survey of the entire project study area in order to assess and document the views from various locations to the four balloon test locations. This letter summarizes the methodology and results of A.D. Marble & Company's windshield survey, and includes APE recommendations for each alternative (D, D1, G2, H1, K).

A.D. Marble & Company's survey consisted of two phases. Each crew assessed and documented the views from a list of specified survey locations that reflected interdisciplinary needs during Phase 1 of the survey (see Attachment B: Photo Documentation Locations Assigned to A.D. Marble & Company). The red and black balloons at Location #3, representing alternatives D, D1, G2, and H1, were visible from Annunciation Church and portions of Bellmawr Park along West Browning Road. The red, black, and beige balloons at Location #1, representing alternatives D, D1, G2, H1, and flyover ramp A, were visible from the southwest end of Winthrop Avenue /

Shining Star Park. No balloons were visible from the other specified locations assigned to A.D. Marble & Company.

Each crew further assessed, documented, and analyzed views from other locations throughout the study area in order to establish APEs for each alternative during Phase 2 of the survey. A.D. Marble & Company staff members marked the locations that balloons were visible from on aerial maps of the study area, in addition to photographically documenting the views. Wind conditions caused the balloons to fly at angles during part of the afternoon; therefore some approximations were necessary during the views analysis process. A.D. Marble & Company staff members also approximated the views to future ramp features located between balloon test locations. In several instances it was clear that ramps would be visible from certain locations that balloons were not visible from. A.D. Marble & Company included such locations in the APEs for the appropriate alternatives.

Attachment C (Recommended APEs for Alternatives D/D1/K and G2/H1/Flyover Ramp A) depicts the two draft APEs that A.D. Marble & Company established based on the windshield survey results. The thick dotted line represents the proposed APE for alternatives D and D1 (red balloons), as well as alternative K. The thick solid line represents the proposed APE for alternatives G2 and H1 (black balloons) and flyover ramp A (beige balloons). The APE outlines in Attachment C are drawn over a base aerial map, and no alternatives are depicted. Attachments D-H each depicts the appropriate APE overlaid on the alternative/scheme drawing that it corresponds to. (Attachments D, E, and H depict the recommended APE for alternatives D/D1/K, and Attachments F-G depict the recommended APE for alternatives G2/H1/Flyover Ramp A). These draft APEs are presented for Dewberry's and the New Jersey Department of Transportation's (NJDOT's) use in analyzing potential impacts to historic architectural resources. Ultimately, there should be only one APE that encompasses all potential historic architectural impact areas.

I look forward to further consultation with Dewberry, the NJDOT, and the New Jersey Historic Preservation Office (NJSHPO) regarding the APE. Please do not hesitate to call me at 609-239-8911 if you have any questions or concerns.

Thank you,
A.D. Marble & Company

Elizabeth Amisson
Architectural Historian

ATTACHMENT A

Balloon Locations, Color-Coding, and Heights

Location #1 – Along I-295 near Ramp

Red balloon (Alt. D/D1) at 9.5 feet above ground level (AGL)

Black balloon (Alt. G/H) at 39.5 feet AGL

Beige balloon (flyover ramp A) at 62.5 feet AGL

Location #2 – Hugg-Harrison-Glover House/St. Mary's Cemetery

Red balloon (Alt. D/D1) at 7.5 feet AGL

Black balloon (Alt. G/H) at 32.5 feet AGL

Beige balloon (flyover ramp A) at 42.5 feet AGL

Location #3 – I-295 at Browning Road

Red balloon (Alt. D/D1) at 57.5 feet AGL

Black balloon (Alt. G/H) at 87.5 feet AGL

Location #4 – Bellmawr Baseball Field

Red balloon (Alt. D/D1) at 43.5 feet AGL

Black balloon (Alt. G/H) at 78.5 feet AGL

ATTACHMENT B

Photo Documentation Locations Assigned to A.D. Marble & Company

Gloucester City

Intersection of Oriental and Holly Avenues

Intersection of Park Drive and Market Street

Bellmawr

Intersection of Browning Road and Victory Drive; Annunciation Church

Intersection of Black Horse Road and Anderson Avenue

Creek Road near I-295; WIP Broadcast Towers

Intersection of Essex Avenue and Creek Road

Intersection of Bell Road and Anderson Avenue

Intersection of Patterson and Leaf Avenues

Mt. Ephraim

Intersection of Bell Road and Rudderow Avenue

Intersection of Winthrop and Emerson Avenues; Shining Star Park

Intersection of King's Highway and Remington or Linden Avenues

Intersection of Black Horse Road and Maple Avenue

Intersection of King's Highway and Davis Avenue

Attachment C
Recommended APEs for Alternatives D/DI/K and G2/HI/Flyover Ramp A

I-295/I-76/Rt. 42 Direct Connection
Camden and Gloucester Counties, NJ



0 500 1,000 2,000 Feet



Recommended APE for Alternatives D, DI and K

Recommended APE for Alternatives G2, HI, and Flyover Ramp A

Attachment D
Recommended APE for Alternatives D/DI/K

I-295/I-76/Rt. 42 Direct Connection
Camden and Gloucester Counties, NJ



0 500 1,000 2,000 Feet



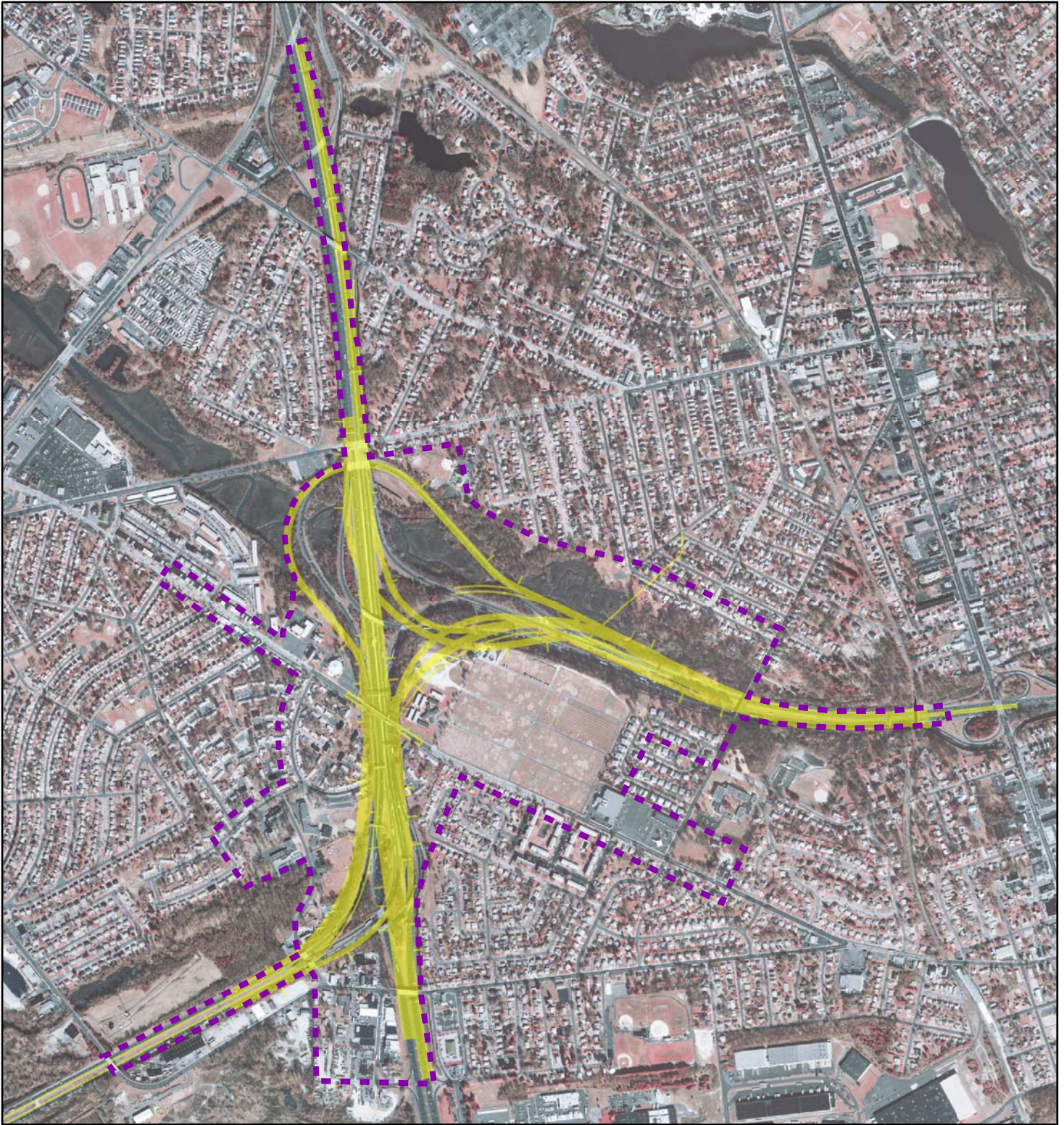
Recommended APE for Alternatives D, DI and K



Alternative D

Attachment E
Recommended APE for Alternatives D/DI/K

I-295/I-76/Rt. 42 Direct Connection
Camden and Gloucester Counties, NJ



0 500 1,000 2,000 Feet

- Alternative DI
- - - Recommended APE for Alternatives D, DI, and K

Attachment F
Recommended APE for Alternatives G2/H1/Flyover Ramp A

I-295/I-76/Rt. 42 Direct Connection
Camden and Gloucester Counties, NJ



0 500 1,000 2,000 Feet



Recommended APE for Alternatives G2, H1, and Flyover Ramp A



Alternative G2

Attachment G
Recommended APE for Alternatives G2/H1/Flyover Ramp A

I-295/I-76/Rt. 42 Direct Connection
Camden and Gloucester Counties, NJ



0 500 1,000 2,000 Feet



Recommended APE for Alternatives G2, H1, and Flyover Ramp A



Alternative H1

Attachment H Recommended APE for Alternatives D/DI/K

I-295/I-76/Rt. 42 Direct Connection
Camden and Gloucester Counties, NJ



0 500 1,000 2,000 Feet



Recommended APE for Alternatives D, DI, and K



Alternative K

Appendix B:
Public Involvement and Potential Consulting Parties

CONTACTS FOR POTENTIALLY INTERESTED HISTORICAL GROUPS

Camden County Historical Society
P.O. Box 378
Collingswood, NJ 08108-0378
Phone: (856) 964-3333

Camden County Cultural & Heritage Commission
250 South Park Drive
Haddon Township, NJ 08108
Phone: (856) 858-0040

Gloucester City Historical Society
34 North King Street
Gloucester City, NJ 08030
Phone: (856) 456-3487

Open House



The New Jersey Department of Transportation invites you to attend an Open House on the I-295/I-76/Route 42 Direct Connection project. The purpose of this Open House is to review more detailed engineering drawings and environmental analysis results for the five project alternatives including photo simulations and noise impacts.

NJDOT welcomes your input.

Monday, June 13, 2005

3:00 - 8:00 pm

Bellmawr Ballroom, 29 Lewis Avenue, Bellmawr

Please plan to participate at a time that is convenient for you. If you have any questions, or if you require assistance, please contact Patricia Feliciano, Office of Community Relations at 609-530-2110.

Directions

From I-295 - Route 168 East: Turn left at Browning Road; Make left at Lewis Avenue

From NJ Turnpike - Exit 3 (Route 168 West); Turn right at Browning Road;

Make left at Lewis Avenue

Ballroom is located behind Bellmawr Library/Municipal Building.

Acting Governor Richard J. Codey



Commissioner Jack Lettiere

Visit the NJDOT website at:
www.state.nj.us/transportation/works/studies/rt295

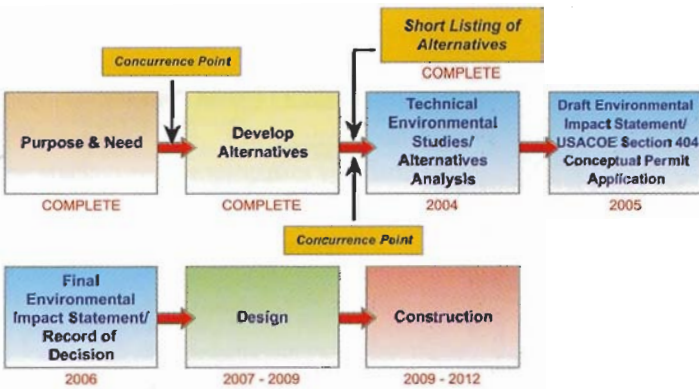


www.state.nj.us/transportation/works/studies/rt295

Volume IV, Summer 2004

Project Update

The I-295/I-76/Route 42 Direct Connection newsletter provides readers with information about the project as it progresses through its environmental, design and construction phases. The Technical Environmental Study (TES) phase of the Environmental Impact Statement (EIS) process has just begun. (See the diagram below for an overview of the entire process.)



Technical Environmental Study (TES)

The New Jersey Department of Transportation (NJDOT) has chosen five alternatives to advance for further study. The five alternatives were selected after evaluating 26 alignments in the scoping phase of the Alternatives Analyses.

Demonstrating NJDOT's continued commitment to seeking public input and keeping the public informed about the project's progress, the selections were made following consultation with the Community Advisory Committee, the local elected officials representing the affected communities, and the perspectives articulated by residents at the Public Information Center on January 28, 2004.

Valuable input was also received from the Federal Highway Administration, the US Environmental Protection Agency,

US Army Corps of Engineers, Delaware Valley Regional Planning Commission, NJ Department of Environmental Protection and other regulatory agencies.



Source: Dewberry, Public Information Center held on January 28, 2004

The alternatives that will advance into the TES phase are: D, D1, G2, H1 and K. (See pages 2 and 3 for details.) Each alternative was selected for its relatively low impact to the built and natural environment as well as its ability to be constructed. All of the alternatives selected meet the criteria established: to improve safety and reduce congestion for motorists by creating a direct connection on I-295.

The TES is a component of the EIS required by the National Environmental Policy Act. The studies are conducted to explore possible impacts the project may have on aspects of the built and natural environment. They will serve as the technical support documents that will be used as the basis for developing the EIS.

Preliminary engineering will also be conducted for each alternative in order to provide sufficient design data for the analysis of specific environmental impacts.

A TES will be prepared for each of the following environmental disciplines: socioeconomics, land use and environmental justice, wetlands/ecology, air quality, noise, historic architecture, archaeology and hazardous waste.

Each TES will describe the existing conditions for these environmental disciplines. An assessment will be made for

Continued on page 4.



Source: Dewberry, Composite Alignment of the five alternatives

Short Listed Alternatives

A composite alignment of the five alternatives is illustrated in the photo above. A view looking north at Browning Road (Section A-A) and a more detailed description of each alternative is shown on page 3.

The alternative screening process identified five alternatives for further study that have similar horizontal alignments for I-295 through the interchange. The horizontal alignment of I-295 attempts to balance the impacts to wetlands, the New St. Mary's Cemetery, Bellmawr Park Mutual Housing, the ball fields on Essex Avenue as well as other resources.

The I-76/Route 42 alignment remains essentially unchanged. The major difference between the alternatives is the vertical relationship of I-295 and I-76/Route 42 where they cross in the vicinity of Browning Road.

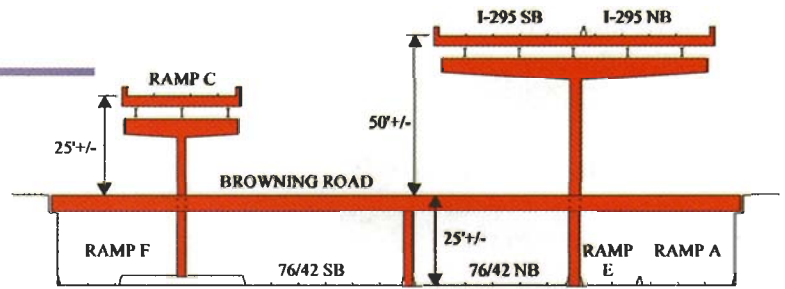
The overall ramp network is similar for each. However, specific ramp termini may shift slightly due to ramp grades and other design requirements. Features common to all the alternatives are three lanes with left and right shoulders on northbound and southbound I-295, two lane ramps (A, B, C & D), removal of the I-76/Route 42 express/local configuration, I-295 speed limit of 55 mph and a ramp speed limit of 40 mph.

Section A-A

View Looking North at Browning Road

Alternative D

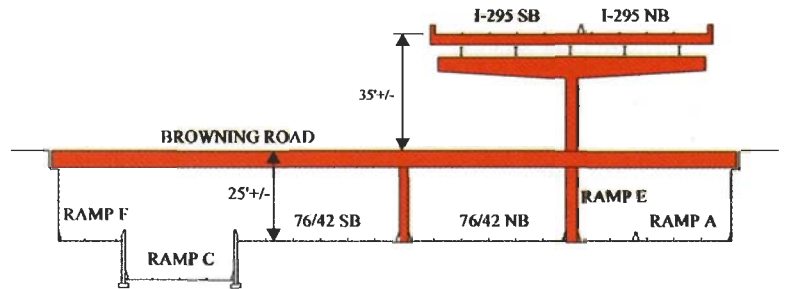
The I-295 mainline crosses over I-76/Route 42 and Browning Road on structure. Ramp C (I-295 SB to Route 42 SB) will be on a flyover ramp over Browning Road. The Ramp C flyover ramp causes I-295 to be raised an additional 15 feet in the vicinity of Browning Road to provide the proper vertical clearances.



Alternative D

Alternative D1

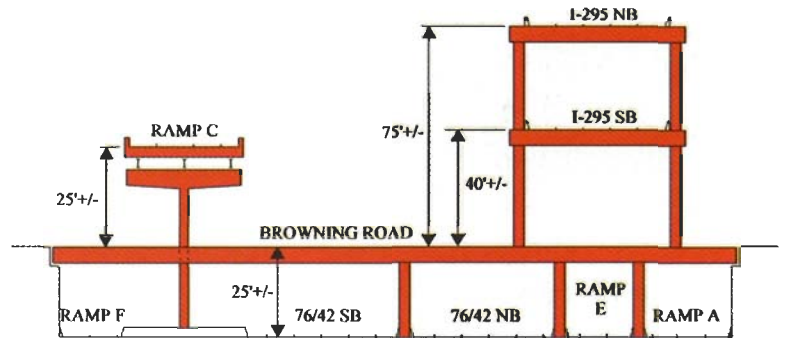
The I-295 mainline crosses over I-76/Route 42 and Browning Road similar to Alternative D. Ramp C will follow the general alignment of existing Al-Joe's curve and then pass under Browning Road as illustrated in orange on the figure on page 2. The Ramp C alignment cannot follow the exact path of Al-Jo's curve since the horizontal curvature needs to be increased to meet today's design standards.



Alternative D1

Alternative G2

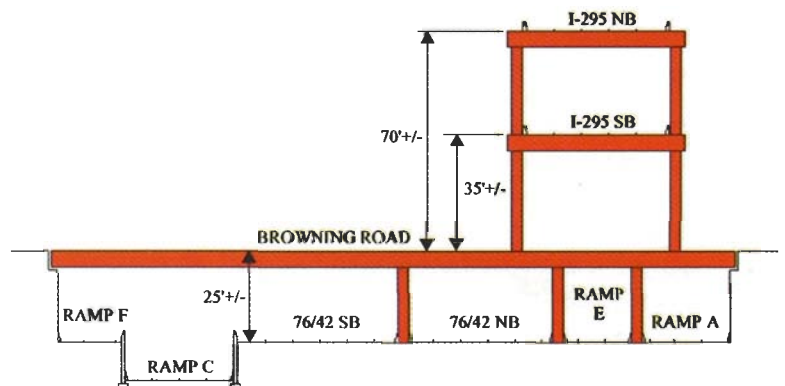
The I-295 NB roadway is stacked above the SB roadway as it crosses over I-76/Route 42 and Browning Road on structure. Ramp C will be on a flyover ramp over Browning Road. The higher roadway profile due to the stacked roadways causes the limits of work to extend further along I-295.



Alternative G2

Alternative H1

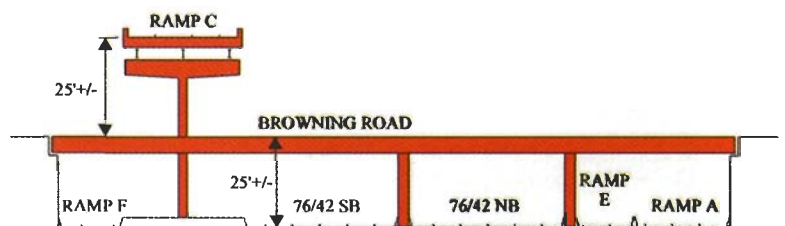
The I-295 NB roadway is stacked above the SB roadway similar to Alternative G2. Ramp C will follow the general alignment of Al-Jo's curve similar to Alternative D1.



Alternative H1

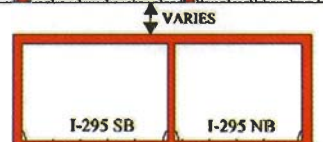
Alternative K

The I-295 mainline crosses under I-76/Route 42 and Browning Road as an underpass. Depending on the length of the underpass, it may be classified as a tunnel requiring other design considerations. With mainline I-295 being lowered so will many of the connecting ramps. Ramp C will be a flyover ramp over Browning Road.



Alternative K

A variation to Alternatives D, G2 and K being evaluated will be to place Ramp C under I-76/Route 42 and Browning Road. This variation reduces the height of I-295 and the connecting ramps thereby reducing the visual impacts of each alternative.



Continued from page 1.

each of the alternatives. The TES will also identify potential mitigation measures to minimize the environmental impacts. Visual impacts to the community will be addressed in the socioeconomic TES. The studies are expected to take approximately one year.

The results of the studies will be collectively evaluated in a document referred to as a Draft Environmental Impact Statement (DEIS) that will summarize the results of the individual studies and compare the overall environmental impact of each alternative. A single preferred alignment will then be recommended to advance into final design and construction.

The DEIS will be released for public and stakeholder comment. These comments will be addressed and incorporated into the Final Environmental Impact Statement.

For more information about the project, please visit our website. Please write or e-mail us with your comments at the addresses on this page.

View the drawings

Large scale drawings of each alternative can be viewed at the Bellmawr, Gloucester City and Mount Ephraim municipal buildings and libraries and the Bellmawr Park Mutual Housing Office.

NJDOT
Project Planning and Development
P.O. Box 600
Trenton, NJ 08625



www.state.nj.us/transportation/works/studies/rt295

Get Involved!

Here's How You Can Contact Us:



Call

Patricia Feliciano, NJDOT Office of Community Relations
(609) 530-2110



Write

NJDOT- Office of Community Relations
P.O. Box 600, Trenton, NJ 08625



Email

fix.295@dot.state.nj.us



Visit Us on the Web

<http://www.state.nj.us/transportation/works/studies/rt295>

I-295/I-76/Route 42 Direct Connection

Camden and Gloucester Counties

www.state.nj.us/transportation/works/studies/rt295

Project Update

The Process

The New Jersey Department of Transportation (NJDOT) believes it is vitally important for the public to be informed about the project development and alternatives analysis process and to provide input. In subsequent quarterly newsletter issues, we will provide our readers with summary explanations of the process and project status as we move through the various project phases.

On July 24, 2003, the NJDOT conducted a Public Information Center (PIC) to present the 26 initial alignment alternatives that were developed through the scoping phase of the alternatives analysis process. This activity, required in the National Environmental Policy Act for all federally funded projects, represents several months of environmental and engineering analysis of these alternatives. The rationale used in determining the selection of alternatives for further analysis - the short-list - will be to select specific alternatives that have relatively lower impacts to both the built and natural environment.

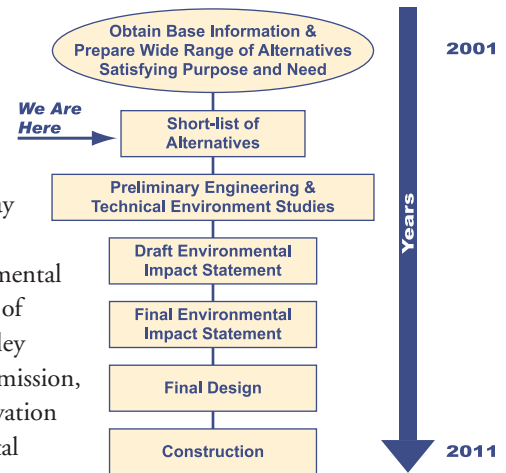
The short-listing process employs impact criteria to analyze and evaluate each alternative. These same criteria will be used in the Preliminary Engineering and Technical Environmental Studies as each short-listed alternative is studied further. They are:

- Right of way: residential, commercial & community facilities (cemeteries, churches, schools and parks)
- Wetlands: tidal, non-tidal
- Socioeconomics
- Noise
- Air
- Visual/contextual impacts
- Constructibility
- Maintenance and operation
- Comparison of estimated construction cost
- Compliance with design criteria
- Floodplains
- Archaeological resources
- Historic architecture

Since July, the NJDOT has conducted Agency Coordination Meetings with the Federal Highway Administration, NJ Department of Environmental Protection, Army Corps of Engineers, Delaware Valley Regional Planning Commission, NJ State Historic Preservation Office, US Environmental Protection Agency, Delaware River Basin Commission, US Fish and Wildlife Service and the National Marine and Fishery Service to review the alternatives and obtain their recommendations on alternatives for further study. These agencies are an integral part of the funding and permitting process which will allow the project to advance to the design and construction phases.

Workshops were conducted with the NJDOT in-house staff, Agency Coordination Members (ACM) and the Community Advisory Committee (CAC) (the stakeholders.) A consensus was reached on recommendations for alternatives to be carried through the Environmental Impact Statement process.

Continued on page 2.



Mark Your Calendars

Public Information Center

January 28, 2004
3 pm to 8 pm
formal presentations at 4 pm & 7 pm
Bellmawr Ballroom
29 Lewis Avenue
Bellmawr, NJ

Please plan to attend the meeting at a time that is convenient for you. If you have any questions, or if you are physically challenged and require assistance, please contact the Office of Community Relations (see page 4).

Project Update

Continued from page 1

Next Steps

Based upon the input we have received from these groups, we will conduct a Partnering Session with the stakeholders in early January, 2004 to confirm a consensus on the recommended alternatives that will be

presented at the PIC on January 28, 2004. Following input from the PIC, NJDOT will be prepared to advance the short-listed alternatives into the Preliminary Engineering and Technical Environmental Studies phase.

Community Involvement and Outreach Activities

The New Jersey Department of Transportation believes that a partnership with the community is critical for a successful outcome of the I-295/I-76/Route 42 project and to the region's mobility. There have been several meetings held over the last six months with the residents, businesses, agencies and public officials providing important feedback and suggestions. They are summarized below.

Public Information Center

On July 24, 2003, NJDOT held a PIC session to brief and solicit input from the residents and stakeholders regarding the 26 alternatives being assessed to determine those that will be considered for further study. The project team explained the federal and state requirements driving the process.

An equally important part of the meeting agenda was to garner resident participation through verbal and written comments about the project. It was important to learn what issues are of greatest concern. Some of the concerns were possible impacts to the following: St. Mary's Cemetery in Bellmawr, portions of the Bellmawr Park Mutual Housing Corporation, Shining Star Park in Mt. Ephraim and possible disruption to communities during construction.

Residents provided information during the PIC. Subsequent input received through the project's website were incorporated into the alternatives. Every effort is being made to minimize and/or avoid impacts to the communities as a whole and especially to individual residents.

The next PIC is planned for January 28, 2004 to discuss the short-list of alternatives.

Local Officials Briefing

On November 5, 2003, local officials were informed about the initial short-listed alternatives. Officials from the study area communities- Bellmawr, Mount Ephraim, Gloucester City, Camden and Gloucester counties participated.

Community Advisory Committee

The CAC was formed to represent the various interests of residents and businesses. In addition to individual residents, members include the Automobile Association of America, Bellmawr Park Mutual Housing Corporation, Korman Interstate Business Park, Senior Citizen Associations from Bellmawr, Mt. Ephraim and Gloucester City and the Diocese of Camden. The alternatives were presented and discussed at the CAC's fourth meeting on November 25, 2003. Valuable comments, suggestions and recommendations on alternatives for further consideration and study were received. The committee also appointed five local residents to participate as the CAC representatives in the upcoming January Partnering Session.

Regional Projects in the Works

Many inquiries have been received about the need for improvements to other highways in the region. We will reserve this section for updates on other projects in the region that will also enhance mobility, help alleviate congestion and improve air quality and safety for the traveling public.

• I-295 "Missing Moves", Bellmawr and Deptford

NJDOT is currently in the final phase of design to provide the missing moves between I-295 and Route 42. The connector ramps cross three abandoned landfills for access to both highways northbound and southbound, south of the main interchange. Construction is anticipated to start 2005.

• Route 168 and Benigno Boulevard, Bellmawr

This project will involve improvements at the intersection of Benigno Boulevard and Route 168 and is currently in the Feasibility Assessment Phase.

All projects are subject to funding availability.

Frequently Asked Questions About the Direct Connection

We are listening! Every issue will provide our readers with responses to questions and comments we have received from you, your neighbors and the motoring public.

Will the I-295 Direct Connection project solve the lack of connections with Route 42 north and southbound?

Answer: No, that is not the purpose and need of the Direct Connection project. However, the lack of connections will be solved through a separate New Jersey Department of Transportation project called The I-295/Route 42 Missing Moves Project, which is currently moving into the final design phase with construction anticipated 2005.

Is there a transit alternative for this project?

Answer: Transit alternatives were considered during the Transportation Investment Study Phase, which recommended three separate projects: (1) I-295/I-76/Route 42 Interchange Improvements (2) improved transit options (3) a new interchange at the NJ Turnpike and Route 42.

The Delaware River Port Authority is currently undertaking a study called the Route 55 Corridor Study, which is evaluating various rail corridor alternatives to extend the PATCO system. The NJ Turnpike is currently studying the possibility of a new exit on their roadway. It is important to note that the addition of a new NJ Turnpike exit or additional transit options does not negate the need for improvements to the I-295/I-76/Route 42 Interchange.

How can I make my concerns known about the project?

Answer: We welcome and encourage input from all the residents. The contact information can be found on page 4.

What is the project status? When will it be built?

Answer: We are completing the alternatives short-listing, which is narrowing alternatives from the initial 26 to approximately less than 5 alternatives. This process will assess at a preliminary level all the socio-economic and environmental impacts, constructibility and right of way impacts of the project. The next phase is Preliminary Engineering & Technical Environmental Studies and will be completed in approximately 2005. The NJDOT will present the short-list of alternatives at an upcoming Public Information Center, scheduled for January 28, 2004. The construction is planned for 2008-2011.

How are you going to address the traffic on our local streets during construction? It's going to be disruptive to the communities.

Answer: We understand your concern about possible disruptions

during the construction phase. Every effort will be made to minimize them and maintain the existing number of through lanes on I-295/I-76/Route 42 during construction. A traffic mitigation plan will be developed for the project to minimize disruption to the local community and local streets may be improved by either temporary or permanent solutions to help alleviate congestion.

Is this project going to help prevent all those accidents at the Al Jo's Curve?

Answer: Yes. Our latest 2002 accident and emergency response data shows that there were 439 incidents responded to by the local communities within the interchange. This is four times the state average, based upon NJDOT's 2001 data, including 60 truck accidents at the Al Jo's Curve.

More than 225,000 motorists pass through this interchange daily. A redesigned interchange will eliminate the need for through traffic to slow down to 35 mph to safely negotiate the ramps and will also eliminate the traffic weaves between the I-295 thru traffic and I-76 and Route 42 traffic. These proposed improvements will significantly reduce congestion and improve highway safety. An additional benefit will be lower emergency response costs to the communities.

Are you going to improve all those merge lane problems? It's very dangerous trying to merge across six lanes of rush hour traffic.

Answer: The I-295 roadway will be provided with a direct connection through the interchange, designed to current freeway standards without the need for I-295 through traffic to merge with other traffic from I-76 and Route 42.

Will a new interchange be built at Route 42 and the NJ Turnpike as part of The Direct Connection Project?

Answer: The NJ Turnpike Authority has recently begun a study to evaluate the feasibility of such an interchange. The purpose and need of our project is to reduce traffic congestion and accidents within the I-295/I-76/Route 42 Interchange. Their study will concentrate on the benefits/impacts of an additional interchange at the Turnpike and Route 42.



Source: NJDEP Bureau of Geographic Information and Analysis, Current aerial of I-295/I-76/Route 42 Interchange

NJDOT
Project Planning and Development
P.O. Box 600
Trenton, NJ 08625

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Source: Dewberry, Existing conditions at I-295/I-76/Route 42 Interchange



www.state.nj.us/transportation/works/studies/rt295

Get Involved!

Here's How You Can Contact Us:



Call

Patricia Feliciano, NJDOT Office of Community Relations
(609) 530-2110



Write

NJDOT- Office of Community Relations
P.O. Box 600, Trenton, NJ 08625



Email

fix.295@dot.state.nj.us



Visit Us on the Web

<http://www.state.nj.us/transportation/works/studies/rt295>

I-295/I-76/Route 42 Interchange Reconstruction

THE NEW JERSEY STATE DEPARTMENT OF TRANSPORTATION

James E. McGreevey, Governor

VOLUME II, SPRING 2003

Jack F. Lettiere, Commissioner

Project Update

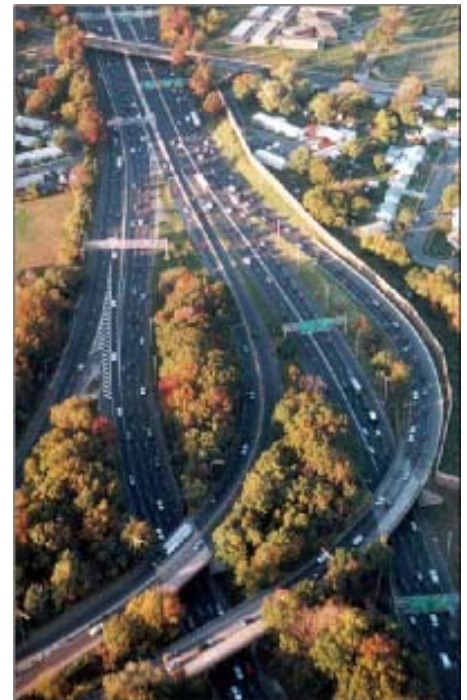
The New Jersey Department of Transportation (NJDOT) is pleased to report that significant preliminary environmental analysis and engineering work to address traffic safety, reduce congestion and improve the quality-of-life for New Jersey residents has been completed on the I-295/I-76/Route 42 Interchange Reconstruction Project.

At present, the roadway does not provide a direct connection for I-295 travelers through the interchange, thus requiring motorists to utilize a series of ramps to stay on the main I-295 roadway. Added traffic from motorists traveling on I-76 or Route 42 through the interchange exacerbates problems associated with significant weaving movements required for vehicles to advance along the I-295 route or to access Route 42. A new interchange design is expected to significantly reduce vehicle accidents, driver confusion and travel delays.

NJDOT is currently preparing an Environmental Impact Statement (EIS) for this project. It uses an innovative partnering approach to engage local officials, agencies, travelers, residents and other stakeholders within the project area, including the key municipalities of Bellmawr, Mt. Ephraim and Gloucester City. Key concerns of the EIS include impacts on quality-of-life issues such as open space, historic resources, traffic access, mobility and noise.

There are approximately 16 potential initial alternative routes under consideration. Through innovative thinking, NJDOT is reviewing current alternatives so that each route will maximize engineering and environmental strategies resulting from the ongoing project studies. NJDOT is also considering the adaptive re-use of ramps to eliminate the need for some roadway flyovers and is also reviewing the opportunities and constraints for tunneling portions of the road.

Later this summer or fall, revised alternatives will be shortlisted for further study, based on recommendations of local stakeholders and the qualitative review of each alternative with specific evaluation criteria. Evaluation criteria for this project was formulated based on input from project specialists, engineers, environmentalists and local stakeholders.

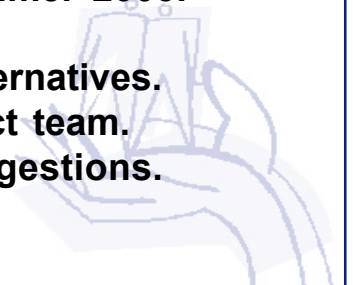


Aerial view of the I-295/I-76/Route 42 Interchange.

Be Involved!

**Public Information Center
Late Spring/Early Summer 2003.**

**Review the initial alternatives.
Speak to the project team.
Offer comments/suggestions.**





Source: NJDEP Bureau of Geographic Information and Analysis, 1995-1997

Study Area

The I-295/I-76/Route 42 Interchange Reconstruction project study area is located within the Boroughs of Bellmawr, and Mount Ephraim and Gloucester City.

The study area includes I-295, beginning in the north at the Pennsylvania-Reading Railroad tracks to the south and ending at Creek Road. On I-76, the western limit of the study area is the Market Street Bridge over I-76. On Route 42, the project's eastern limit is the extension of Heller Road and Leaf Street, east of Windsor Creek Road.

While the proposed project is primarily focused upon the interchange of the three highways, the project study area encompasses a larger area than the interchange itself. This is necessary to ensure that all prudent and feasible alternatives and their potential impacts are examined in the project vicinity.

To learn more about the project and how you can be involved in the planning process, sign-up for future mailings and/or send comments to NJDOT, visit our project Web site at njdot.nj.gov and click on "In the Works".

Community Questionnaire Feedback

Public responses to the Community Input Sheet, a survey included in the first project newsletter, and downloadable from the project website, has provided NJDOT with insight into local community concerns. Thirty-one people filled out the Community Input Sheet and commented on environmental, community and maintenance issues and also suggested alternatives for further review by the project team.

Health, safety and quality-of-life issues topped the list of concerns. Many respondents commented on the current congested roadway and the difficulty they have had with its effects, such as noise, pollution and high accident rates. Comments also included: "The traffic noise is unbearable", "Al-Jo's curve is a major concern...too many accidents happen in this area", "Can anything be done about the terrible exhaust fumes during the summer?"

Many respondents expressed a need for improvement in the area. "I must agree one hundred percent that the above interchange needs some kind of overhaul", "I-295 commuters cutting through our neighborhoods", "This is a great idea that will improve quality of life in Bellmawr...295/42 crossover is treacherous". Others simply requested additional information through future project updates and one respondent added, "Good luck with the project!"



Participants mark up maps during the Public Information Center held on April 24, 2002.

Community Involvement and Outreach



The first Partnering meeting was held December 10 and 11, 2001.

NJDOT believes that comprehensive public involvement is an important element in successful project development and is working to get input from residents and stakeholders within the project area, as well as elected officials, agency representatives and the general traveling public.

Public Information Centers

Public Information Centers (PIC) will be held at key milestones during the project. The initial PIC was held on April 24, 2002 and included displays of information in various formats, short presentations and question and answer sessions. Participants also marked up maps and submitted written comments. The next PIC will be held in late spring/early summer 2003 and will be similar in nature, in addition to providing opportunities for feedback on current alternatives and making recommendations for possible new alternatives.

The Community Advisory Committee

The Community Advisory Committee (CAC) has been established to gather input from community representatives, help reconcile various community interests and assist in setting priorities, in addition to planning outreach activities.

Three CAC meetings have already been held to approve a draft purpose and need statement and discuss alternatives. It is anticipated that three to four additional CAC meetings will be held, each linked to specific milestones. The CAC may also address other issues and concerns raised by the

community and supplement the meeting schedule, as appropriate.

Local Officials Briefing

Local Officials Briefings (LOB) have been conducted as an additional method of gaining input into the project and keeping officials apprised of project progress. Three LOBs have been held to date, and additional meetings will be scheduled. Representatives from the study area have been involved in these briefings, including the Mayors of Bellmawr, Gloucester City and Mt. Ephraim.

Partnering Meetings

Partnering meetings are an important element in streamlining the project process and fostering open communication and trust between the project team and regulatory agencies.

To date, one partnering meeting has been held to update agencies on the project, identify potential project issues/problems, identify possible solutions, gain personal insight into the project environs, reach agreement on mutual expectations and project objectives and adopt a formal commitment to work cooperatively. Participation included representatives from the Federal Highway Administration New Jersey Office, New Jersey Transit, New Jersey Department of Transportation, local planning representatives and local elected officials as well as others.

Agency Meetings

In addition to large group meetings, NJDOT has conducted small group meetings with decision-making bodies, such as the Delaware Valley Regional Planning Commission.

In responding to the needs of the project, NJDOT has made presentations to specific agencies such as the Delaware River Port Authority to update them on the project, in addition to receiving input.

Agency Coordination Meetings

The project team has held a number of Agency Coordination Meetings (ACM) to ensure that all decision-making authorities receive parallel information about the project and also to ensure that any changes to the project scope, timeline or approach are transmitted in a manner that provides sufficient time to respond in a coordinated and proactive manner. To date, five ACMs have been held with representatives from the Army Corps of Engineers, New Jersey Department of Environmental Protection and the United States Environmental Protection Agency among others.

Environmental Streamlining

This project will require several environmental permits. The environmental streamlining process provides a mechanism for the project team to partner with the involved state and federal permitting agencies. This process also ensures that tasks such as data collection and reporting meet the requirements of the multiple agencies. This approach was designed specifically for this project and has already been adapted on other NJDOT projects.

Benefits of the approach include reducing duplicate reports, early identification of program elements that may require more study and a project-focused approach that ensures that there are no surprises among permitting agencies at the end of the planning process.

Environmental Impact Statement

Project Schedule:

- Develop Alternatives (2002 - 2003)
- Draft Environmental Impact Statement (2002 - 2004)
- Final Environmental Impact Statement (2005)
- Design (2004 - 2008)
- Construction (2008 - 2010)

All schedules are subject to available funding.

Public meetings and other opportunities for input will be provided throughout the process.

Get Involved!

Here's how you can contact us:



Call:
Patricia Feliciano, Community Relations
(609) 530-2110



E-Mail:
fix.295@dot.state.nj.us



Write:
NJDOT - Communications Office
P.O. Box 600, Trenton, NJ 08625



Visit the Web site at:
njdot.nj.gov and click on "In the Works"

**NJDOT
Project Planning and Development
P.O. Box 600
Trenton, NJ 08625**

I-295/I-76/Route 42 Interchange Reconstruction

THE NEW JERSEY STATE DEPARTMENT OF TRANSPORTATION

James E. McGreevey, Governor

VOLUME I, SPRING 2002

James P. Fox, Commissioner

The New Jersey Department of Transportation (NJDOT) is committed to involving members of affected communities and the traveling public from the earliest planning stages of projects.

This is the first of the newsletters to keep the community informed and engaged in discussions during the planning, design and construction phases for improvements to the intersection of Interstate Route 295, Interstate 76, and Route 42 in Camden and Gloucester counties. It will help citizens make informed recommendations to NJDOT during every stage of this project and supplement community meetings.



Aerial view of the I-295/I-76/Route 42 Interchange at "Aljo's Curve" (I-295, Exit 26).

NJDOT
P.O. Box 600
Trenton, NJ 08625

About the Project

The purpose of this project is to improve traffic safety and reduce traffic congestion at the intersection of Interstate 295, Interstate 76 and NJ State Route 42 (the I-295/I-76/Route 42 Interchange). The project will address quality-of-life issues associated with the highway system as it relates to the motorist, residents, and the environment.

NJDOT is currently preparing an Environmental Impact Statement (EIS) for the I-295/I-76/Route 42 Interchange in Bellmawr, Mt. Ephraim, Gloucester City, Camden County and Barrington.

Presently the interchange does not provide a direct connection for the I-295 movements through this interchange. Although contiguous, the existing configuration requires motorists to reduce speed in both the northbound and southbound directions of I-295 to negotiate ramps with posted speeds of 35 MPH. Weaving movements with vehicles from NJ Rt. 42 and from I-76 exacerbate this problem. This location is arguably the busiest in all of Southern New Jersey as it carries large volumes of commuter traffic destined to and from Philadelphia via the Walt Whitman Bridge. It is also a connection via Route 42 and the Atlantic City Expressway to the Shore areas for weekend trips.

These problems, in conjunction with high levels of traffic, produce a high number of vehicle accidents, congestion and travel delays.

Environmental Impact Statement

Project Schedule:

- Develop Alternatives (2001 - 2002)
- Draft Environmental Impact Statement (2002 - 2003)
- Final Environmental Impact Statement (2003)
- Design (2003 - 2006)
- Construction (2006 - 2008)

Public meetings and other opportunities for input will be provided throughout the process.

Background Studies

Aware of the continuing demands on the highway in the 1980s, NJDOT addressed traffic safety and congestion issues in the vicinity of the interchange with the Route 42 Widening project. This effort improved traffic conditions along the Route 42 Corridor, but did not address the interchange.

In the 1990s, NJDOT began engineering studies to identify possible interchange improvements. These studies included conceptual solutions and a Transportation Investment Study (TIS).

A broad-based planning study, the TIS explored the use of intermodal solutions at the interchange including mass transit, HOV lanes and rail to address the interchange's traffic safety and congestion issues. In 1999, the TIS concluded that the preferred course of action is an interchange reconstruction project.

Our task now is to determine the best alternative for the I-295/I-76/Route 42 Interchange Reconstruction. The first step is to conduct the federally required Environmental Impact Statement (EIS) process. NJDOT is committed to the mission of environmental responsibility and community involvement during this process.

Get Involved!

The success of the I-295/I-76/Route 42 Interchange Reconstruction project depends on the participation of the people who live, work and do business in the area. Your input will ensure that the issues of importance to you and your community are given proper consideration in this process. [Here's how you can contact us:](#)



Call:
James Stevenson, Community Relations
(609) 530-2117



E-Mail:
fix.295@dot.state.nj.us



Write:
NJDOT - Communications Office
P.O. Box 600, Trenton, NJ 08625



Visit the Web site at:
www.state.nj.us/transportation

COMMUNITY INPUT SHEET

I-295/I-76/Route 42 Interchange Reconstruction Project

Listed below are some of the factors being investigated in the development of this project. Using the form below, please provide input on the following items or any others you feel are important. The form may be folded and mailed using the pre-addressed panel on the other side of the page, or it can be faxed to James Stevenson, NJDOT Communications Office, at (609) 530-2536. You may also return it to any NJDOT Project Team member at the April 24th Public Information Center.

Safety

- ▶ Reducing motor-vehicle accidents
- ▶ Pedestrian/Bicycle safety

Traffic

- ▶ Delays
- ▶ I-295 Commuters cutting through local neighborhoods
- ▶ Traffic Calming (speed bumps, etc.)

Social

- ▶ Economic effects
- ▶ Aesthetics
- ▶ Property acquisitions
- ▶ Neighborhood preservation

Environmental

- ▶ Noise/Air
- ▶ Archeological resources
- ▶ Wetlands
- ▶ Wildlife habitats
- ▶ Hazardous materials management

Construction

- ▶ Delays
- ▶ Detours
- ▶ Noise/Dust
- ▶ Night work
- ▶ Duration

COMMENTS: _____

Add me to the I-295/I-76/Route 42 Interchange Reconstruction Project Mailing List Yes ___ No ___

Name: _____

Organization (if applicable): _____

Address: _____

City: _____ State: _____ Zip: _____

Telephone: _____ email: _____

What is an EIS?

Federal law requires all major transportation projects to be evaluated prior to construction for their effects on the environment and that alternative courses of action be considered. The National Environmental Policy Act of 1969 (NEPA) specifies when an Environmental Impact Statement (EIS) must be prepared. Council for Environmental Quality (CEQ) regulations provide the recommended format and content of Environmental Impact Statements.

An EIS is a document that describes the environmental impacts that a proposed activity might have, such as the filling of wetlands or an improvement in air quality. Environmental issues considered in an EIS include natural characteristics such as land use, water, air, and noise; and social characteristics such as the cultural and economic aspects of the community living in the study area.

Environmental Impacts can be positive or negative or both. An EIS describes impacts of proposed alternatives, as well as plans to mitigate any negative impacts. It discloses the result of the environmental analysis to the public and allows for their input.

fold here

fold here



Appendix C:
Photo Simulations

Without Noise Walls

**I-76/ROUTE 42 FROM
BELLMAWR PARK BALLFIELDS**



EXISTING CONDITIONS

**I-76/ROUTE 42 FROM
BELLMAWR PARK BALLFIELDS**



ALTERNATIVES D, D1

**I-76/ROUTE 42 FROM
BELLMAWR PARK BALLFIELDS**



ALTERNATIVES G2, H1

**I-76/ROUTE 42 FROM
BELLMAWR PARK BALLFIELDS**



ALTERNATIVE K

**BELLMAWR PARK SCHOOL FROM
VICTORY DRIVE/POPLAR PLACE**



EXISTING CONDITIONS

**BELLMAWR PARK SCHOOL FROM
VICTORY DRIVE/POPLAR PLACE**



ALTERNATIVES D, D1

**BELLMAWR PARK SCHOOL FROM
VICTORY DRIVE/POPLAR PLACE**



ALTERNATIVES G2, H1

**BELLMAWR PARK SCHOOL FROM
VICTORY DRIVE/POPLAR PLACE**



ALTERNATIVE K

**BROWNING ROAD FROM
ANNUNCIATION CHURCH**



EXISTING CONDITIONS

**BROWNING ROAD FROM
ANNUNCIATION CHURCH**



ALTERNATIVES D, D1

**BROWNING ROAD FROM
ANNUNCIATION CHURCH**



ALTERNATIVES G2, H1

**BROWNING ROAD FROM
ANNUNCIATION CHURCH**



ALTERNATIVE K

RAMP E FROM FLANDERS ROAD



EXISTING CONDITIONS

RAMP E FROM FLANDERS ROAD



ALTERNATIVES D, D1

RAMP E FROM FLANDERS ROAD



ALTERNATIVES G2, H1

RAMP E FROM FLANDERS ROAD



ALTERNATIVE K

**BROWNING ROAD FROM NEW ST.
MARY'S CEMETERY DRIVEWAY**



EXISTING CONDITIONS

BROWNING ROAD FROM NEW ST. MARY'S CEMETERY DRIVEWAY



ALTERNATIVES D, D1

BROWNING ROAD FROM NEW ST. MARY'S CEMETERY DRIVEWAY



ALTERNATIVES G2, H1

BROWNING ROAD FROM NEW ST. MARY'S CEMETERY DRIVEWAY



ALTERNATIVE K

**I-295/LITTLE TIMBER CREEK
FROM SHINING STAR PARK**



EXISTING CONDITIONS

**I-295/LITTLE TIMBER CREEK
FROM SHINING STAR PARK**



ALTERNATIVES D, D1

**I-295/LITTLE TIMBER CREEK
FROM SHINING STAR PARK**



ALTERNATIVES G2, H1

**I-295/LITTLE TIMBER CREEK
FROM SHINING STAR PARK**



ALTERNATIVE K

**BELL ROAD FROM NORTH OF
EMERSON AVENUE**



EXISTING CONDITIONS

**BELL ROAD FROM NORTH OF
EMERSON AVENUE**



ALTERNATIVES D, D1

**BELL ROAD FROM NORTH OF
EMERSON AVENUE**



ALTERNATIVES G2, H1

**BELL ROAD FROM NORTH OF
EMERSON AVENUE**



ALTERNATIVE K

With Noise Walls

ESSEX AVENUE LOOKING EAST



EXISTING CONDITIONS

ESSEX AVENUE LOOKING EAST



ALTERNATIVE D, D1

ESSEX AVENUE LOOKING EAST



ALTERNATIVE G2, H1

ESSEX AVENUE LOOKING EAST



ALTERNATIVE K

VICTORY DRIVE LOOKING SOUTH



EXISTING CONDITIONS

VICTORY DRIVE LOOKING SOUTH



ALTERNATIVE D, D1

VICTORY DRIVE LOOKING SOUTH



ALTERNATIVE G2, H1

VICTORY DRIVE LOOKING SOUTH



ALTERNATIVE K

BROWNING ROAD LOOKING EAST



ALTERNATIVE D, D1

BROWNING ROAD LOOKING EAST



ALTERNATIVE G2, H1

BROWNING ROAD LOOKING EAST



EXISTING CONDITIONS

BROWNING ROAD LOOKING EAST



ALTERNATIVE K

BROWNING ROAD LOOKING WEST



EXISTING CONDITIONS

BROWNING ROAD LOOKING WEST



ALTERNATIVE D, D1

BROWNING ROAD LOOKING WEST



ALTERNATIVE G2, H1

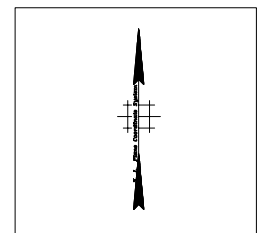
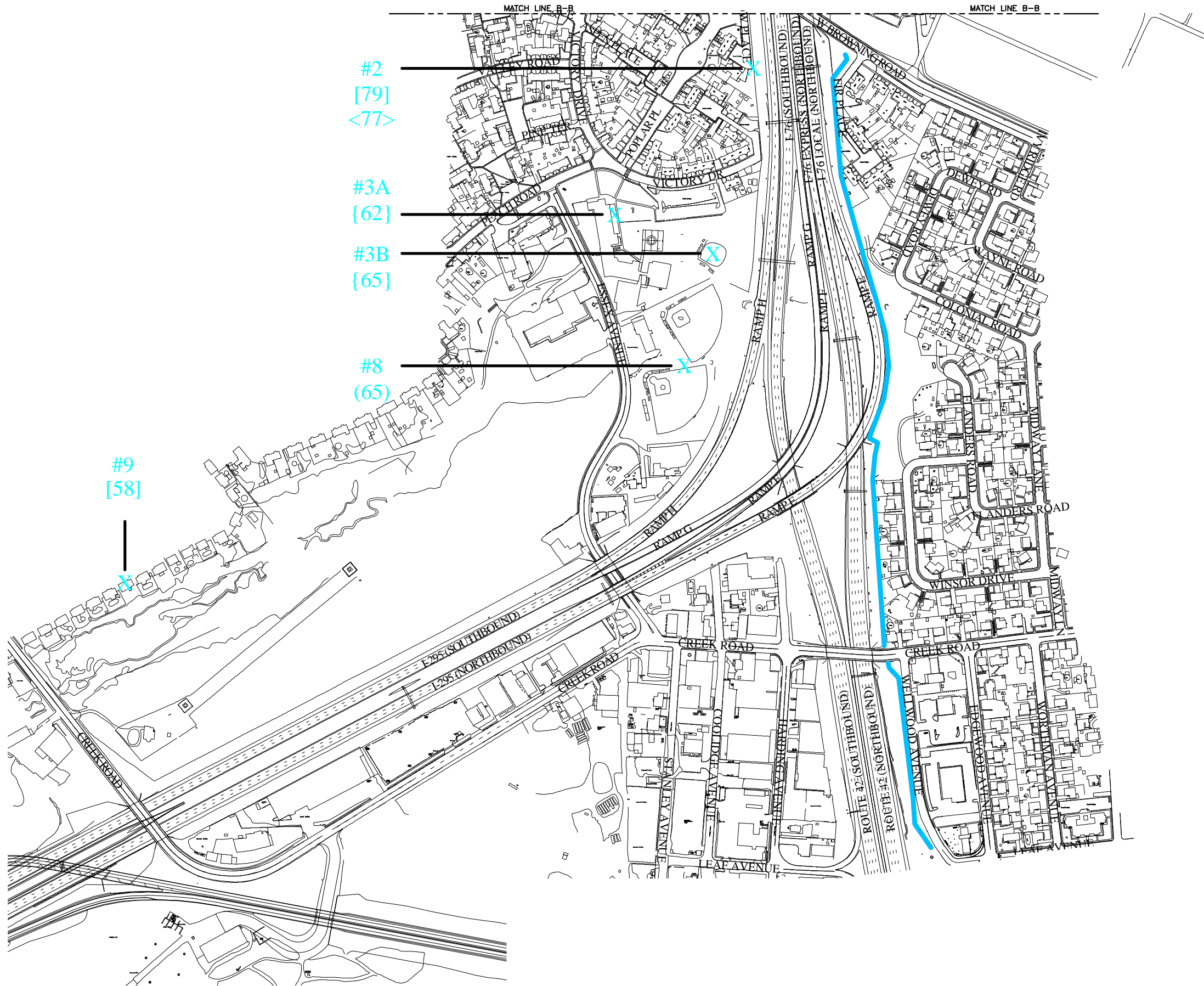
BROWNING ROAD LOOKING WEST



ALTERNATIVE K

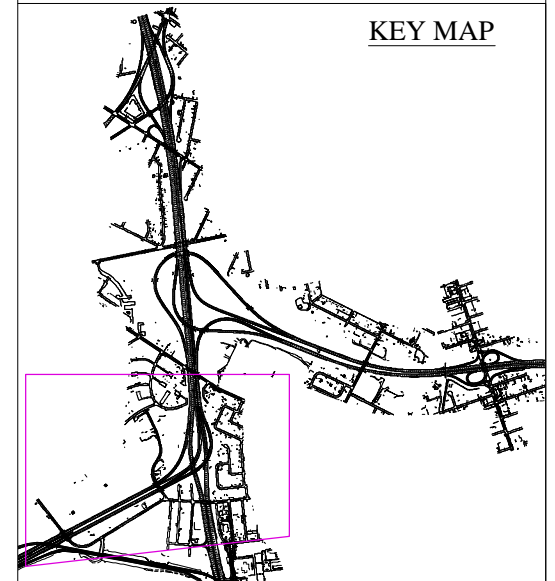
Appendix D:
Noise Contours

Noise Monitoring Locations & Peak Noise Levels



PROJECT NORTH

KEY MAP



LEGEND

- Noise Figure Generated by Peak AM & PM Conditions
- X Location of Noise Monitor
 - # Noise Monitoring Location Number
 - [] Peak Non-Summer Hourly Noise Levels - dBA L_{eq}
 - < > Peak Summer Hourly Noise Levels - dBA L_{eq}
 - () Peak Non-Summer Hourly Noise Levels, Typical School Hours - dBA L_{eq}
 - Existing Noise Wall Locations



New Jersey Department of Transportation

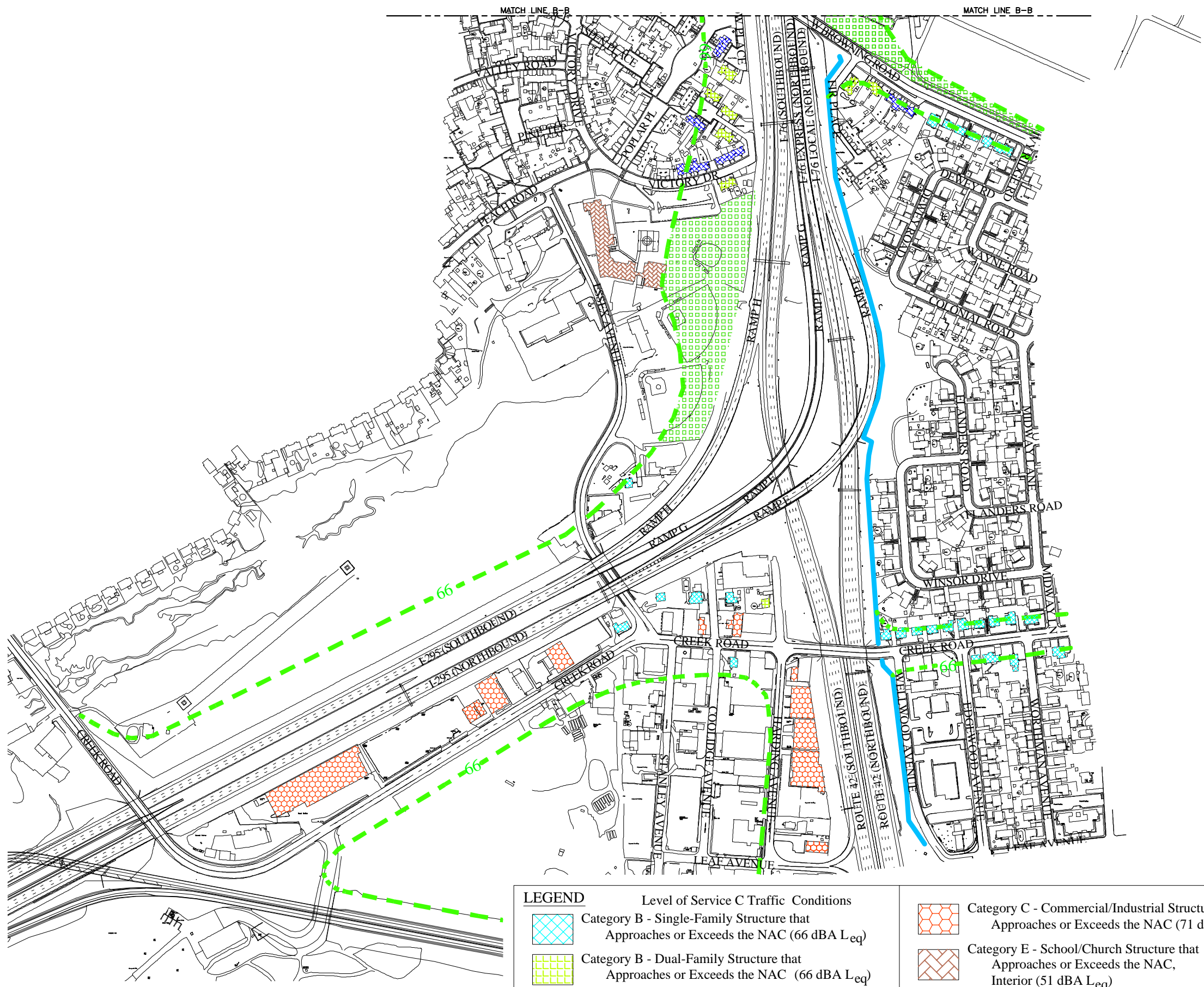
I-295/I-76/Route 42
Direct Connection
Camden County

Figure 8.2

Noise Monitoring Locations and Peak Noise Levels

Date April 14, 2006

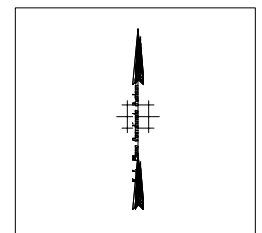
No Build



LEGEND Level of Service C Traffic Conditions

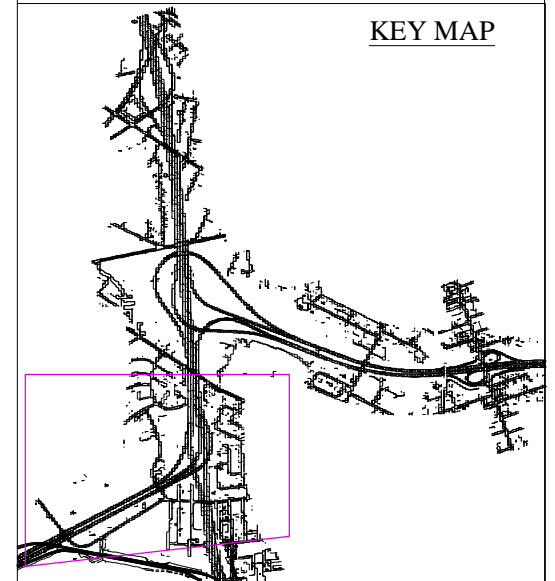
	Category B - Single-Family Structure that Approaches or Exceeds the NAC (66 dBA L _{eq})
	Category B - Dual-Family Structure that Approaches or Exceeds the NAC (66 dBA L _{eq})
	Category B - Multi-Family Structure that Approaches or Exceeds the NAC (66 dBA L _{eq})
	Category B - Special-Use Property (Cemetery or Recreational Area) that Approaches or Exceeds the NAC (66 dBA L _{eq})

	Category C - Commercial/Industrial Structure that Approaches or Exceeds the NAC (71 dBA L _{eq})
	Category E - School/Church Structure that Approaches or Exceeds the NAC, Interior (51 dBA L _{eq})



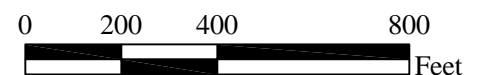
PROJECT NORTH

KEY MAP



LEGEND

- 66 dBA L_{eq} Noise Contour
- Existing Noise Wall Locations



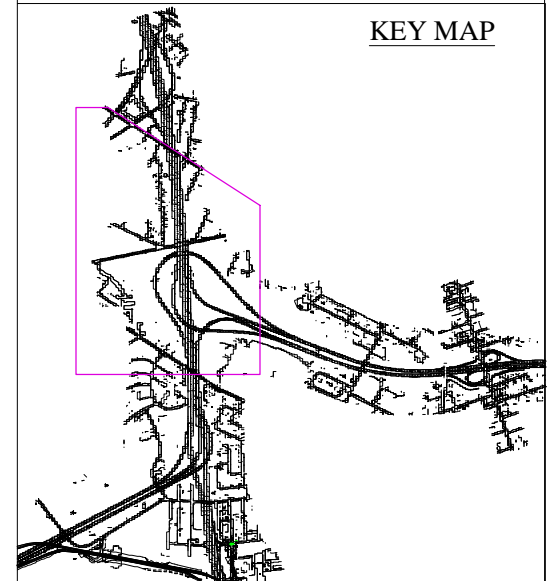
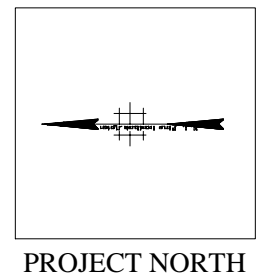
New Jersey Department of Transportation

I-295/I-76/Route 42 Direct Connection Camden County Figure 9.2

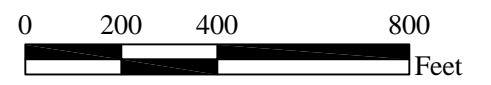
2030 "No-Build" 66 dBA Noise Contour

Date April 14, 2006

Without Noise Walls



- LEGEND**
- Proposed Improvements
 - Structure Limits
 - - - 66 dBA L_{eq} Noise Contour
 - Existing Noise Wall Locations
 - X X Removed Existing Noise Wall Locations



New Jersey Department of Transportation

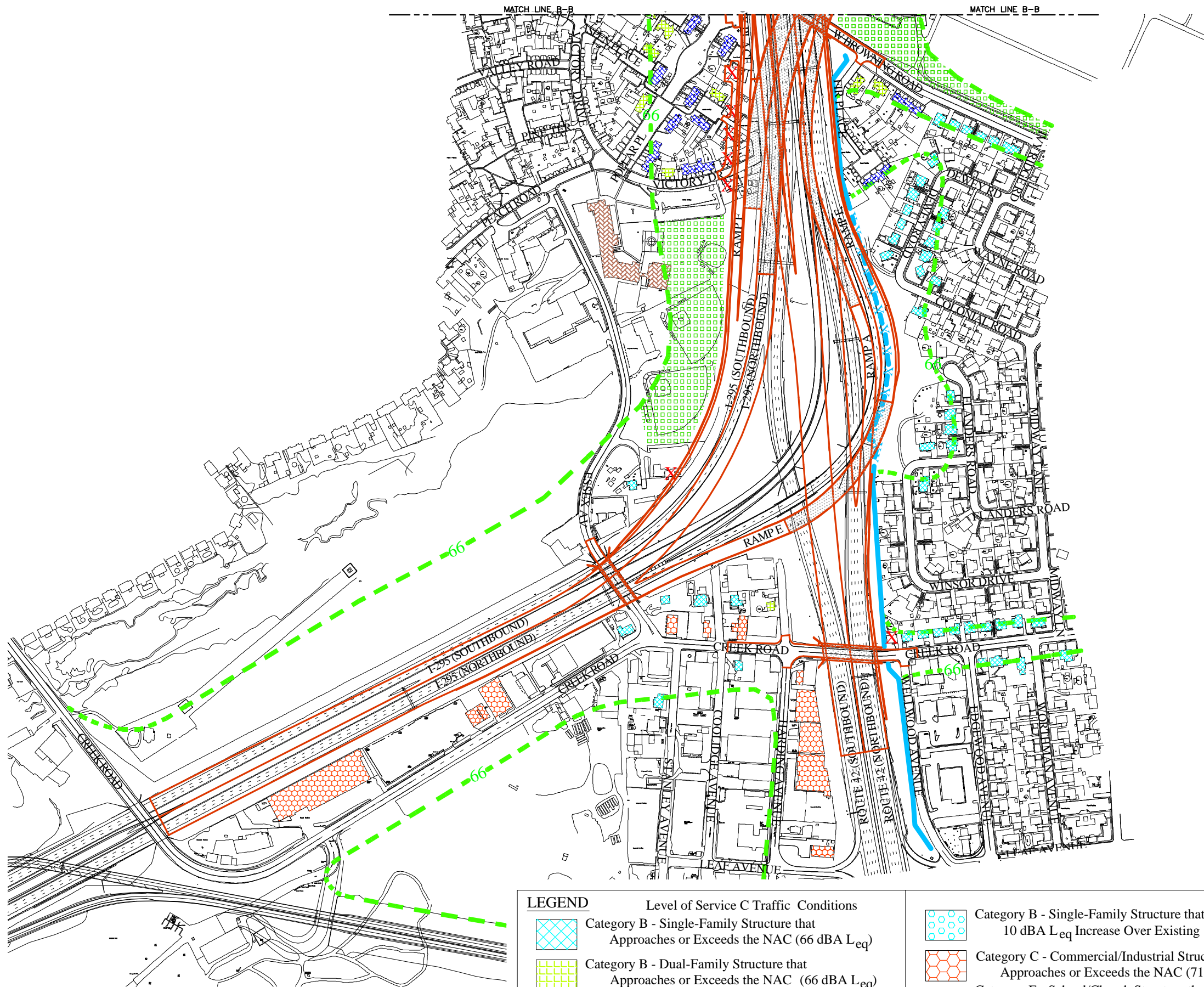
I-295/I-76/Route 42 Direct Connection Camden County Figure 10.1.1

2030 "Alternative D" 66 dBA Noise Contour

Date April 14, 2006

- LEGEND** Level of Service C Traffic Conditions
- Category B - Single-Family Structure that Approaches or Exceeds the NAC (66 dBA L_{eq})
 - Category B - Dual-Family Structure that Approaches or Exceeds the NAC (66 dBA L_{eq})
 - Category B - Multi-Family Structure that Approaches or Exceeds the NAC (66 dBA L_{eq})
 - Category B - Special-Use Property (Cemetery or Recreational Area) that Approaches or Exceeds the NAC (66 dBA L_{eq})

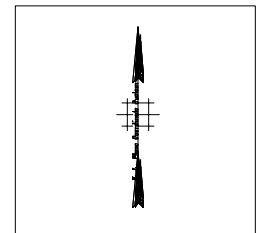
- Category B - Single-Family Structure that Possesses a 10 dBA L_{eq} Increase Over Existing
- Category C - Commercial/Industrial Structure that Approaches or Exceeds the NAC (71 dBA L_{eq})
- Category E - School/Church Structure that Approaches or Exceeds the NAC, Interior (51 dBA L_{eq})
- X Structure Acquisitions



LEGEND

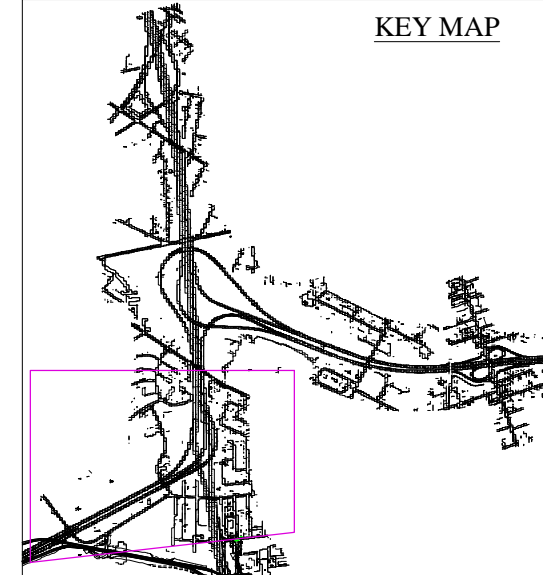
- Level of Service C Traffic Conditions
- Category B - Single-Family Structure that Approaches or Exceeds the NAC (66 dBA Leq)
 - Category B - Dual-Family Structure that Approaches or Exceeds the NAC (66 dBA Leq)
 - Category B - Multi-Family Structure that Approaches or Exceeds the NAC (66 dBA Leq)
 - Category B - Special-Use Property (Cemetery or Recreational Area) that Approaches or Exceeds the NAC (66 dBA Leq)

- Category B - Single-Family Structure that Possesses a 10 dBA Leq Increase Over Existing
- Category C - Commercial/Industrial Structure that Approaches or Exceeds the NAC (71 dBA Leq)
- Category E - School/Church Structure that Approaches or Exceeds the NAC, Interior (51 dBA Leq)
- Structure Acquisitions



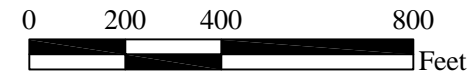
PROJECT NORTH

KEY MAP



LEGEND

- Proposed Improvements
- Structure Limits
- 66 dBA Leq Noise Contour
- Existing Noise Wall Locations
- Removed Existing Noise Wall Locations

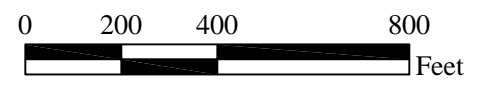
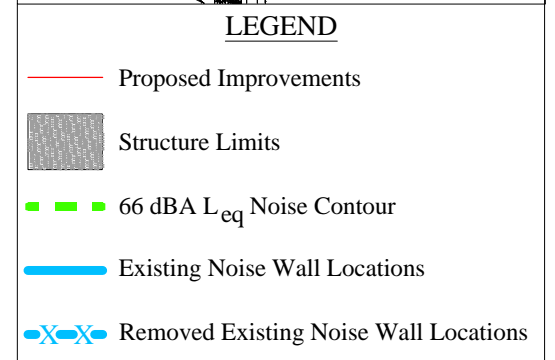
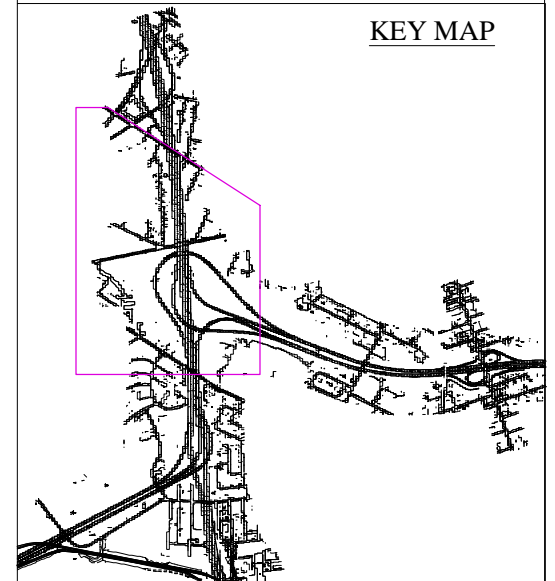
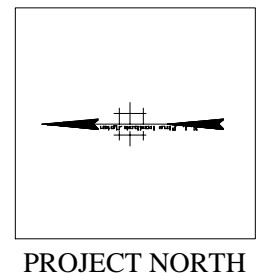
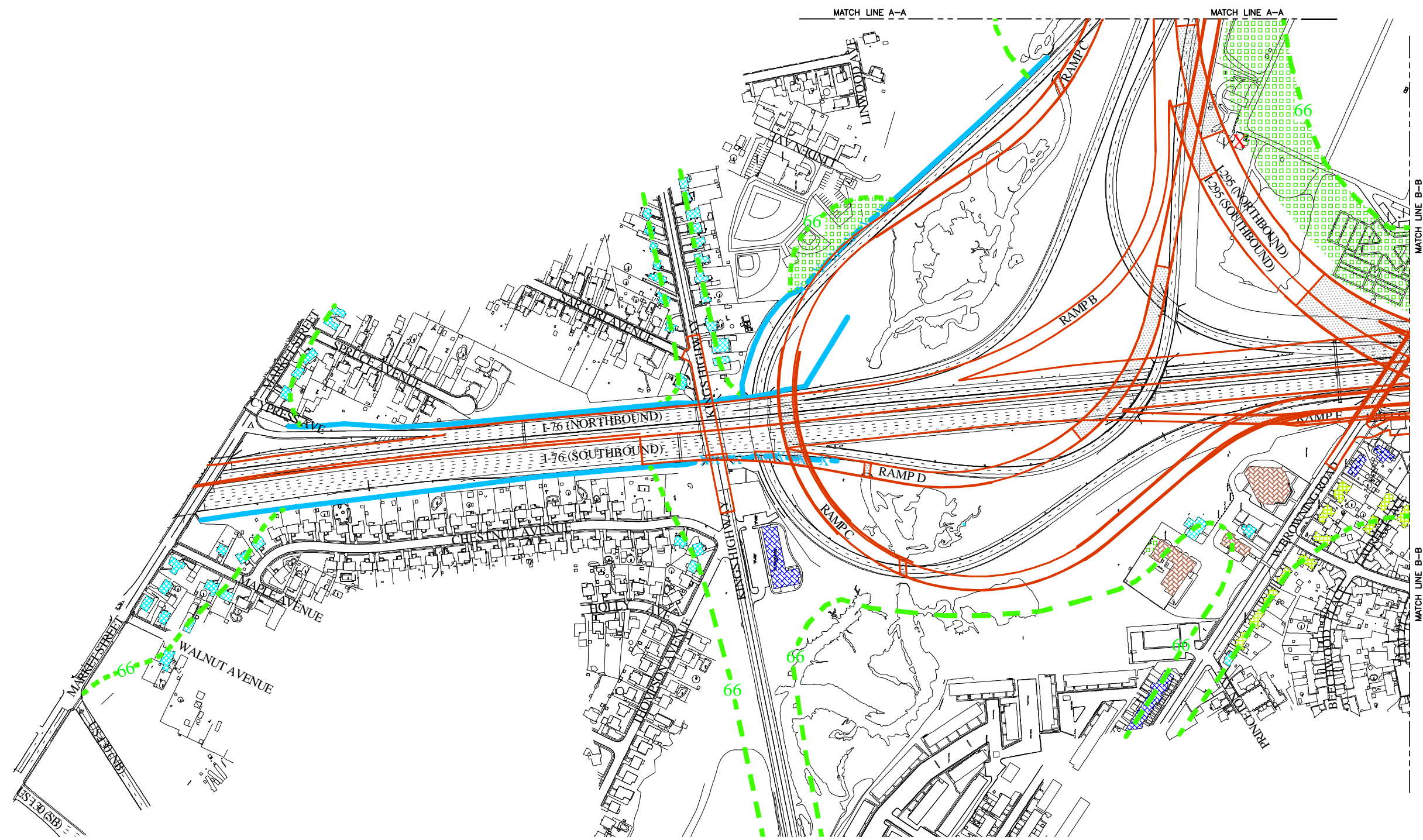


New Jersey Department of Transportation

**I-295/I-76/Route 42
Direct Connection
Camden County
Figure 10.1.2**

2030 "Alternative D" 66 dBA Noise Contour

Date April 14, 2006



New Jersey Department of Transportation

I-295/I-76/Route 42 Direct Connection Camden County Figure 10.2.1

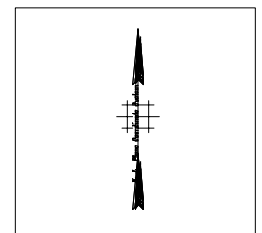
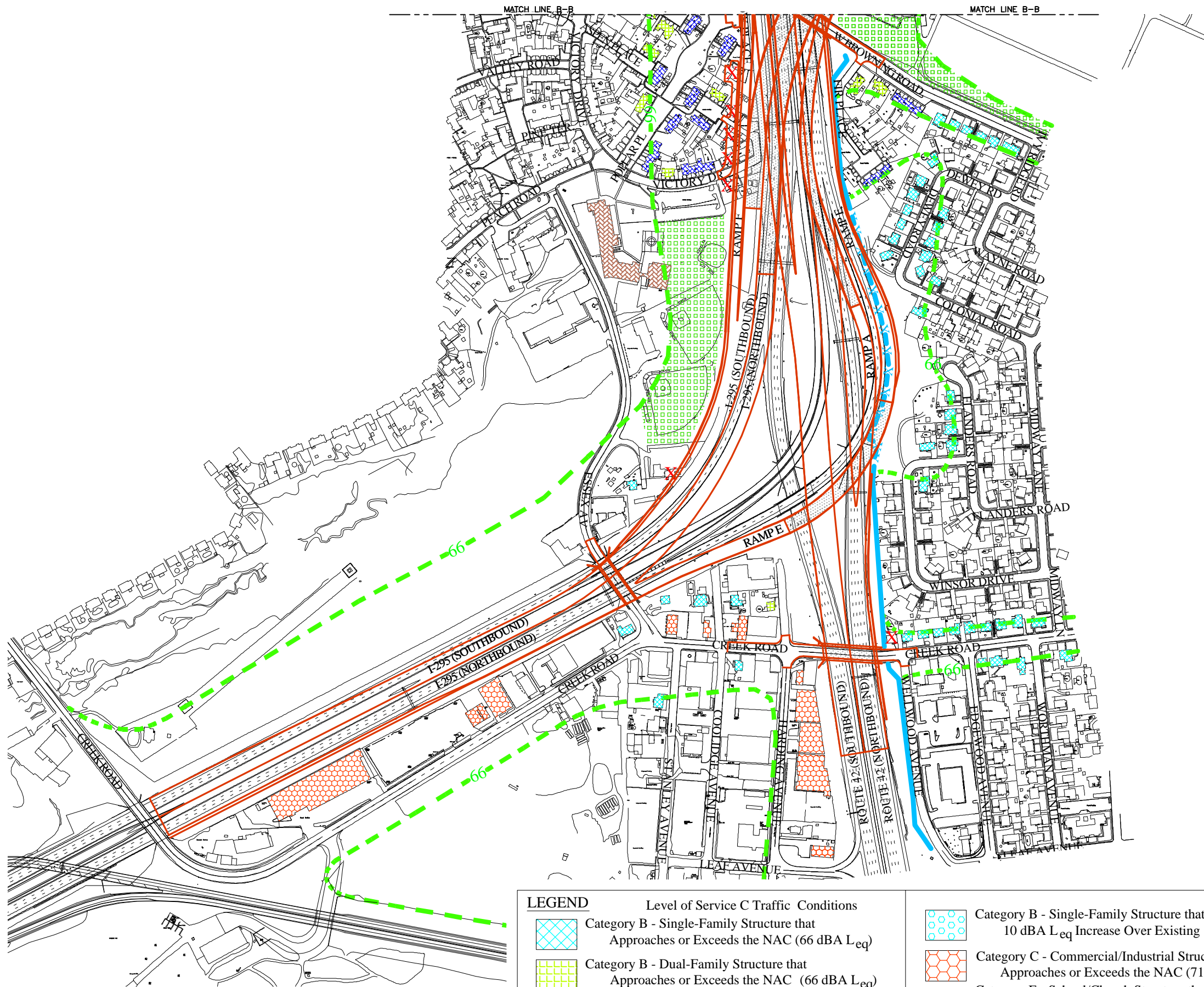
2030 "Alternative D1" 66 dBA Noise Contour

Date April 14, 2006

LEGEND Level of Service C Traffic Conditions

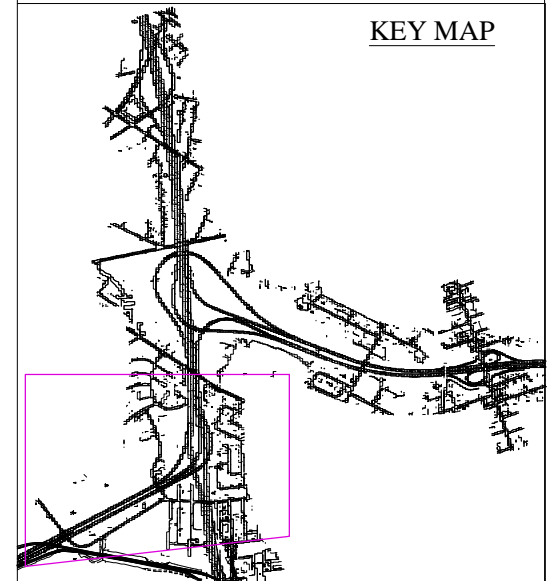
<ul style="list-style-type: none"> Category B - Single-Family Structure that Approaches or Exceeds the NAC (66 dBA L_{eq}) Category B - Dual-Family Structure that Approaches or Exceeds the NAC (66 dBA L_{eq}) Category B - Multi-Family Structure that Approaches or Exceeds the NAC (66 dBA L_{eq}) Category B - Special-Use Property (Cemetery or Recreational Area) that Approaches or Exceeds the NAC (66 dBA L_{eq}) 	<ul style="list-style-type: none"> Category B - Single-Family Structure that Possesses a 10 dBA L_{eq} Increase Over Existing Category C - Commercial/Industrial Structure that Approaches or Exceeds the NAC (71 dBA L_{eq}) Category E - School/Church Structure that Approaches or Exceeds the NAC, Interior (51 dBA L_{eq}) X Structure Acquisitions
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<ul style="list-style-type: none"> Category B - Single-Family Structure that Possesses a 10 dBA L_{eq} Increase Over Existing Category C - Commercial/Industrial Structure that Approaches or Exceeds the NAC (71 dBA L_{eq}) Category E - School/Church Structure that Approaches or Exceeds the NAC, Interior (51 dBA L_{eq}) X Structure Acquisitions
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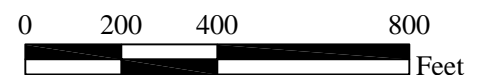
PROJECT NORTH

KEY MAP



LEGEND

- Proposed Improvements
- Structure Limits
- 66 dBA Leq Noise Contour
- Existing Noise Wall Locations
- Removed Existing Noise Wall Locations



New Jersey Department of Transportation

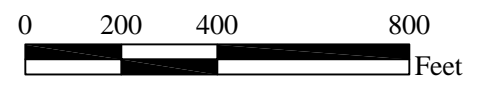
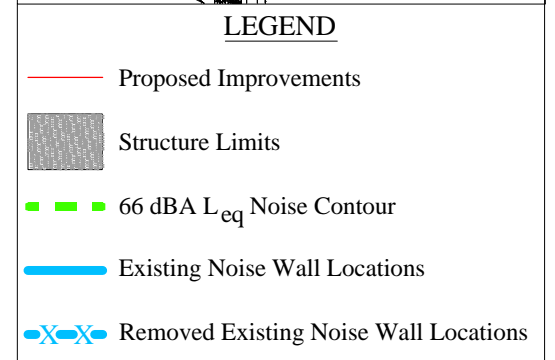
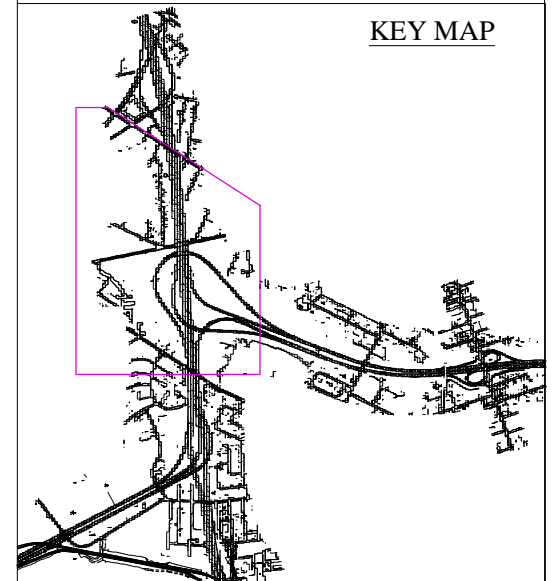
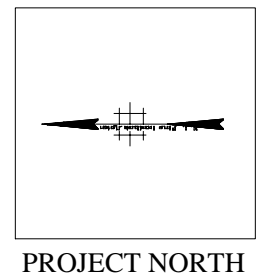
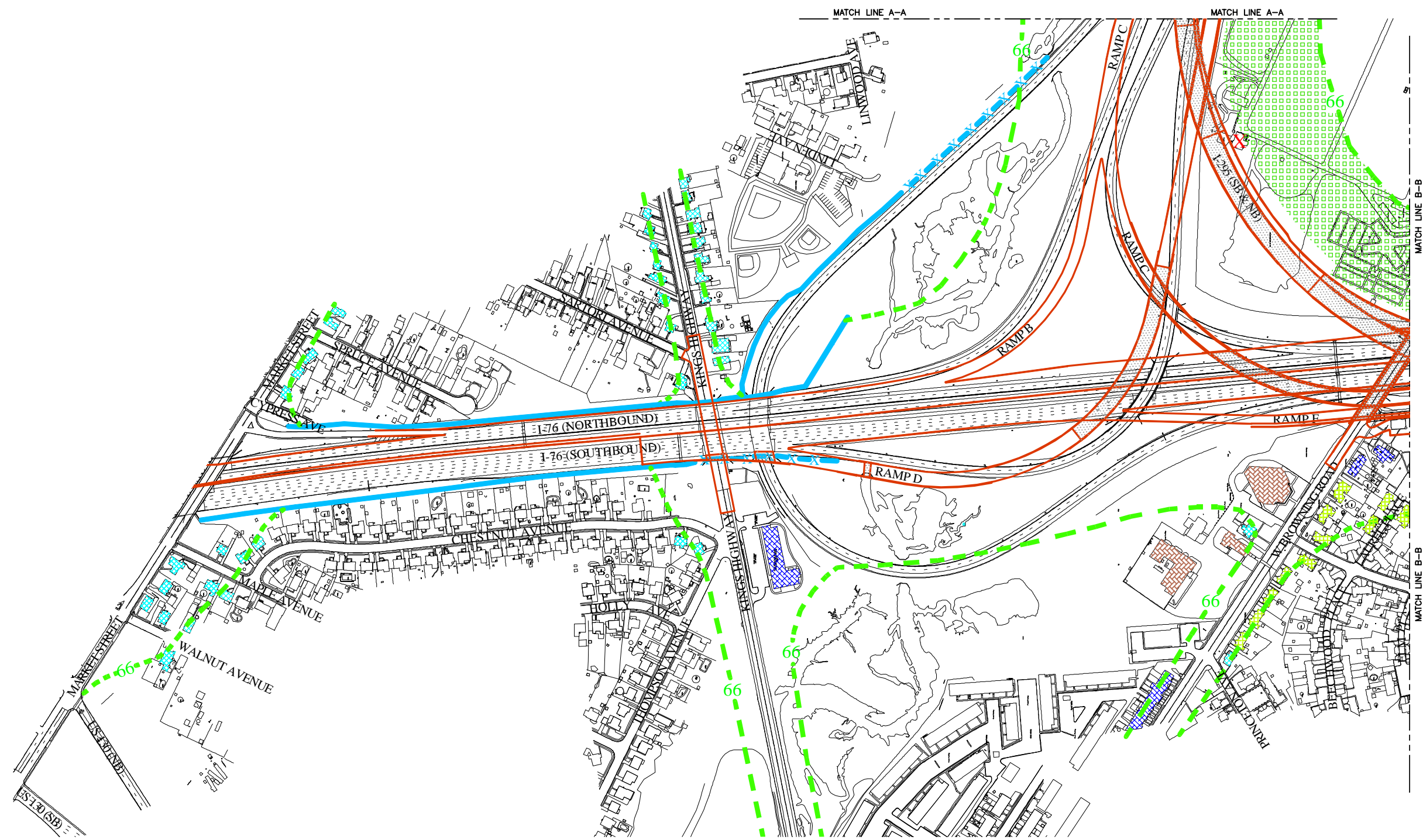
I-295/I-76/Route 42 Direct Connection Camden County Figure 10.2.2

2030 "Alternative D1" 66 dBA Noise Contour

Date April 14, 2006

LEGEND Level of Service C Traffic Conditions

- | | | | |
|--|---|--|--|
| | Category B - Single-Family Structure that Approaches or Exceeds the NAC (66 dBA Leq) | | Category B - Single-Family Structure that Possesses a 10 dBA Leq Increase Over Existing |
| | Category B - Dual-Family Structure that Approaches or Exceeds the NAC (66 dBA Leq) | | Category C - Commercial/Industrial Structure that Approaches or Exceeds the NAC (71 dBA Leq) |
| | Category B - Multi-Family Structure that Approaches or Exceeds the NAC (66 dBA Leq) | | Category E - School/Church Structure that Approaches or Exceeds the NAC, Interior (51 dBA Leq) |
| | Category B - Special-Use Property (Cemetery or Recreational Area) that Approaches or Exceeds the NAC (66 dBA Leq) | | Structure Acquisitions |



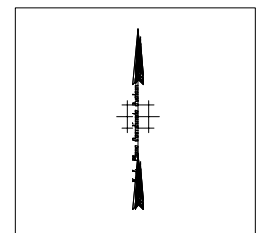
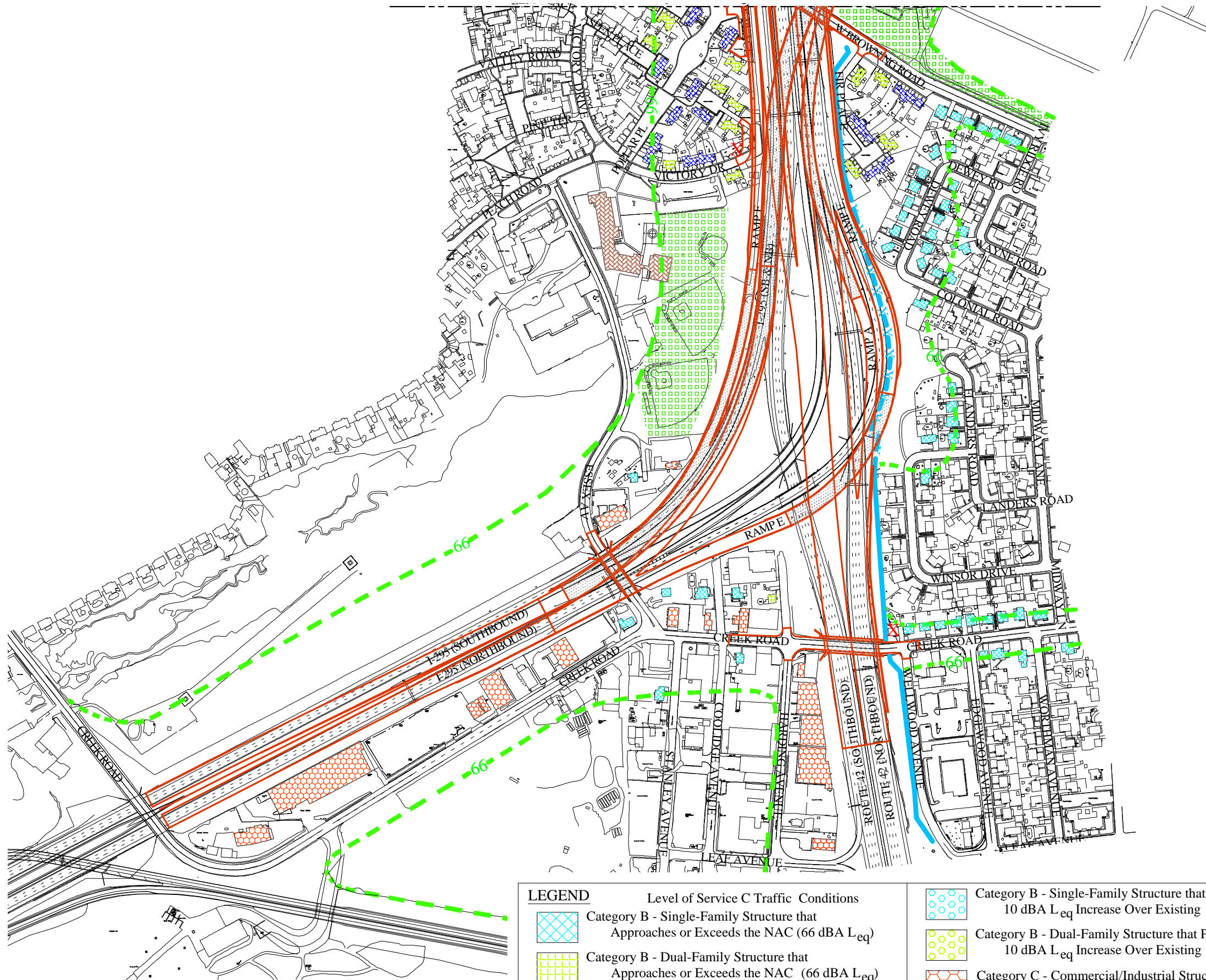
New Jersey Department of Transportation

I-295/I-76/Route 42 Direct Connection Camden County Figure 10.3.1

2030 "Alternative G2" 66 dBA Noise Contour

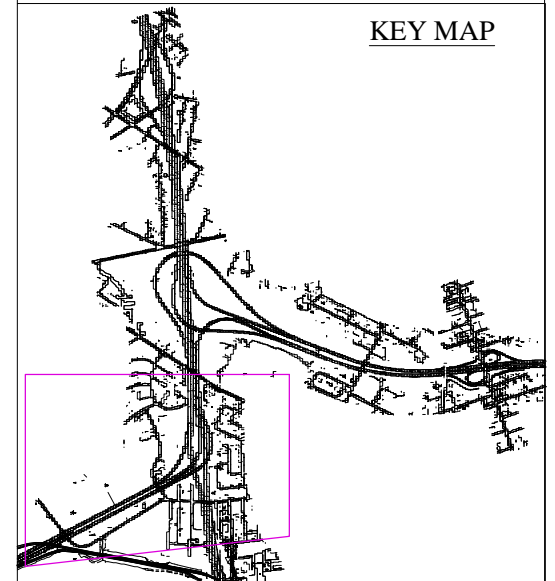
Date April 14, 2006

LEGEND		Level of Service C Traffic Conditions	
	Category B - Single-Family Structure that Approaches or Exceeds the NAC (66 dBA L_{eq})		Category B - Single-Family Structure that Possesses a 10 dBA L_{eq} Increase Over Existing
	Category B - Dual-Family Structure that Approaches or Exceeds the NAC (66 dBA L_{eq})		Category B - Dual-Family Structure that Possesses a 10 dBA L_{eq} Increase Over Existing
	Category B - Multi-Family Structure that Approaches or Exceeds the NAC (66 dBA L_{eq})		Category C - Commercial/Industrial Structure that Approaches or Exceeds the NAC (71 dBA L_{eq})
	Category B - Special-Use Property (Cemetery or Recreational Area) that Approaches or Exceeds the NAC (66 dBA L_{eq})		Category E - School/Church Structure that Approaches or Exceeds the NAC, Interior (51 dBA L_{eq})
		X	Structure Acquisitions



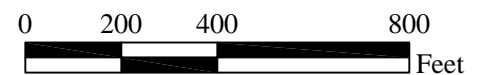
PROJECT NORTH

KEY MAP



LEGEND

- Proposed Improvements
- Structure Limits
- 66 dBA Leq Noise Contour
- Existing Noise Wall Locations
- Removed Existing Noise Wall Locations



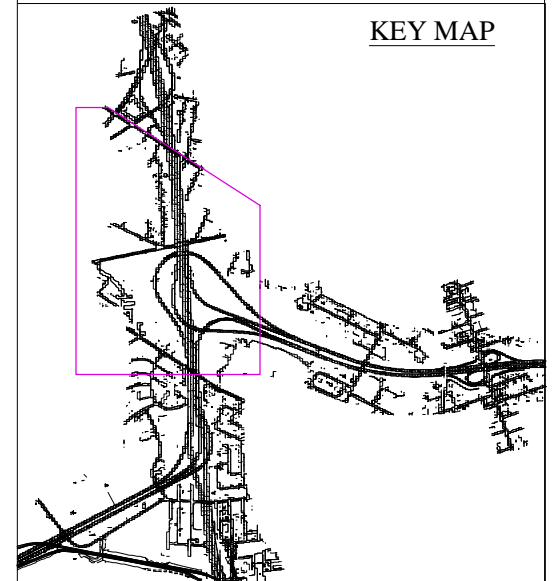
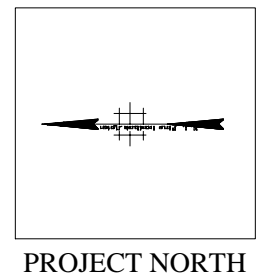
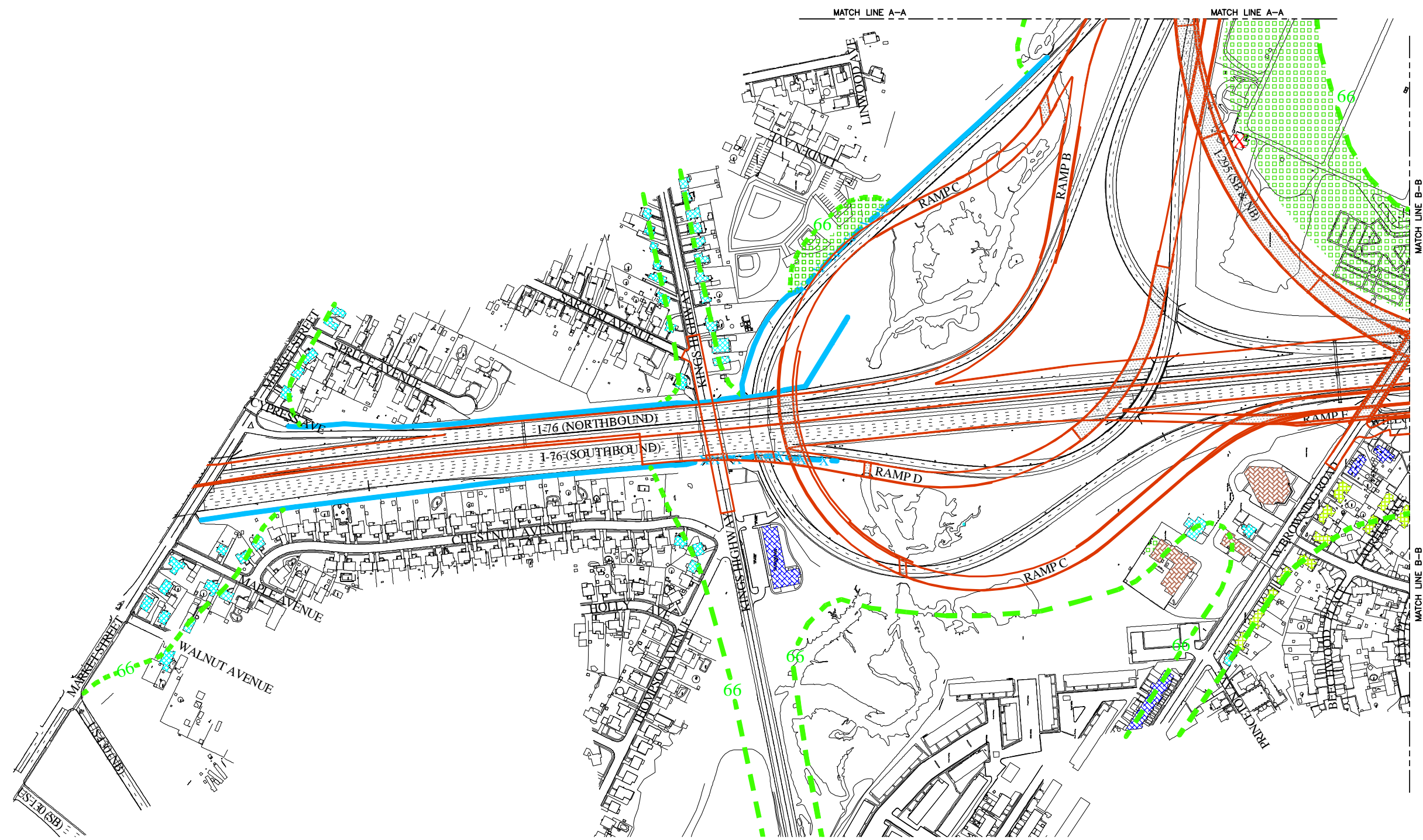
New Jersey Department of Transportation

I-295/I-76/Route 42 Direct Connection Camden County Figure 10.3.2

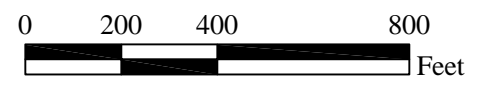
2030 "Alternative G2" 66 dBA Noise Contour

Date April 14, 2006

LEGEND		Level of Service C Traffic Conditions	
	Category B - Single-Family Structure that Approaches or Exceeds the NAC (66 dBA Leq)		Category B - Single-Family Structure that Possesses a 10 dBA Leq Increase Over Existing
	Category B - Dual-Family Structure that Approaches or Exceeds the NAC (66 dBA Leq)		Category B - Dual-Family Structure that Possesses a 10 dBA Leq Increase Over Existing
	Category B - Multi-Family Structure that Approaches or Exceeds the NAC (66 dBA Leq)		Category C - Commercial/Industrial Structure that Approaches or Exceeds the NAC (71 dBA Leq)
	Category B - Special-Use Property (Cemetery or Recreational Area) that Approaches or Exceeds the NAC (66 dBA Leq)		Category E - School/Church Structure that Approaches or Exceeds the NAC, Interior (51 dBA Leq)
			Structure Acquisitions



- LEGEND**
- Proposed Improvements
 - Structure Limits
 - - - 66 dBA L_{eq} Noise Contour
 - Existing Noise Wall Locations
 - X X Removed Existing Noise Wall Locations



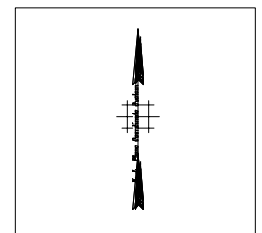
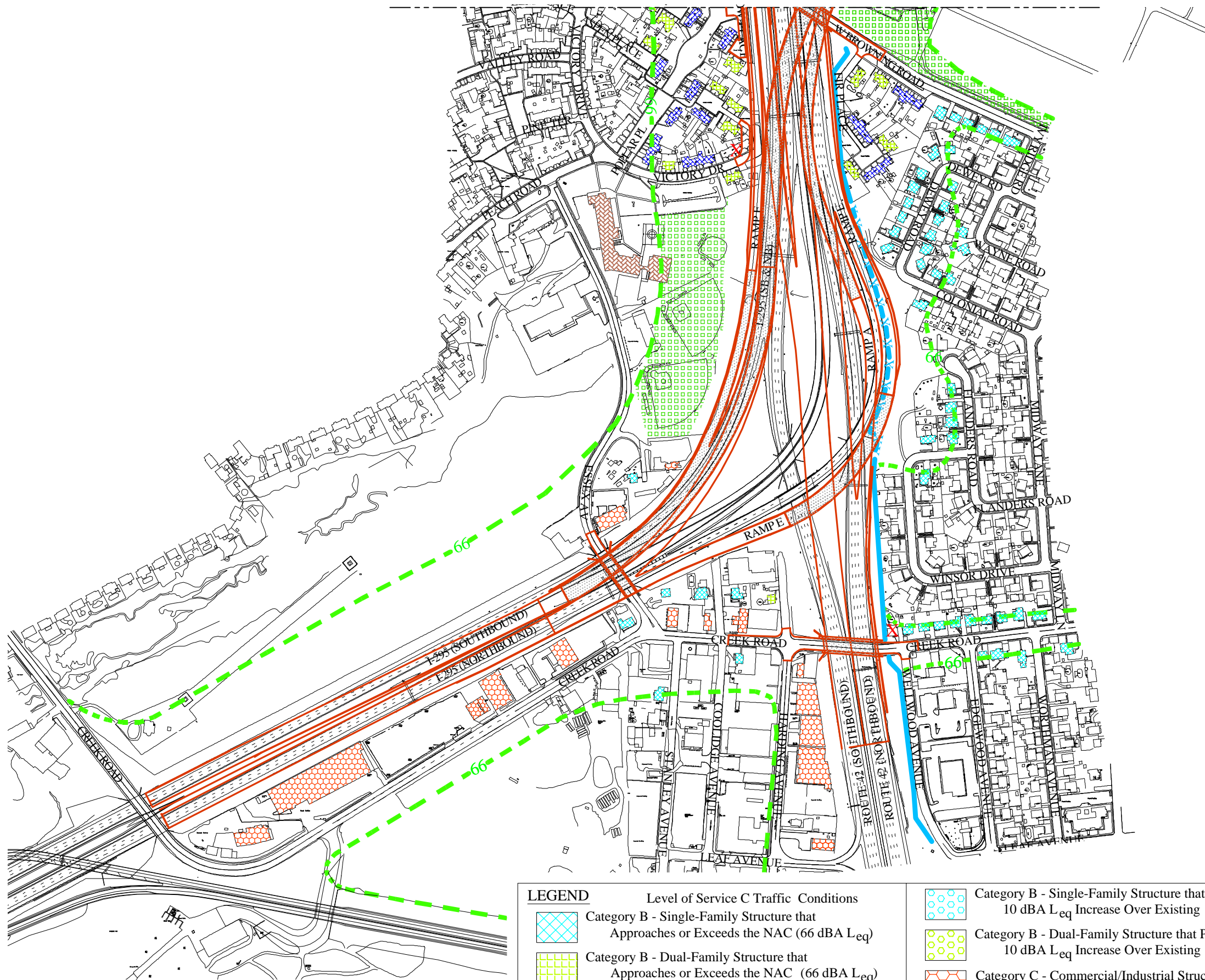
New Jersey Department of Transportation

I-295/I-76/Route 42 Direct Connection Camden County Figure 10.4.1

2030 "Alternative H1" 66 dBA Noise Contour

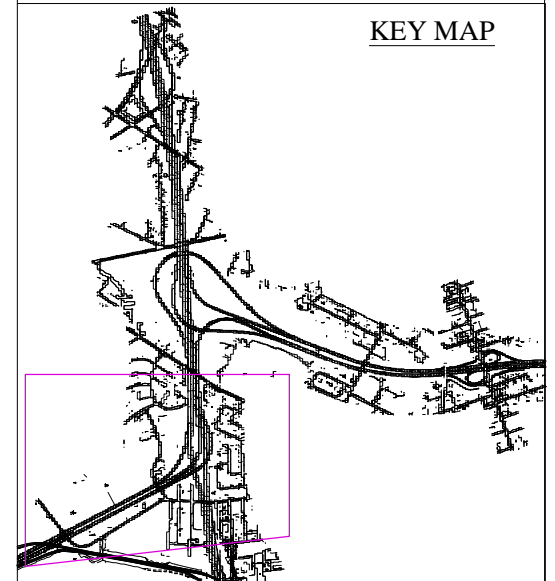
Date April 14, 2006

- LEGEND** Level of Service C Traffic Conditions
- | | |
|--|--|
| <ul style="list-style-type: none"> Category B - Single-Family Structure that Approaches or Exceeds the NAC (66 dBA L_{eq}) Category B - Dual-Family Structure that Approaches or Exceeds the NAC (66 dBA L_{eq}) Category B - Multi-Family Structure that Approaches or Exceeds the NAC (66 dBA L_{eq}) Category B - Special-Use Property (Cemetery or Recreational Area) that Approaches or Exceeds the NAC (66 dBA L_{eq}) | <ul style="list-style-type: none"> Category B - Single-Family Structure that Possesses a 10 dBA L_{eq} Increase Over Existing Category B - Dual-Family Structure that Possesses a 10 dBA L_{eq} Increase Over Existing Category C - Commercial/Industrial Structure that Approaches or Exceeds the NAC (71 dBA L_{eq}) Category E - School/Church Structure that Approaches or Exceeds the NAC, Interior (51 dBA L_{eq}) X Structure Acquisitions |
|--|--|



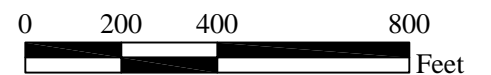
PROJECT NORTH

KEY MAP



LEGEND

- Proposed Improvements
- Structure Limits
- 66 dBA Leq Noise Contour
- Existing Noise Wall Locations
- Removed Existing Noise Wall Locations



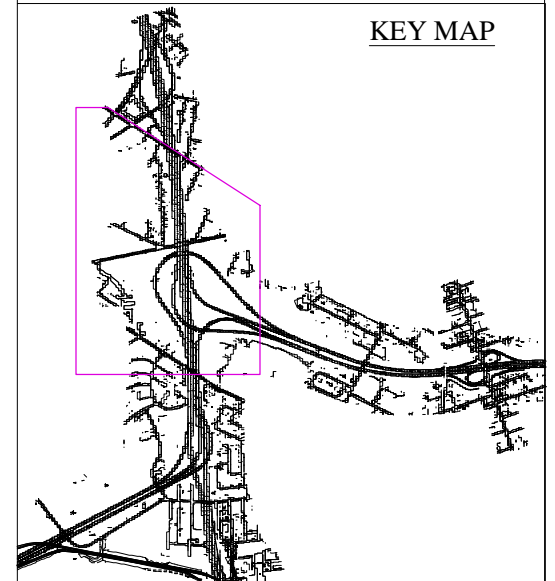
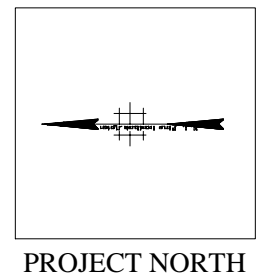
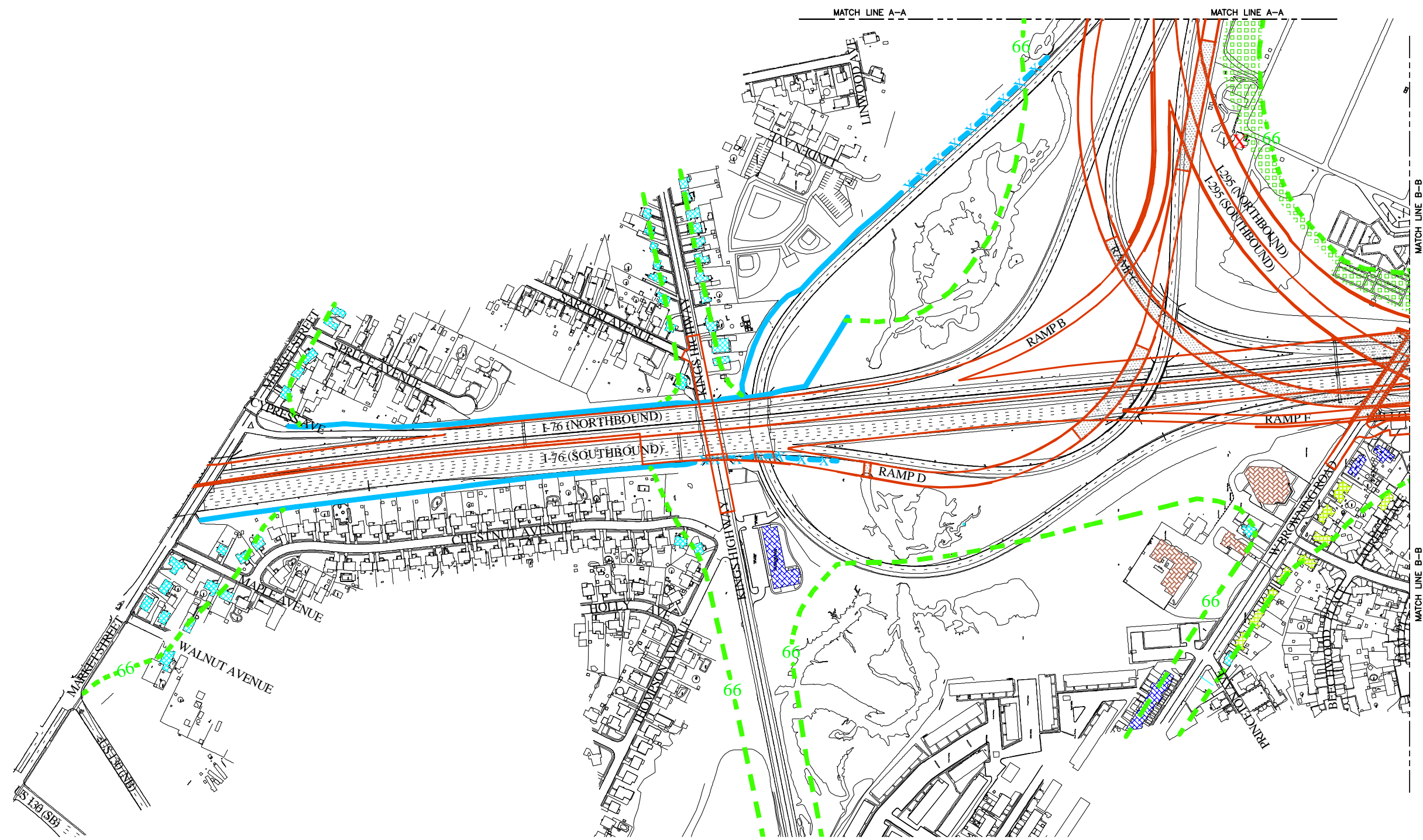
New Jersey Department of Transportation

I-295/I-76/Route 42 Direct Connection Camden County Figure 10.4.2

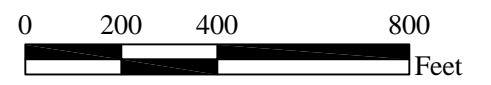
2030 "Alternative H1" 66 dBA Noise Contour

Date April 14, 2006

LEGEND		Level of Service C Traffic Conditions	
	Category B - Single-Family Structure that Approaches or Exceeds the NAC (66 dBA Leq)		Category B - Single-Family Structure that Possesses a 10 dBA Leq Increase Over Existing
	Category B - Dual-Family Structure that Approaches or Exceeds the NAC (66 dBA Leq)		Category B - Dual-Family Structure that Possesses a 10 dBA Leq Increase Over Existing
	Category B - Multi-Family Structure that Approaches or Exceeds the NAC (66 dBA Leq)		Category C - Commercial/Industrial Structure that Approaches or Exceeds the NAC (71 dBA Leq)
	Category B - Special-Use Property (Cemetery or Recreational Area) that Approaches or Exceeds the NAC (66 dBA Leq)		Category E - School/Church Structure that Approaches or Exceeds the NAC, Interior (51 dBA Leq)
			Structure Acquisitions



- LEGEND**
- Proposed Improvements
 - Structure Limits
 - - - 66 dBA L_{eq} Noise Contour
 - Existing Noise Wall Locations
 - X X Removed Existing Noise Wall Locations



New Jersey Department of Transportation

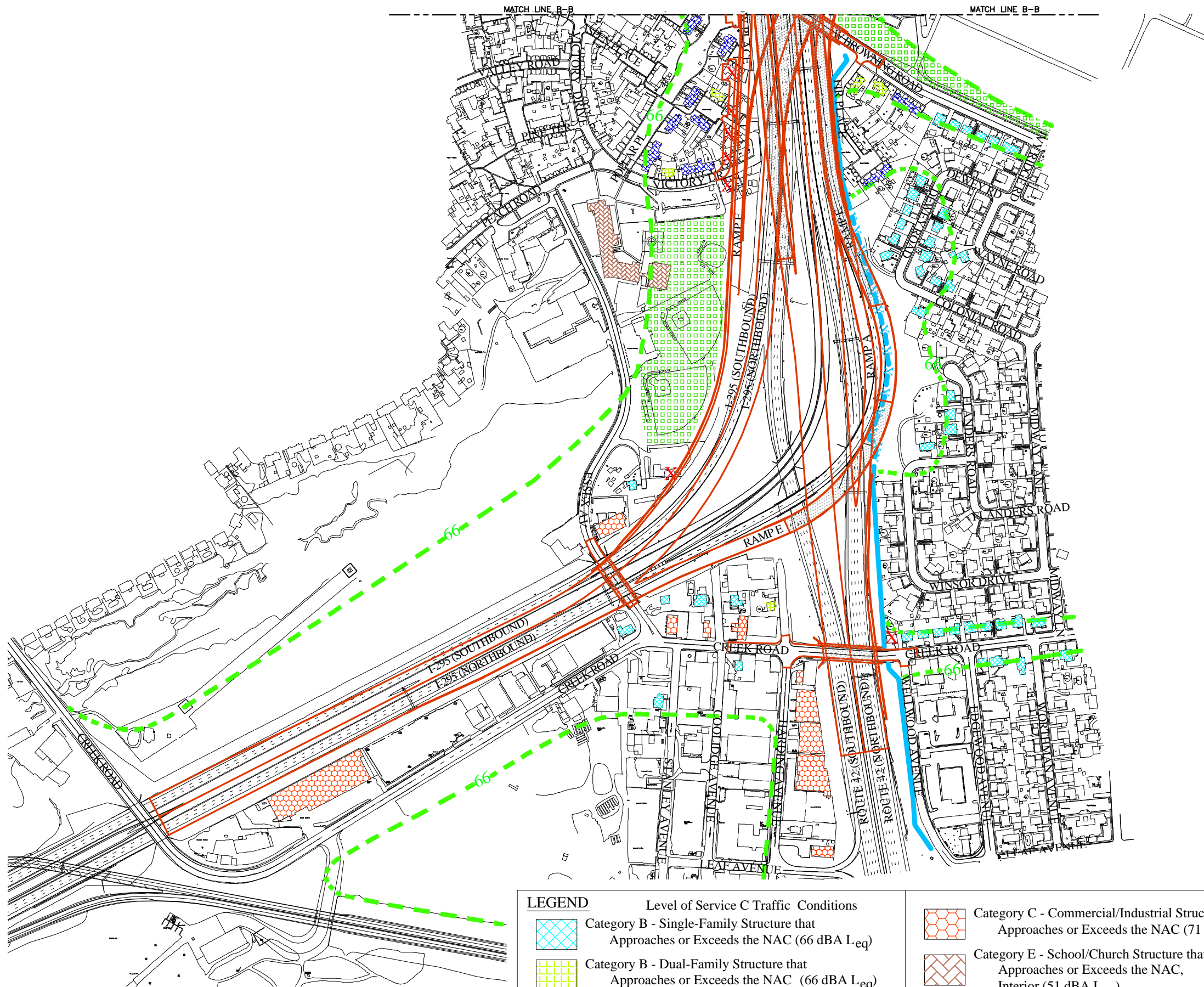
**I-295/I-76/Route 42
Direct Connection
Camden County
Figure 10.5.1**

2030 "Alternative K" 66 dBA Noise Contour

Date April 14, 2006

- LEGEND** Level of Service C Traffic Conditions
- Category B - Single-Family Structure that Approaches or Exceeds the NAC (66 dBA L_{eq})
 - Category B - Dual-Family Structure that Approaches or Exceeds the NAC (66 dBA L_{eq})
 - Category B - Multi-Family Structure that Approaches or Exceeds the NAC (66 dBA L_{eq})
 - Category B - Special-Use Property (Cemetery or Recreational Area) that Approaches or Exceeds the NAC (66 dBA L_{eq})

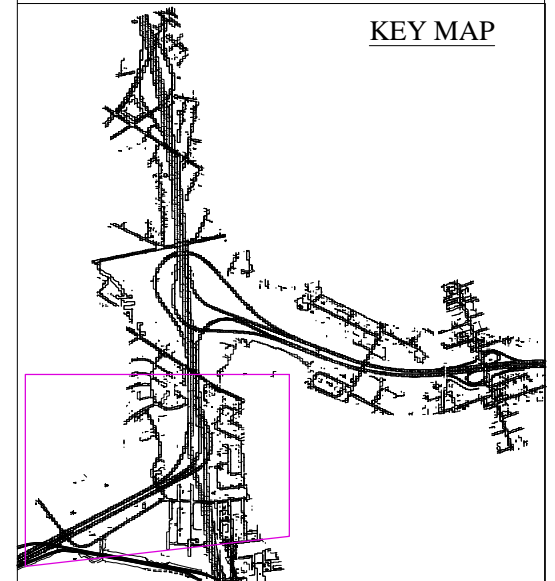
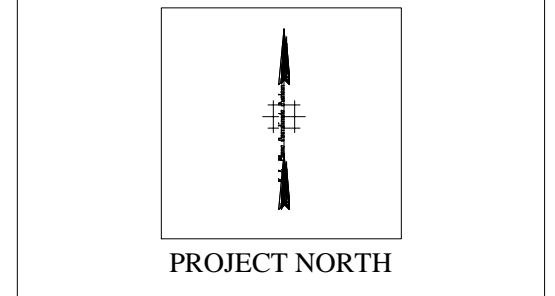
- Category C - Commercial/Industrial Structure that Approaches or Exceeds the NAC (71 dBA L_{eq})
- Category E - School/Church Structure that Approaches or Exceeds the NAC, Interior (51 dBA L_{eq})
- X Structure Acquisitions



LEGEND Level of Service C Traffic Conditions

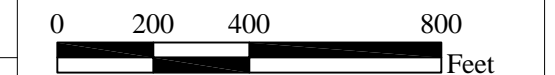
	Category B - Single-Family Structure that Approaches or Exceeds the NAC (66 dBA Leq)
	Category B - Dual-Family Structure that Approaches or Exceeds the NAC (66 dBA Leq)
	Category B - Multi-Family Structure that Approaches or Exceeds the NAC (66 dBA Leq)
	Category B - Special-Use Property (Cemetery or Recreational Area) that Approaches or Exceeds the NAC (66 dBA Leq)

	Category C - Commercial/Industrial Structure that Approaches or Exceeds the NAC (71 dBA Leq)
	Category E - School/Church Structure that Approaches or Exceeds the NAC, Interior (51 dBA Leq)
	Structure Acquisitions



LEGEND

	Proposed Improvements
	Structure Limits
	66 dBA Leq Noise Contour
	Existing Noise Wall Locations
	Removed Existing Noise Wall Locations



New Jersey Department of Transportation

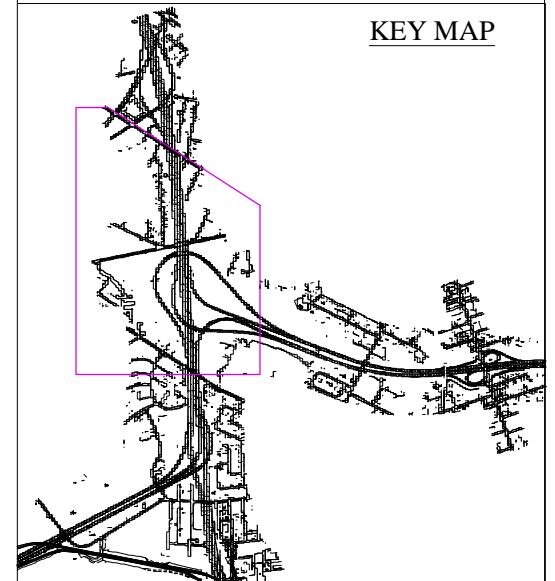
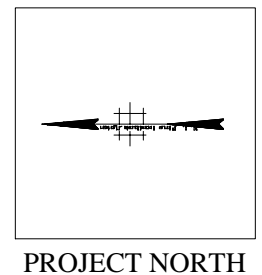
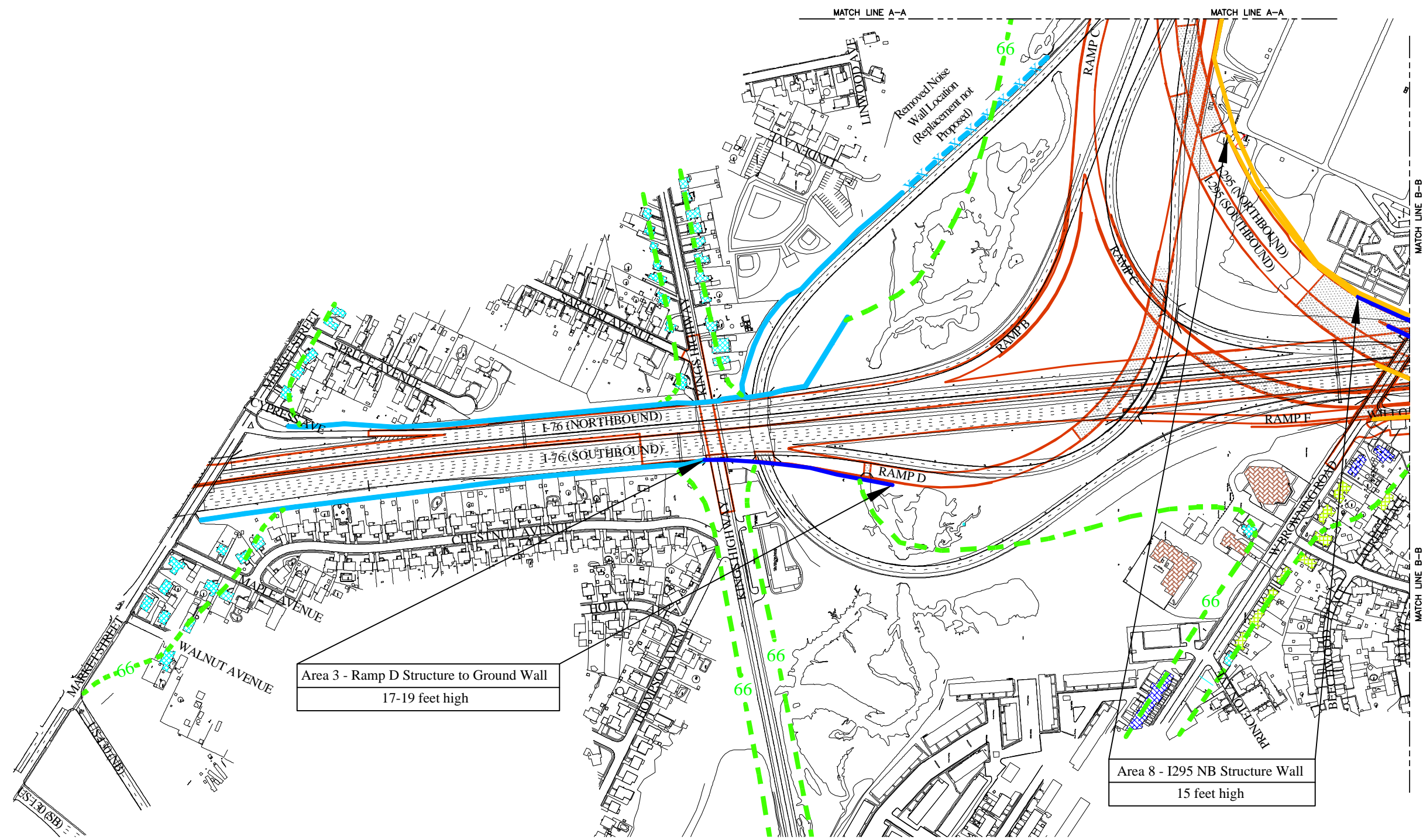
**I-295/I-76/Route 42
Direct Connection
Camden County**

Figure 10.5.2

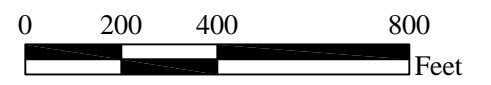
2030 "Alternative K" 66 dBA Noise Contour

Date	April 14, 2006
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With Noise Walls



- LEGEND**
- Proposed Improvements
 - Structure Limits
 - - - 66 dBA L_{eq} Noise Contour
 - Existing Noise Wall Location
 - X X X Removed Existing Noise Wall Locations
 - Replacement Noise Wall Location
 - New Noise Wall Location



- LEGEND** Level of Service C Traffic Conditions
- Category B - Single-Family Structure that Approaches or Exceeds the NAC (66 dBA L_{eq})
 - Category B - Dual-Family Structure that Approaches or Exceeds the NAC (66 dBA L_{eq})
 - Category B - Multi-Family Structure that Approaches or Exceeds the NAC (66 dBA L_{eq})
 - Category B - Special-Use Property (Cemetery or Recreational Area) that Approaches or Exceeds the NAC (66 dBA L_{eq})

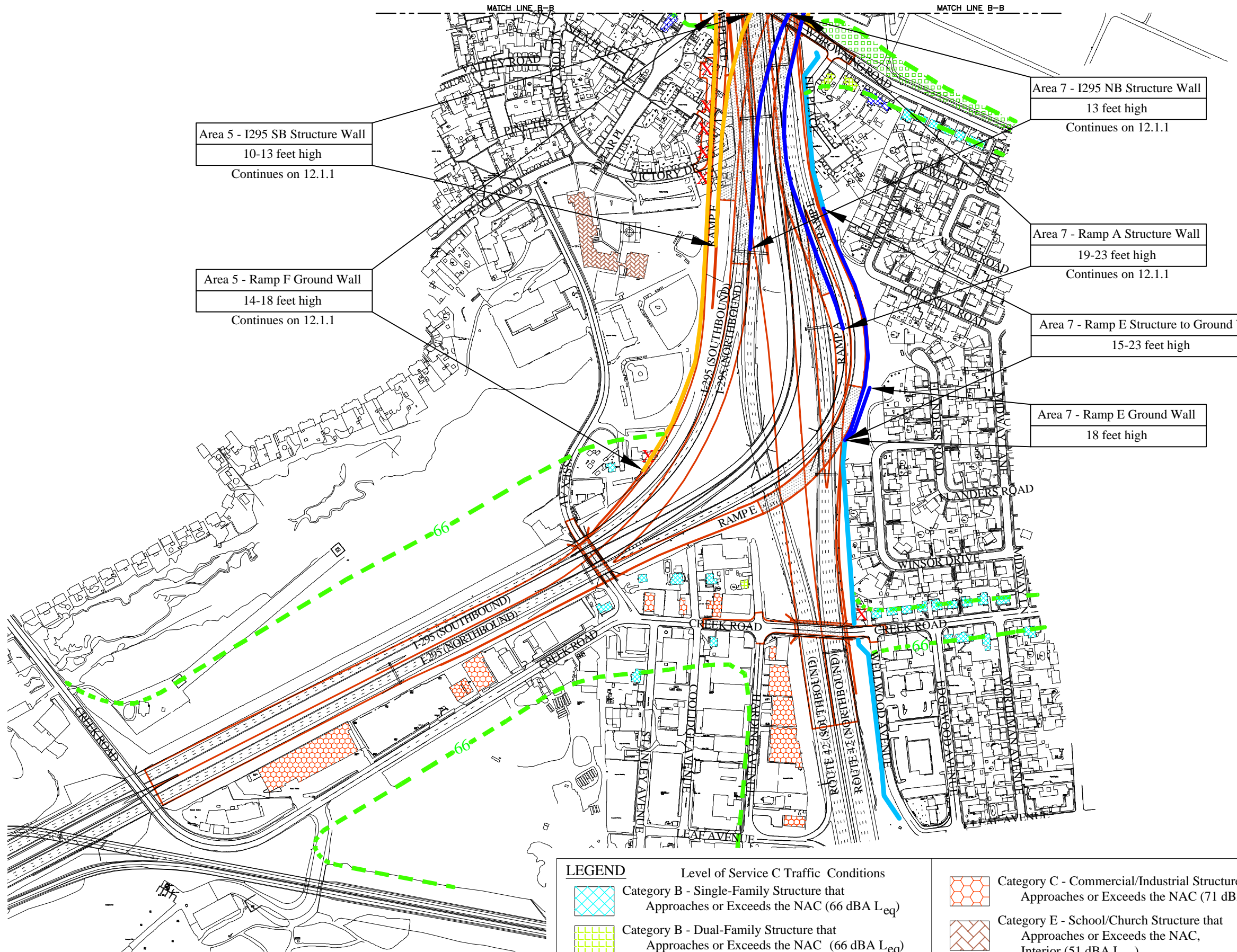
- Category C - Commercial/Industrial Structure that Approaches or Exceeds the NAC (71 dBA L_{eq})
- Category E - School/Church Structure that Approaches or Exceeds the NAC, Interior (51 dBA L_{eq})
- X Structure Acquisitions

New Jersey Department of Transportation

**I-295/I-76/Route 42
Direct Connection
Camden County
Figure 12.1.1**

2030 "Alternative D" Proposed Noise Walls

Date	April 14, 2006
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Area 5 - I295 SB Structure Wall
10-13 feet high
Continues on 12.1.1

Area 5 - Ramp F Ground Wall
14-18 feet high
Continues on 12.1.1

Area 7 - I295 NB Structure Wall
13 feet high
Continues on 12.1.1

Area 7 - Ramp A Structure Wall
19-23 feet high
Continues on 12.1.1

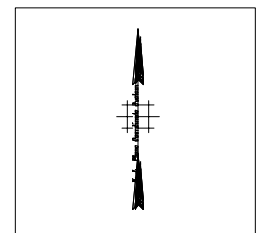
Area 7 - Ramp E Structure to Ground Wall
15-23 feet high

Area 7 - Ramp E Ground Wall
18 feet high

LEGEND Level of Service C Traffic Conditions

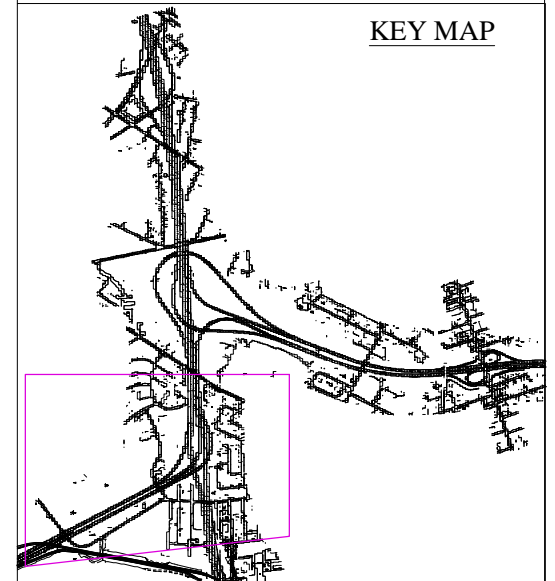
	Category B - Single-Family Structure that Approaches or Exceeds the NAC (66 dBA L _{eq})
	Category B - Dual-Family Structure that Approaches or Exceeds the NAC (66 dBA L _{eq})
	Category B - Multi-Family Structure that Approaches or Exceeds the NAC (66 dBA L _{eq})
	Category B - Special-Use Property (Cemetery or Recreational Area) that Approaches or Exceeds the NAC (66 dBA L _{eq})

	Category C - Commercial/Industrial Structure that Approaches or Exceeds the NAC (71 dBA L _{eq})
	Category E - School/Church Structure that Approaches or Exceeds the NAC, Interior (51 dBA L _{eq})
	Structure Acquisitions



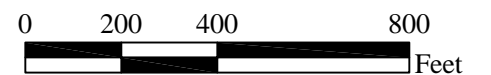
PROJECT NORTH

KEY MAP



LEGEND

- Proposed Improvements
- Structure Limits
- 66 dBA L_{eq} Noise Contour
- Existing Noise Wall Location
- Removed Existing Noise Wall Locations
- Replacement Noise Wall Location
- New Noise Wall Location

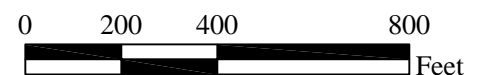
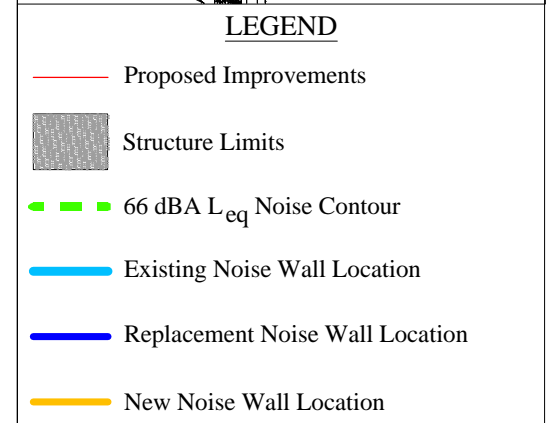
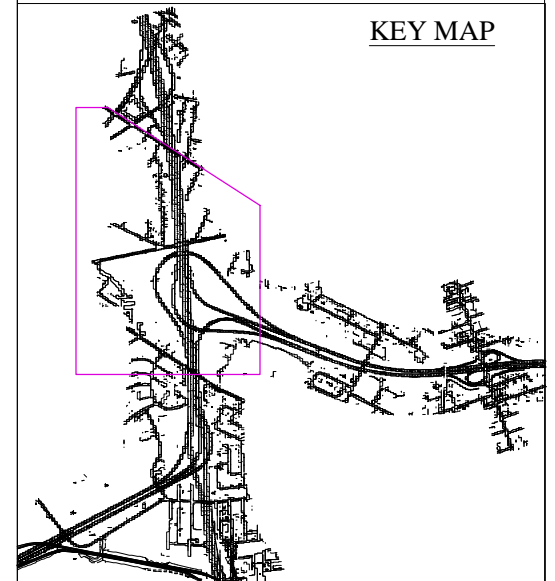
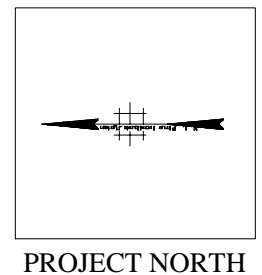
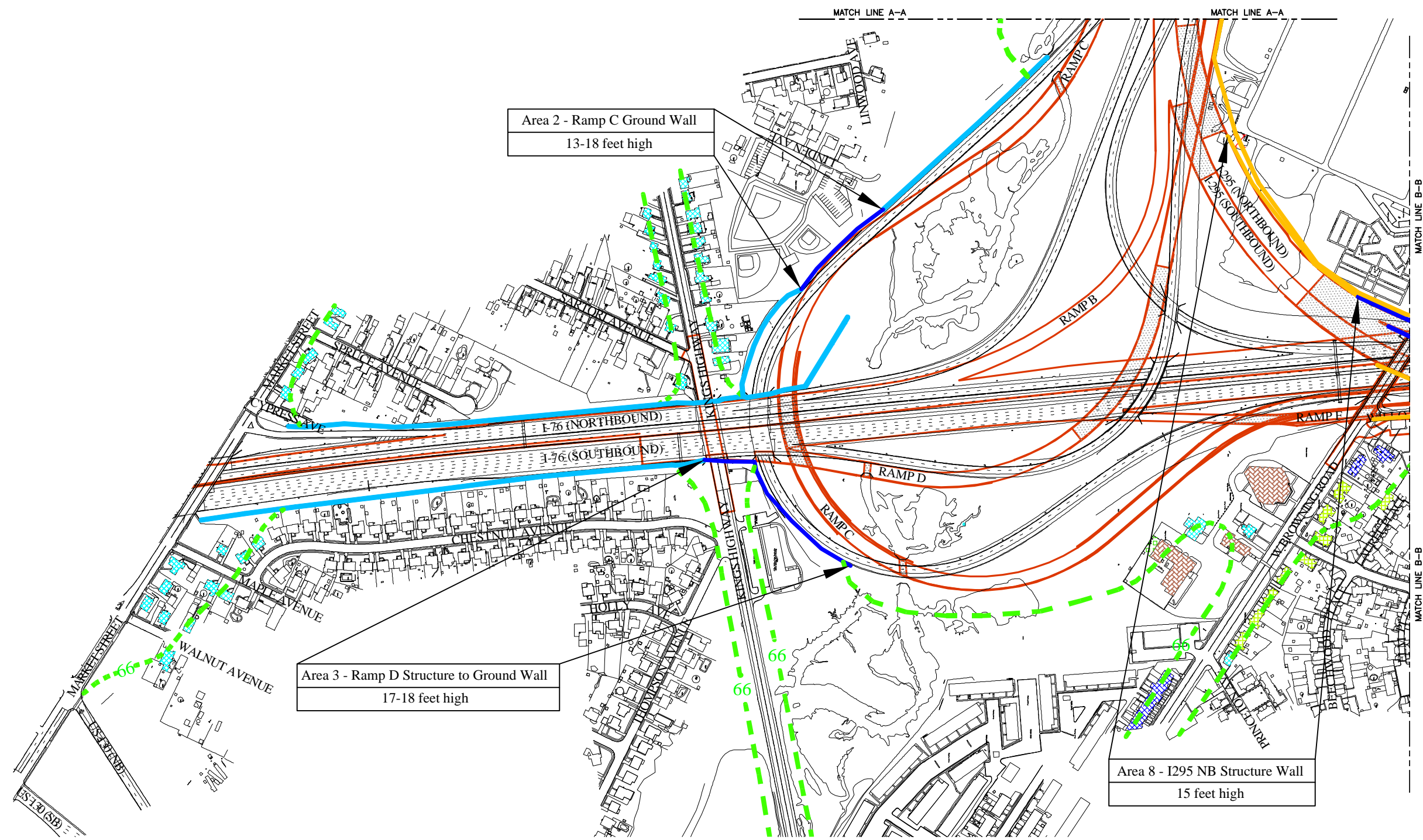


New Jersey Department of Transportation

I-295/I-76/Route 42 Direct Connection Camden County Figure 12.1.2

2030 "Alternative D" Proposed Noise Walls

Date April 14, 2006



New Jersey Department of Transportation

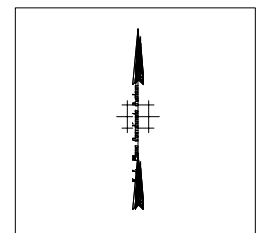
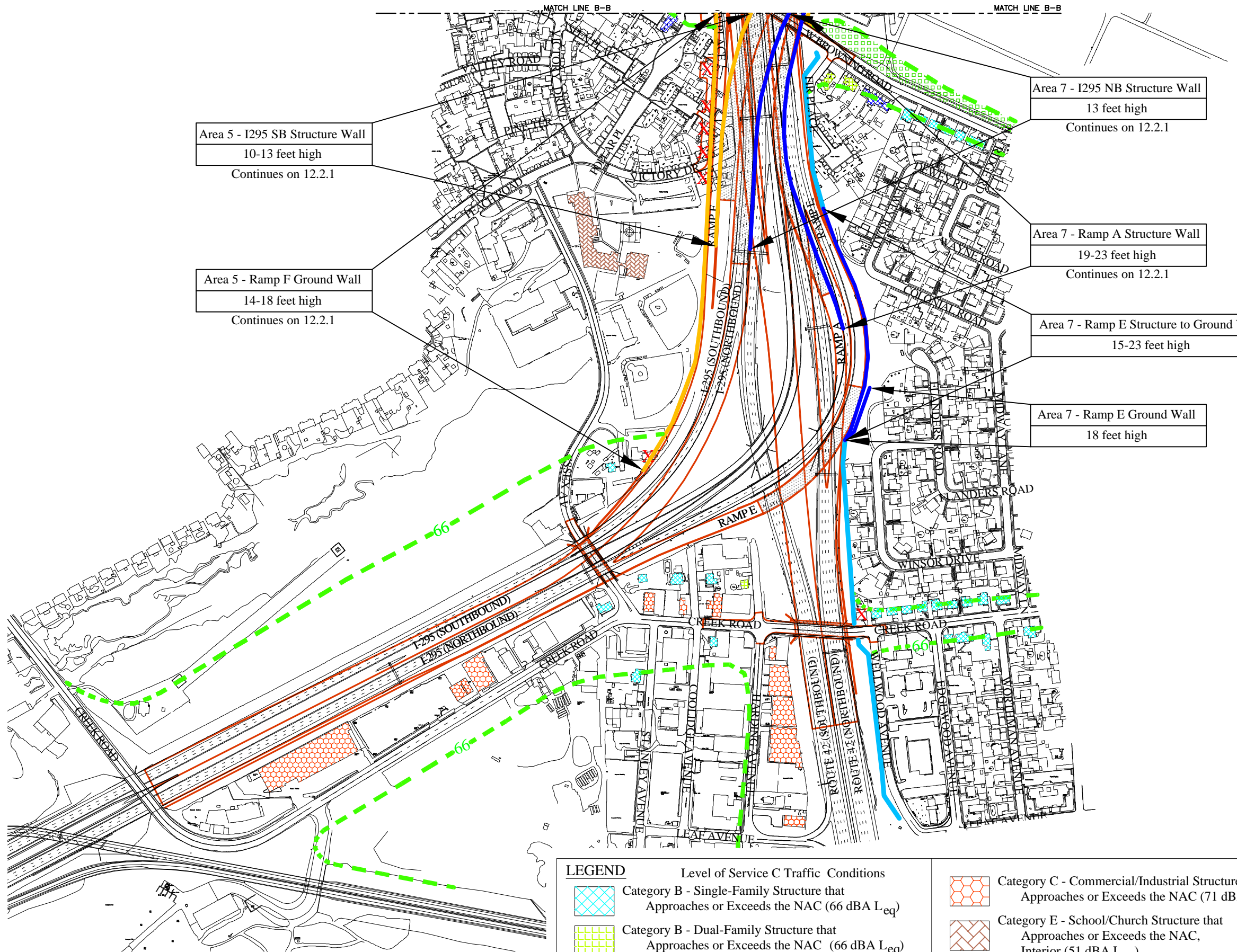
I-295/I-76/Route 42 Direct Connection Camden County Figure 12.2.1

2030 "Alternative D1" Proposed Noise Walls

Date April 14, 2006

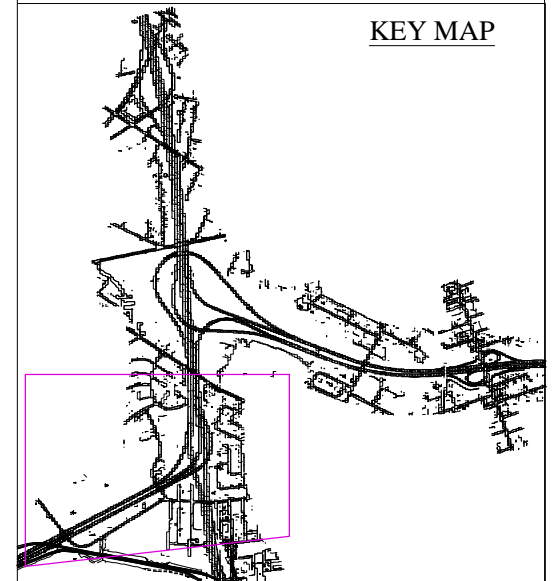
LEGEND Level of Service C Traffic Conditions

<ul style="list-style-type: none"> Category B - Single-Family Structure that Approaches or Exceeds the NAC (66 dBA L_{eq}) Category B - Dual-Family Structure that Approaches or Exceeds the NAC (66 dBA L_{eq}) Category B - Multi-Family Structure that Approaches or Exceeds the NAC (66 dBA L_{eq}) Category B - Special-Use Property (Cemetery or Recreational Area) that Approaches or Exceeds the NAC (66 dBA L_{eq}) 	<ul style="list-style-type: none"> Category C - Commercial/Industrial Structure that Approaches or Exceeds the NAC (71 dBA L_{eq}) Category E - School/Church Structure that Approaches or Exceeds the NAC, Interior (51 dBA L_{eq}) X Structure Acquisitions
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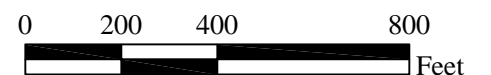
PROJECT NORTH

KEY MAP



LEGEND

- Proposed Improvements
- Structure Limits
- - - 66 dBA L_{eq} Noise Contour
- Existing Noise Wall Location
- Replacement Noise Wall Location
- New Noise Wall Location



New Jersey Department of Transportation

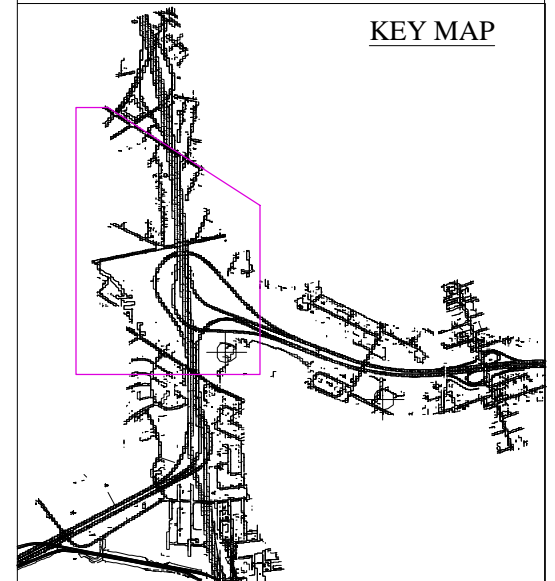
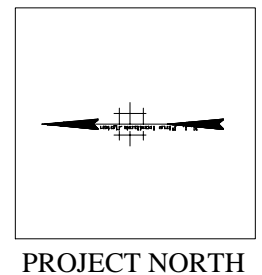
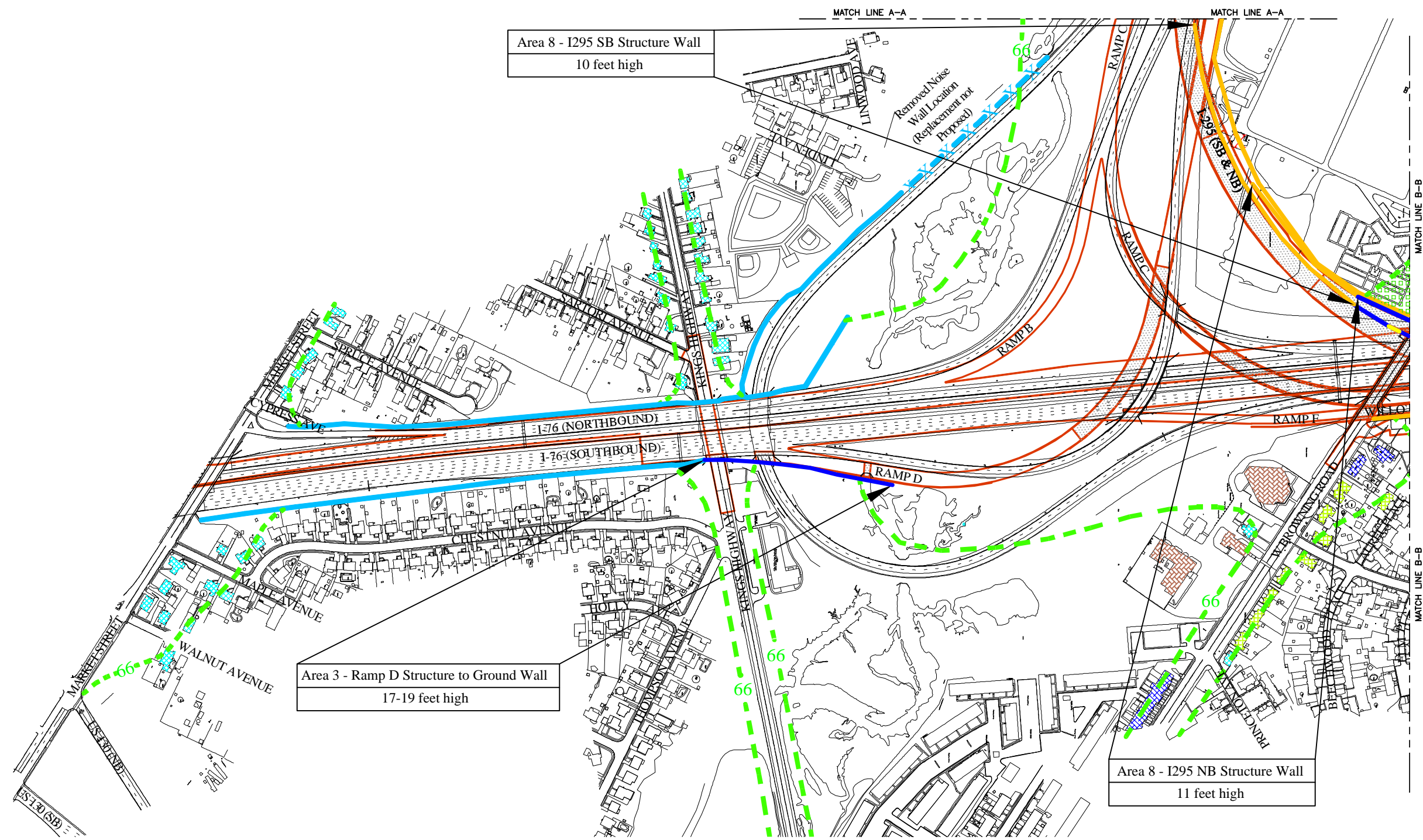
I-295/I-76/Route 42 Direct Connection Camden County Figure 12.2.2

2030 "Alternative D1" Proposed Noise Walls

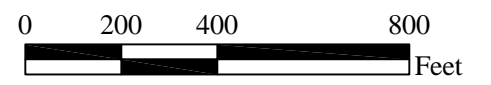
Date April 14, 2006

LEGEND

- | | |
|---|---|
| <p style="text-align: center;">Level of Service C Traffic Conditions</p> <ul style="list-style-type: none"> Category B - Single-Family Structure that Approaches or Exceeds the NAC (66 dBA L_{eq}) Category B - Dual-Family Structure that Approaches or Exceeds the NAC (66 dBA L_{eq}) Category B - Multi-Family Structure that Approaches or Exceeds the NAC (66 dBA L_{eq}) Category B - Special-Use Property (Cemetery or Recreational Area) that Approaches or Exceeds the NAC (66 dBA L_{eq}) | <ul style="list-style-type: none"> Category C - Commercial/Industrial Structure that Approaches or Exceeds the NAC (71 dBA L_{eq}) Category E - School/Church Structure that Approaches or Exceeds the NAC, Interior (51 dBA L_{eq}) X Structure Acquisitions |
|---|---|



- LEGEND**
- Proposed Improvements
 - Structure Limits
 - - - 66 dBA L_{eq} Noise Contour
 - Existing Noise Wall Location
 - X-X Removed Existing Noise Wall Locations
 - Replacement Noise Wall Location
 - - - Stacked Noise Wall Location (NB & SB)
 - New Noise Wall Location
 - - - Stacked Noise Wall Location (NB & SB)



New Jersey Department of Transportation

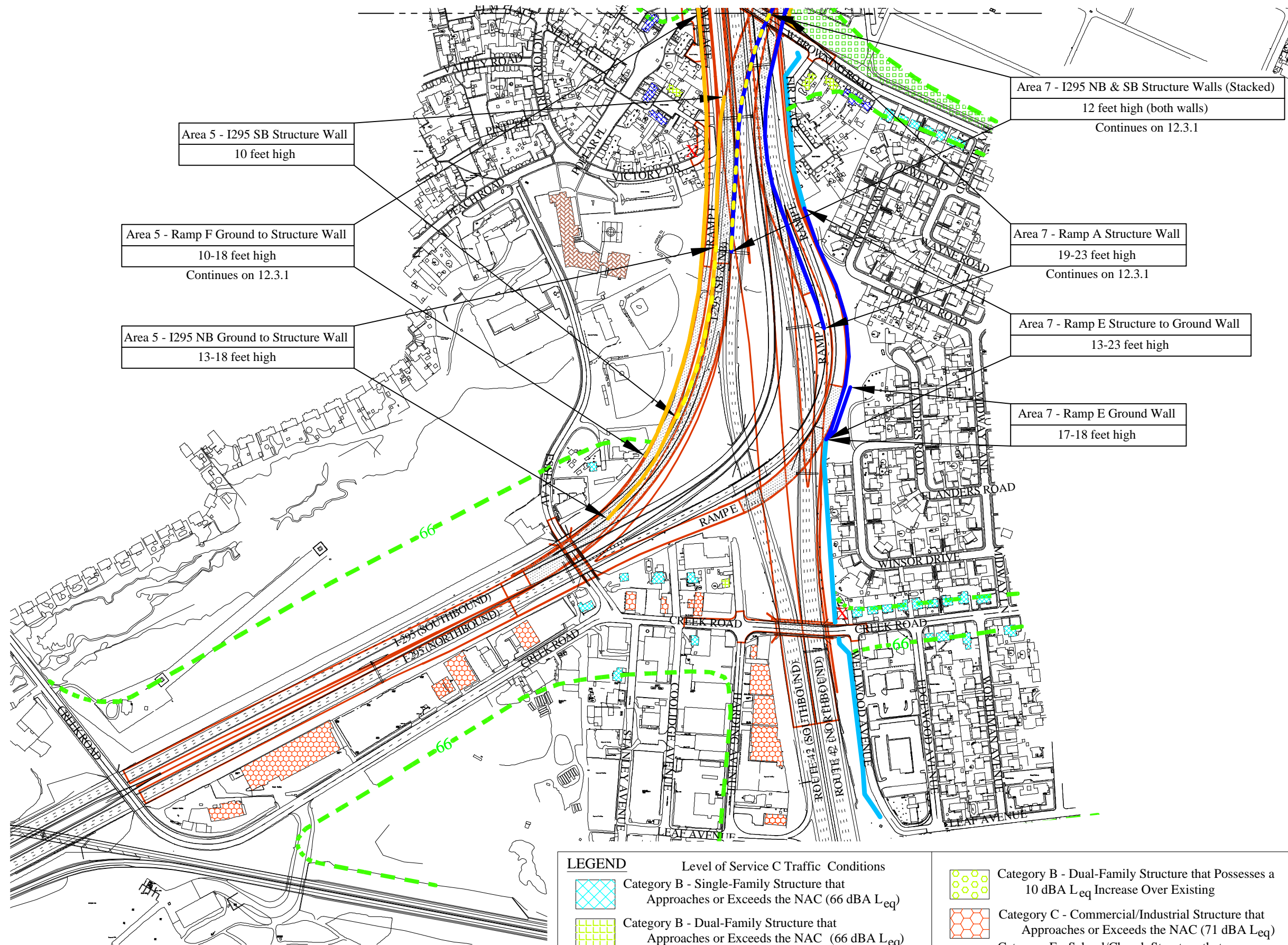
I-295/I-76/Route 42 Direct Connection Camden County Figure 12.3.1

2030 "Alternative G2" Proposed Noise Walls

Date April 14, 2006

- LEGEND** Level of Service C Traffic Conditions
- Category B - Single-Family Structure that Approaches or Exceeds the NAC (66 dBA L_{eq})
 - Category B - Dual-Family Structure that Approaches or Exceeds the NAC (66 dBA L_{eq})
 - Category B - Multi-Family Structure that Approaches or Exceeds the NAC (66 dBA L_{eq})
 - Category B - Special-Use Property (Cemetery or Recreational Area) that Approaches or Exceeds the NAC (66 dBA L_{eq})

- Category B - Dual-Family Structure that Possesses a 10 dBA L_{eq} Increase Over Existing
- Category C - Commercial/Industrial Structure that Approaches or Exceeds the NAC (71 dBA L_{eq})
- Category E - School/Church Structure that Approaches or Exceeds the NAC, Interior (51 dBA L_{eq})
- X Structure Acquisitions



Area 5 - I-295 SB Structure Wall
10 feet high

Area 5 - Ramp F Ground to Structure Wall
10-18 feet high
Continues on 12.3.1

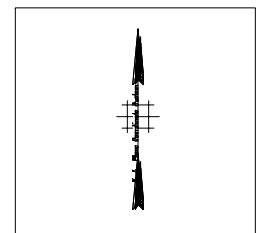
Area 5 - I-295 NB Ground to Structure Wall
13-18 feet high

Area 7 - I-295 NB & SB Structure Walls (Stacked)
12 feet high (both walls)
Continues on 12.3.1

Area 7 - Ramp A Structure Wall
19-23 feet high
Continues on 12.3.1

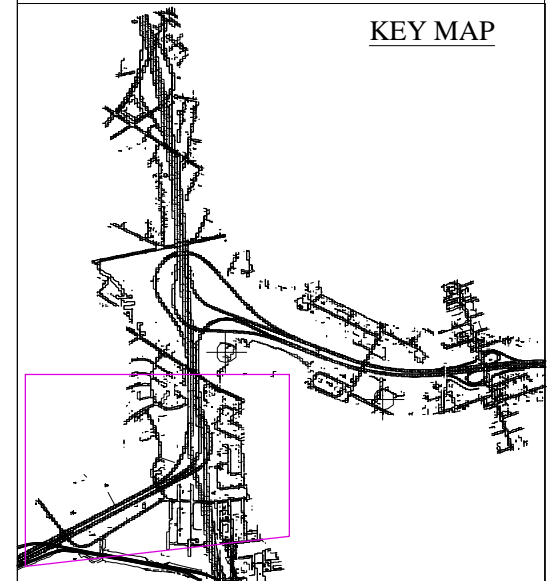
Area 7 - Ramp E Structure to Ground Wall
13-23 feet high

Area 7 - Ramp E Ground Wall
17-18 feet high



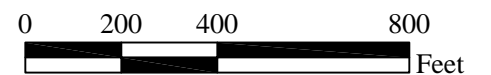
PROJECT NORTH

KEY MAP



LEGEND

- Proposed Improvements
- Structure Limits
- - - 66 dBA L_{eq} Noise Contour
- Existing Noise Wall Location
- X-X Removed Existing Noise Wall Locations
- Replacement Noise Wall Location
- - - Stacked Noise Wall Location (NB & SB)
- New Noise Wall Location
- - - Stacked Noise Wall Location (NB & SB)



New Jersey Department of Transportation

I-295/I-76/Route 42 Direct Connection Camden County Figure 12.3.2

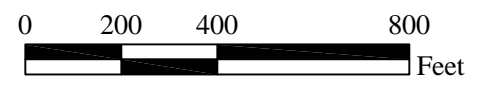
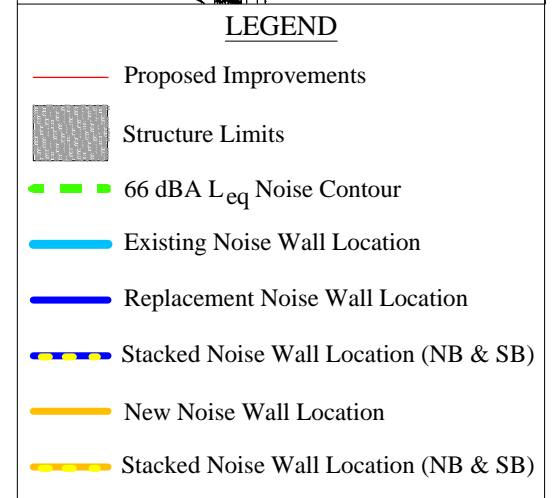
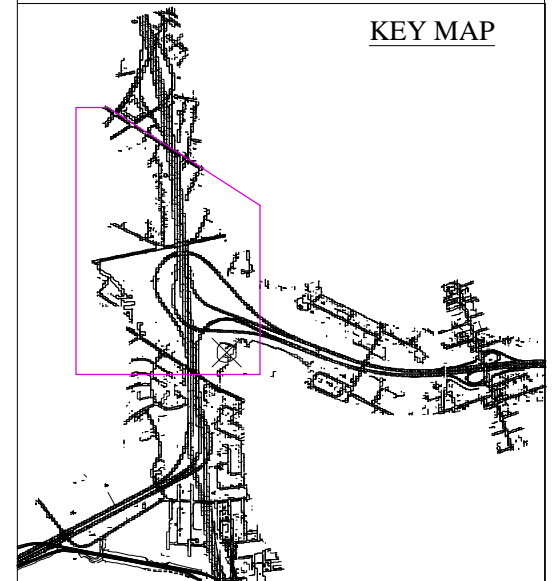
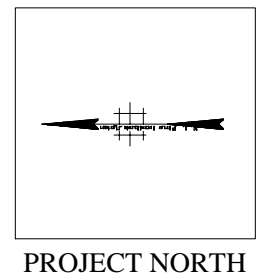
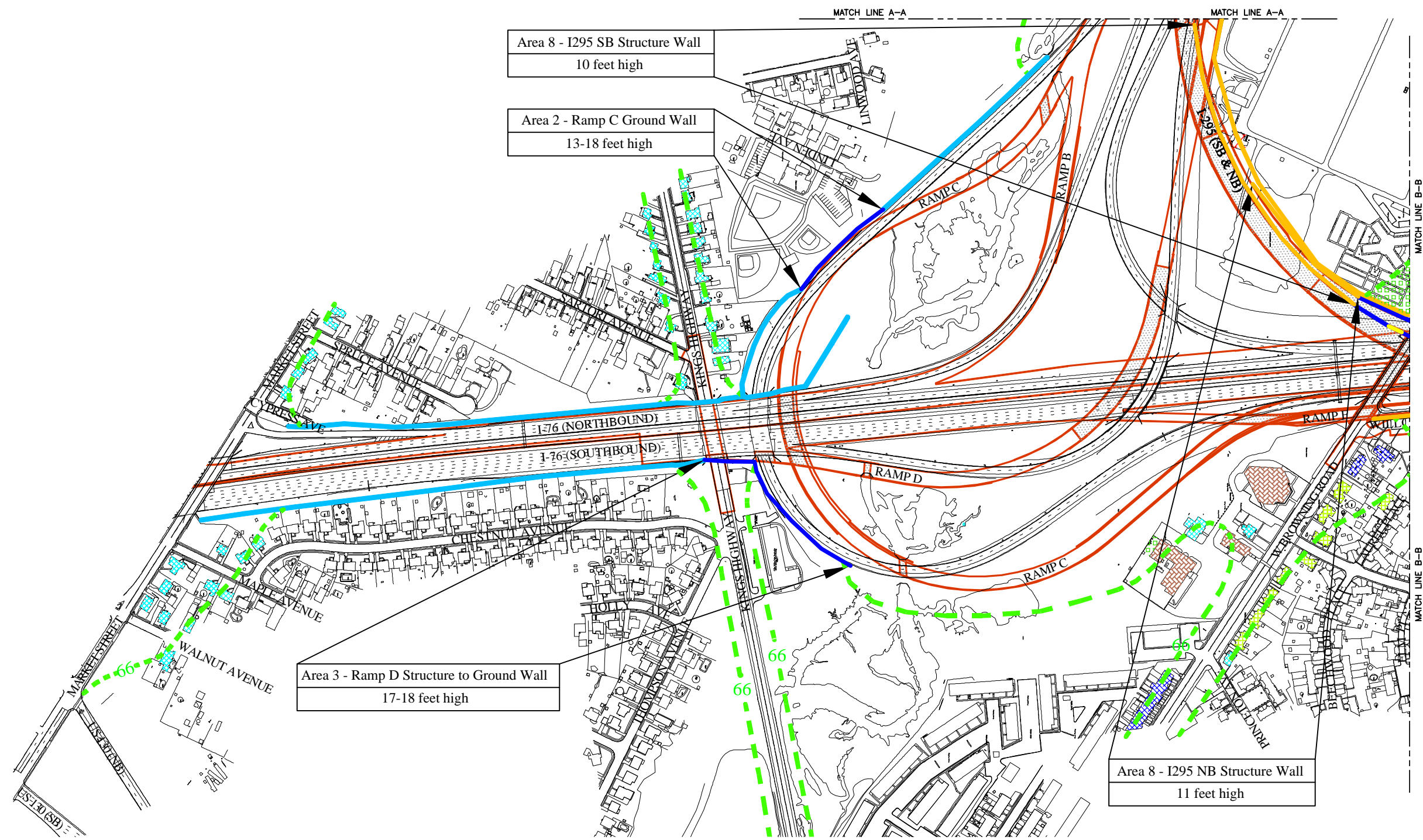
2030 "Alternative G2" Proposed Noise Walls

Date April 14, 2006

LEGEND

Level of Service C Traffic Conditions

- | | |
|--|---|
| <ul style="list-style-type: none"> Category B - Single-Family Structure that Approaches or Exceeds the NAC (66 dBA L_{eq}) Category B - Dual-Family Structure that Approaches or Exceeds the NAC (66 dBA L_{eq}) Category B - Multi-Family Structure that Approaches or Exceeds the NAC (66 dBA L_{eq}) Category B - Special-Use Property (Cemetery or Recreational Area) that Approaches or Exceeds the NAC (66 dBA L_{eq}) | <ul style="list-style-type: none"> Category B - Dual-Family Structure that Possesses a 10 dBA L_{eq} Increase Over Existing Category C - Commercial/Industrial Structure that Approaches or Exceeds the NAC (71 dBA L_{eq}) Category E - School/Church Structure that Approaches or Exceeds the NAC, Interior (51 dBA L_{eq}) X Structure Acquisitions |
|--|---|



New Jersey Department of Transportation

I-295/I-76/Route 42 Direct Connection Camden County Figure 12.4.1

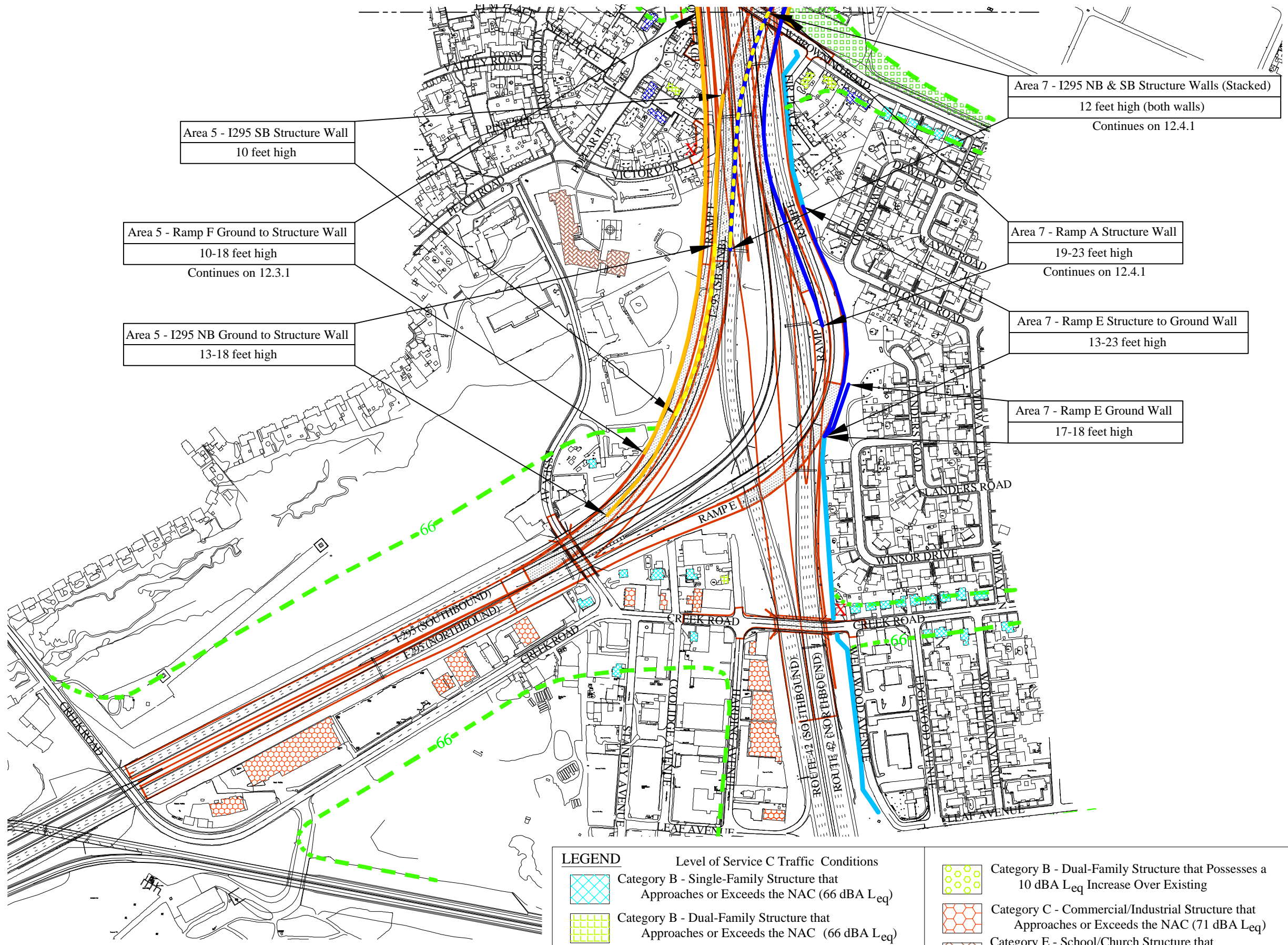
2030 "Alternative H1" Proposed Noise Walls

Date April 14, 2006

LEGEND Level of Service C Traffic Conditions

	Category B - Single-Family Structure that Approaches or Exceeds the NAC (66 dBA L_{eq})
	Category B - Dual-Family Structure that Approaches or Exceeds the NAC (66 dBA L_{eq})
	Category B - Multi-Family Structure that Approaches or Exceeds the NAC (66 dBA L_{eq})
	Category B - Special-Use Property (Cemetery or Recreational Area) that Approaches or Exceeds the NAC (66 dBA L_{eq})

	Category B - Dual-Family Structure that Possesses a 10 dBA L_{eq} Increase Over Existing
	Category C - Commercial/Industrial Structure that Approaches or Exceeds the NAC (71 dBA L_{eq})
	Category E - School/Church Structure that Approaches or Exceeds the NAC, Interior (51 dBA L_{eq})
X	Structure Acquisitions



Area 5 - I-295 SB Structure Wall
10 feet high

Area 5 - Ramp F Ground to Structure Wall
10-18 feet high
Continues on 12.3.1

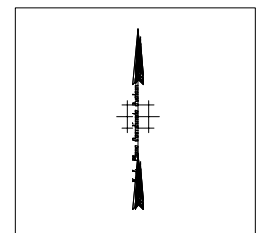
Area 5 - I-295 NB Ground to Structure Wall
13-18 feet high

Area 7 - I-295 NB & SB Structure Walls (Stacked)
12 feet high (both walls)
Continues on 12.4.1

Area 7 - Ramp A Structure Wall
19-23 feet high
Continues on 12.4.1

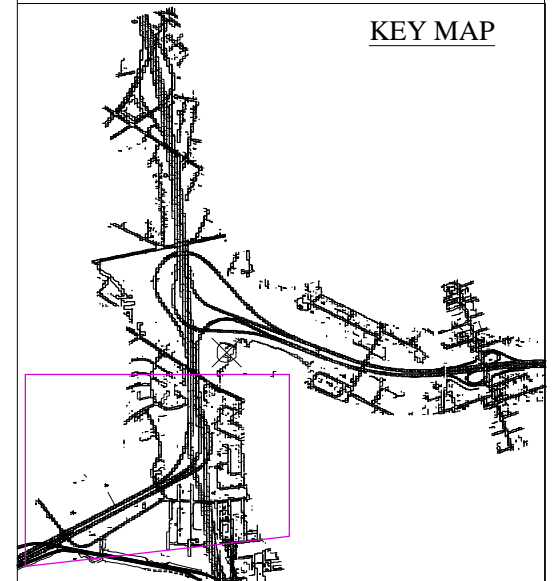
Area 7 - Ramp E Structure to Ground Wall
13-23 feet high

Area 7 - Ramp E Ground Wall
17-18 feet high



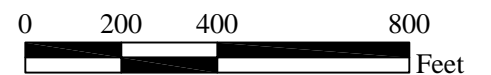
PROJECT NORTH

KEY MAP



LEGEND

- Proposed Improvements
- Structure Limits
- - - 66 dBA L_{eq} Noise Contour
- Existing Noise Wall Location
- Replacement Noise Wall Location
- Stacked Noise Wall Location (NB & SB)
- New Noise Wall Location
- Stacked Noise Wall Location (NB & SB)



New Jersey Department of Transportation

I-295/I-76/Route 42 Direct Connection Camden County Figure 12.4.2

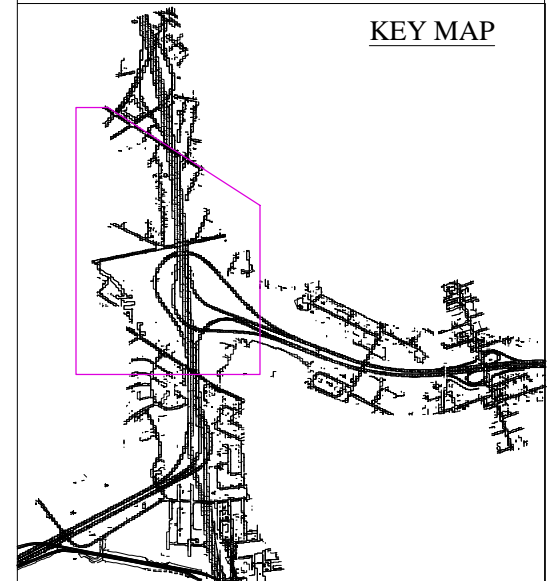
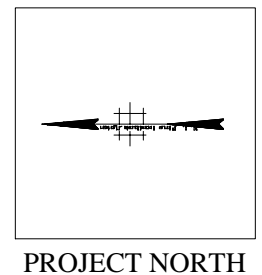
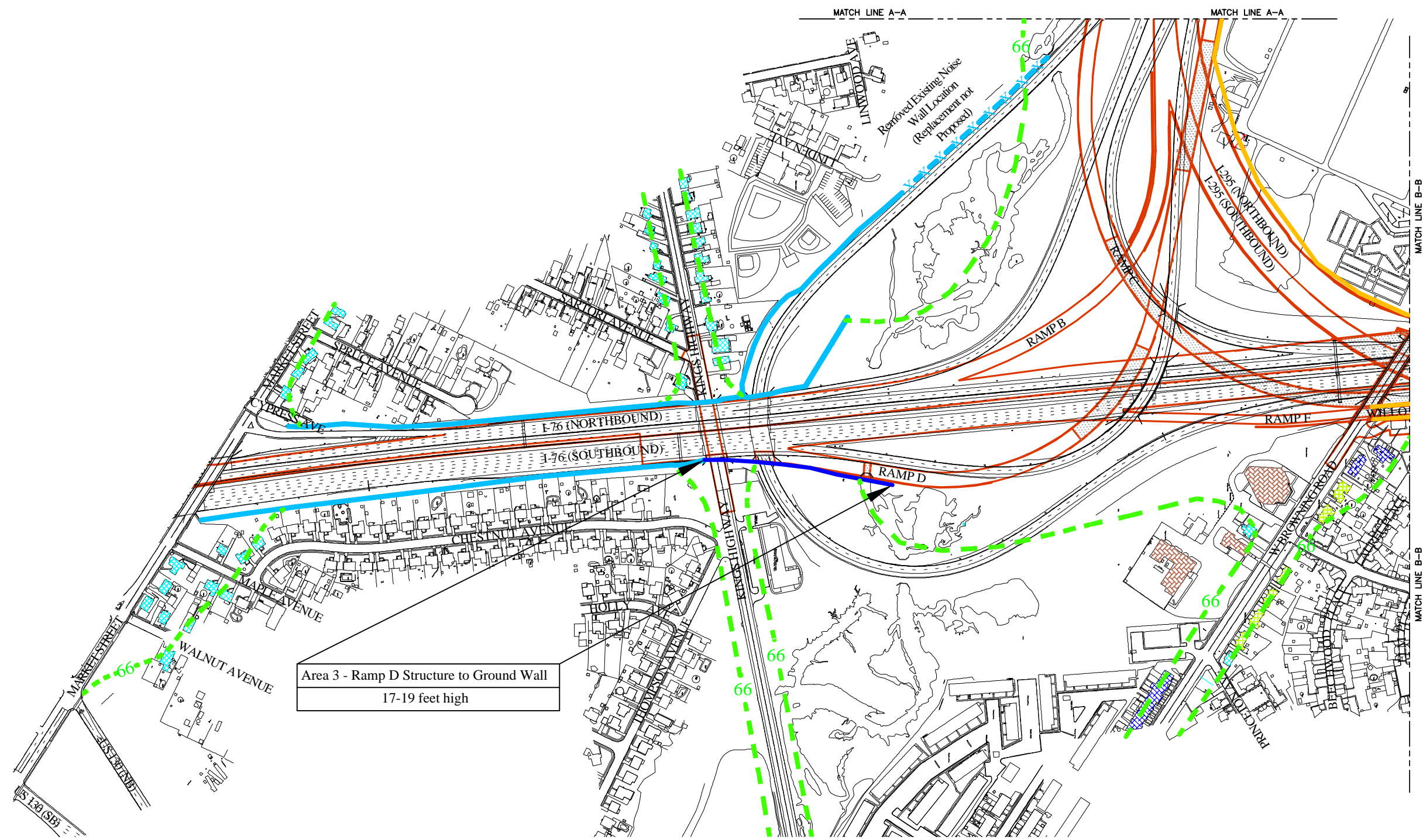
2030 "Alternative H1" Proposed Noise Walls

Date April 14, 2006

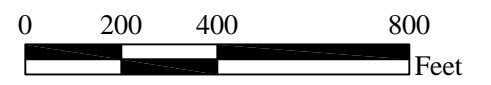
LEGEND

Level of Service C Traffic Conditions

- | | |
|--|---|
| <ul style="list-style-type: none"> Category B - Single-Family Structure that Approaches or Exceeds the NAC (66 dBA L_{eq}) Category B - Dual-Family Structure that Approaches or Exceeds the NAC (66 dBA L_{eq}) Category B - Multi-Family Structure that Approaches or Exceeds the NAC (66 dBA L_{eq}) Category B - Special-Use Property (Cemetery or Recreational Area) that Approaches or Exceeds the NAC (66 dBA L_{eq}) | <ul style="list-style-type: none"> Category B - Dual-Family Structure that Possesses a 10 dBA L_{eq} Increase Over Existing Category C - Commercial/Industrial Structure that Approaches or Exceeds the NAC (71 dBA L_{eq}) Category E - School/Church Structure that Approaches or Exceeds the NAC, Interior (51 dBA L_{eq}) X Structure Acquisitions |
|--|---|



- LEGEND**
- Proposed Improvements
 - Structure Limits
 - - - 66 dBA L_{eq} Noise Contour
 - Existing Noise Wall Location
 - X-X- Removed Existing Noise Wall Locations
 - Replacement Noise Wall Location
 - New Noise Wall Location



New Jersey Department of Transportation

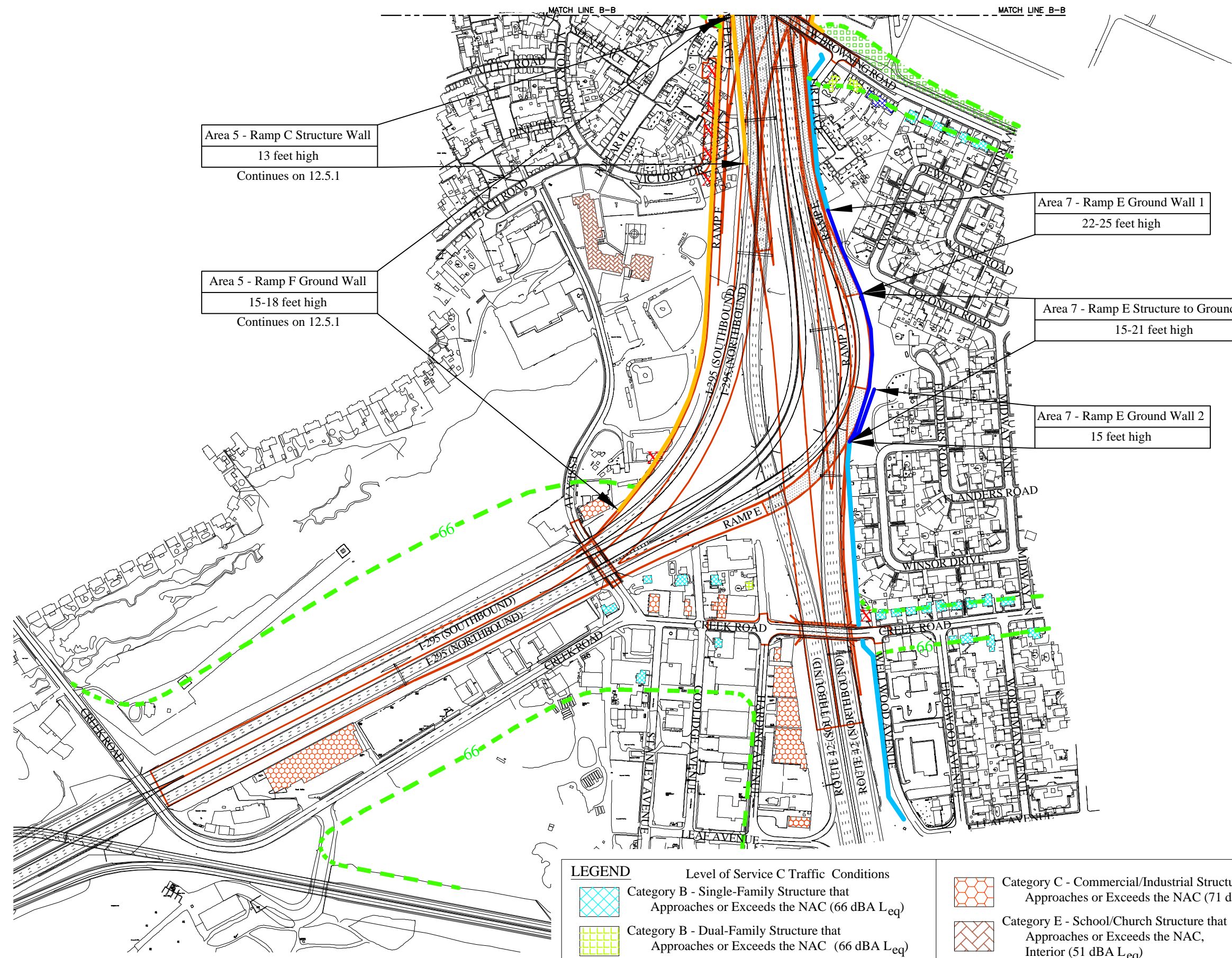
I-295/I-76/Route 42 Direct Connection Camden County Figure 12.5.1

2030 "Alternative K" Proposed Noise Walls

Date April 14, 2006

- LEGEND** Level of Service C Traffic Conditions
- Category B - Single-Family Structure that Approaches or Exceeds the NAC (66 dBA L_{eq})
 - Category B - Dual-Family Structure that Approaches or Exceeds the NAC (66 dBA L_{eq})
 - Category B - Multi-Family Structure that Approaches or Exceeds the NAC (66 dBA L_{eq})
 - Category B - Special-Use Property (Cemetery or Recreational Area) that Approaches or Exceeds the NAC (66 dBA L_{eq})

- Category C - Commercial/Industrial Structure that Approaches or Exceeds the NAC (71 dBA L_{eq})
- Category E - School/Church Structure that Approaches or Exceeds the NAC, Interior (51 dBA L_{eq})
- X Structure Acquisitions



Area 5 - Ramp C Structure Wall
13 feet high
Continues on 12.5.1

Area 5 - Ramp F Ground Wall
15-18 feet high
Continues on 12.5.1

Area 7 - Ramp E Ground Wall 1
22-25 feet high

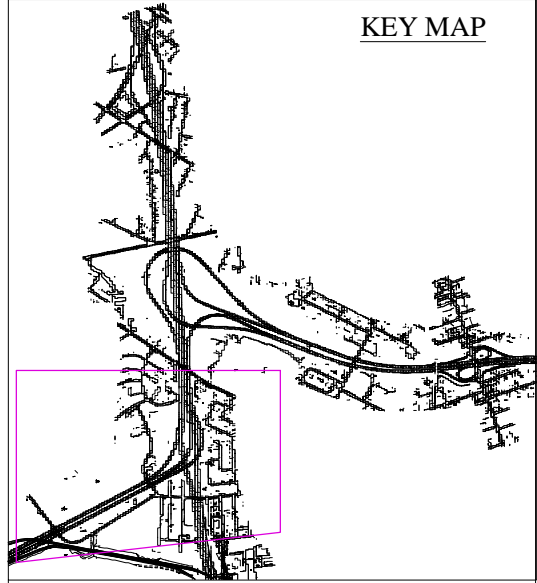
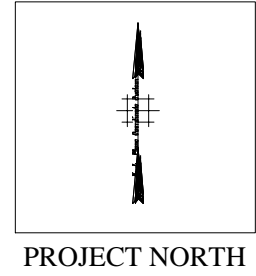
Area 7 - Ramp E Structure to Ground Wall
15-21 feet high

Area 7 - Ramp E Ground Wall 2
15 feet high

LEGEND Level of Service C Traffic Conditions

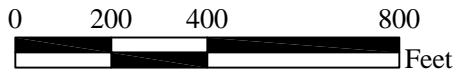
	Category B - Single-Family Structure that Approaches or Exceeds the NAC (66 dBA L _{eq})
	Category B - Dual-Family Structure that Approaches or Exceeds the NAC (66 dBA L _{eq})
	Category B - Multi-Family Structure that Approaches or Exceeds the NAC (66 dBA L _{eq})
	Category B - Special-Use Property (Cemetery or Recreational Area) that Approaches or Exceeds the NAC (66 dBA L _{eq})

	Category C - Commercial/Industrial Structure that Approaches or Exceeds the NAC (71 dBA L _{eq})
	Category E - School/Church Structure that Approaches or Exceeds the NAC, Interior (51 dBA L _{eq})
	Structure Acquisitions



LEGEND

- Proposed Improvements
- Structure Limits
- 66 dBA L_{eq} Noise Contour
- Existing Noise Wall Location
- Removed Existing Noise Wall Locations
- Replacement Noise Wall Location
- New Noise Wall Location



New Jersey Department of Transportation

**I-295/I-76/Route 42
Direct Connection
Camden County
Figure 12.5.2**

2030 "Alternative K" Proposed Noise Walls

Date April 14, 2006

Appendix E:
Qualifications of Researchers

Elizabeth Amisson
Senior Architectural Historian

Ms. Amisson is an architectural historian with approximately six years of experience in cultural resource management. Her primary responsibilities consist of conducting historic research and historic architectural surveys, preparing historic contexts, and writing assessment of eligibility and effects reports for transportation projects. Ms. Amisson has identified, surveyed, and evaluated numerous residential, commercial, agricultural, industrial, transportation-related, and military resources in Pennsylvania, New Jersey, New York, Delaware, Virginia, Massachusetts, and Maine. She is knowledgeable of the Secretary of the Interior's Standards for the identification and evaluation of historic resources, as well as the Section 106 Review process. She is also familiar with the guidelines established by the National Park Service for the Historic American Buildings Survey/Historic American Engineering Record (HABS/HAER), and has completed HABS/HAER recordation for the Department of the Navy. Ms. Amisson meets the National Park Service's professional requirements as specified in 36 CFR Part 61.

Education

1999 BS, Architectural Studies, Philadelphia University

Professional Experience

2002 – present A.D. Marble & Company

Senior Architectural Historian

1999 – 2002 Kise Straw & Kolodner, Inc.

Cultural Resources Specialist

Professional Affiliations

National Trust for Historic Preservation
Vernacular Architecture Forum
Preservation Pennsylvania
Preservation New Jersey
Recent Past Preservation Network

Paul W. Schopp **Senior Historian**

Mr. Schopp is employed as a senior historian by A.D. Marble & Company to conduct historic background research, property specific research, and historic context development. He has more than 25 years of experience in American history and the American historic landscape. His work has been primarily within the transportation industry, working closely with engineering firms, state departments of transportation, and state historic preservation offices to prepare Section 106 documentation and related reports for highway improvements projects, bridge replacement and rehabilitation projects, and other transportation related projects.

Professional Experience

2000 - Present	A.D. Marble & Company	<i>Senior Historian</i>
1998 - 2000	Richard Grubb & Associates, Inc.	<i>Historian</i>
1996 - 2000	Camden County Historical Society	<i>Executive Director</i>
1987 - 2000	Paul W. Schopp, Historical Consultant	<i>Historical Consultant</i>

Professional and Historical Organization Memberships

Atlantic County Historical Society
Batsto Citizens Committee
Burlington County Historical Society
Camden County Historical Society
Delaware Valley Archives Group
Gloucester County Historical Society
Friends of the Pennsylvania State R.R. Museum
Historical Society of Pennsylvania
Historical Society of Riverton
National Railway Historical Society (National)
New Jersey Historical Society
New Jersey Postal History Society
Ocean County Historical Society
Pennsylvania Railroad Technical & Historical Society (National)
Pennsylvania Railroad Technical & Historical Society (Philadelphia Chapter)
Railroad & Locomotive Historical Society
Society for Industrial Archaeology (National)
Society for Industrial Archaeology (Oliver Evans Chapter, Philadelphia)
Society for Industrial Archaeology (Roebing Chapter, New York City)
Steamship Historical Society of America (National)
Steamship Historical Society of America (Delaware Valley Chapter, Philadelphia)
Walt Whitman Association
West Jersey Chapter, National Railway Historical Society (Palmyra, New Jersey)
West Jersey History Roundtable

Professional Appointments

2001	Appointed by Mayor Faison to the Camden City Historic Preservation Commission
2001	Reappointed by Governor Whitman to the New Jersey State Historic Records Advisory Board
2000	Camden County Open Space Preservation Trust Fund Advisory Committee
1999	Camden County Millennium Sub-Committee on History
1998	Appointed by Governor Whitman to the New Jersey State Historic Records Advisory Board

**US Department of Transportation
Federal Highway Administration
New Jersey Department of Transportation**

