#### INDEX FOR STANDARD ROADWAY CONSTRUCTION DETAILS

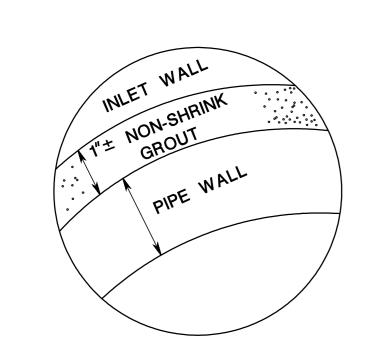
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DESCRIPTION	CD	DESCRIPTION	CD	DESCRIPTION	CD
DELINEATORS		HEADWALLS		INLET TYPE D1	CD-602-5.1
GROUND MOUNTED FLEXIBLE DELINEATORS	CD-610-4	CONCRETE HEADWALL AND APRON	CD-602-10	INLET TYPE D2	CD-602-5.2
	95 0.0	CONCRETE HEADWALL	CD-602-10.1	CURB PIECE FOR INLETS, TYPE D1 AND D2	CD-602-5.3
		CONCRETE HEADWALL WITH APRON	CD-602-10.2	GENERAL NOTES	CD-602-5.4
DRIVEWAYS				REPLACE INLET CURB PIECE TYPE B OR D IN	CD-602-5A
CONCRETE AND HMA DRIVEWAY AND SIDEWALK	CD-606-5	INLETS AND MANHOLES		EXISTING CONCRETE BARRIER CURB	05 002 07
TYPE A	CD-606-5.1	INLET GENERAL DETAILS	CD-602-1	EXISTING CONDITION	CD-602-5A.1
TYPE B	CD-606-5.2	CONNECTION OF PIPE AND INLET FOR PRECAST INLET	CD-602-1.1	DETAIL A	CD-602-5A.2
TYPE C	CD-606-5.3	RISER JOINT DETAIL FOR PRECAST INLETS	CD-602-1.2	SECTION A-A	CD-602-5A.3
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TYPE F	CD-606-5.6	COPOLYMER POLYPROPYLENE PLASTIC LADDER RUNG	CD-602-1.5	NOTES	CD-602-5A.6
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TYPICAL DRIVEWAY TREATMENT	CD-606-5.8	SQUARE FRAME MANHOLE CASTING, CIRCULAR COVER	CD-602-1.7	EXISTING CONCRETE BARRIER CURB IN NEW CONCRETE SECTION	CD-602-5B
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SOIL IN UNPAVED AREAS, TYPICAL CROSS-SECTION	CD-202-1.2	INLET TYPE B AND TYPE C CASTING	CD-602-2.6	EXTENSION RINGS FOR EXISTING MANHOLE	CD-602-7.1
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DRIVE ANCHOR SHOE ASSEMBLY	CD-605-1.2	INLET, TYPE E	CD-602-4.2	LONGITUDINAL AND TRANSVERSE JOINT TREATMENT FOR CONCRETE ISLAND	CD-606-6.2
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CHAIN-LINK FARM-TYPE FENCE	CD-605-2.1	INLETS, TYPE D1 & D2	CD-602-5		

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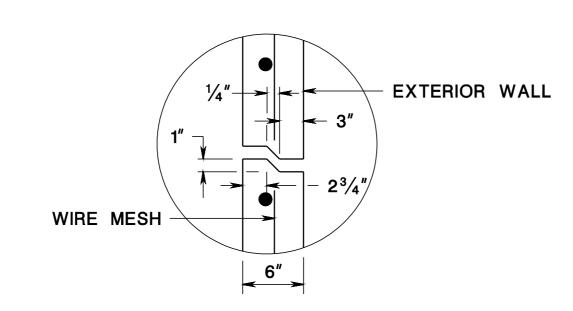
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JOINTS		LANDSCAPING		NON-VEGETATIVE SURFACE, UNDER MEDIAN GUIDE RAIL	CD-608-1.7
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OFFSET OF JOINTS	CD-401-2.2	PLANTING	CD-811-1	NON-VEGETATIVE SURFACE AROUND OVERHEAD SIGN FOUNDATIONS AND	CD-608-1.9
HMA PAVEMENT	CD-401-2.3	TREE PLANTING - 2H:1V SLOPE	CD-811-1.1	UNDER LARGE GROUND MOUNTED SIGNS	
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CONSTRUCTION JOINT TIE BOLT	CD-405-2.2	MILLING		HMA REPLACEMENT WHERE EXISTING OVERLAY AND CONCRETE COURSE IS REMOVED AT CROSS DRAIN OR UTILITY TRENCH WITH PROPOSED RESURFACING	CD-601-3.4
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CONTRACTION JOINT	CD-405-2.6	MONUMENT		RAISED PAVEMENT MARKER (RPM)	
NOTES	CD-405-2.7	MONUMENT AND MONUMENT BOX	CD-157-1	RAISED PAVEMENT MARKER (RPM), LOCATION	CD-610-1
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PAVEMENT / SHOULDER		MONUMENT BOX FOR NEW MONUMENT	CD-157-1.2	LEGEND	CD-610-1.2
CONCRETE PAVEMENT JOINTS NON-SKEWED	CD-405-3			TYPICAL ACCELERATION LANE TREATMENT	CD-610-1.3
LOAD TRANSFER ASSEMBLIES		NON-VEGETATIVE SURFACE		TYPICAL PAVED MEDIAN TREATMENT	CD-610-1.4
TYPICAL EXPANSION JOINT ASSEMBLY - PLAN	CD-405-3.1	NON-VEGETATIVE SURFACES AROUND GUIDE RAIL ANCHORAGE	CD-608-1	RAISED PAVEMENT MARKER (RPM), LOCATION	CD-610-2
TYPICAL CONTRACTION JOINT ASSEMBLY - PLAN	CD-405-3.2	NON-VEGETATIVE SURFACES AROUND GUIDE RAIL BEHIND CURB OR		TYPICAL DIVISIONAL ISLAND TREATMENT	CD-610-2.1
EXPANSION JOINT ASSEMBLY - ELEVATION	CD-405-3.3	RAISED BERM	CD-608-1.1	NARROW BRIDGE OR CULVERT TREATMENT	CD-610-2.2
CONTRACTION JOINT ASSEMBLY - ELEVATION	CD-405-3.4	NON-VEGETATIVE SURFACE AT EDGE OF PAVEMENT ON UMBRELLA SECTION		LEGEND	CD-610-2.3
CENTER FRAME WIRE DETAIL	CD-405-3.5	WHERE GUIDE RAIL IS USED	CD-608-1.2	TYPICAL TWO LANE SECTION	CD-610-2.4
EXPANSION JOINT ASSEMBLY - SECTION A-A	CD-405-3.6	NON-VEGETATIVE SURFACES AROUND GUIDE RAIL ANCHORAGE	CD-608-1.3	TYPICAL LEFT TURN LANE SECTION	CD-610-2.5
CONTRACTION JOINT ASSEMBLY - SECTION B-B	CD-405-3.7	LEAVE OUT FOR NON-VEGETATIVE SURFACE, HOT MIX ASPHALT ONLY	CD-608-1.4	RAISED PAVEMENT MARKER (RPM), LOCATION	CD-610-3
TYPICAL SIDE FRAME DETAIL - "A" DESIGN	CD-405-3.8	NON-VEGETATIVE SURFACE AROUND FLARED GUIDE RAIL WHERE GUIDE RAIL OFFSET FROM EDGE OF PAVEMENT IS GREATER THAN 4'-0"	CD-608-1.5	TYPICAL MULTI-LANE DIVIDED SECTION	CD-610-3.1
NOTES	CD-405-3.9			TYPICAL MULTI-LANE UNDIVIDED SECTION	CD-610-3.2
		NON-VEGETATIVE SURFACE AROUND FLARED GUIDE RAIL WHERE GUIDE RAIL OFFSET FROM EDGE OF PAVEMENT IS 4'-0" OR LESS	CD-608-1.6	METHOD FOR DETERMINING RPM SPACING ON HORIZONTAL CURVES	CD-610-3.3
				LEGEND	CD-610-3.4



### CONNECTION OF PIPE AND **INLET FOR PRECAST INLET**

CD-602-1.1



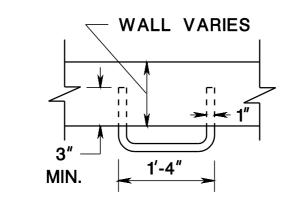
### RISER JOINT DETAIL FOR PRECAST INLETS

CD-602-1.2

**NOTE:** 

JOINT TO BE GROUTED WITH MORTAR BY CONTRACTOR

WALL VARIES -**ELEVATION** 



**PLAN** 

LADDER RUNGS FACING TRAFFIC 12" C TO C

**NOTE:** 

LADDER RUNGS FACING TRAFFIC 12" C TO C

LADDER RUNG DETAIL

CD-602-1.3 | 5.

- *- - - - - -*

SECTION A-A

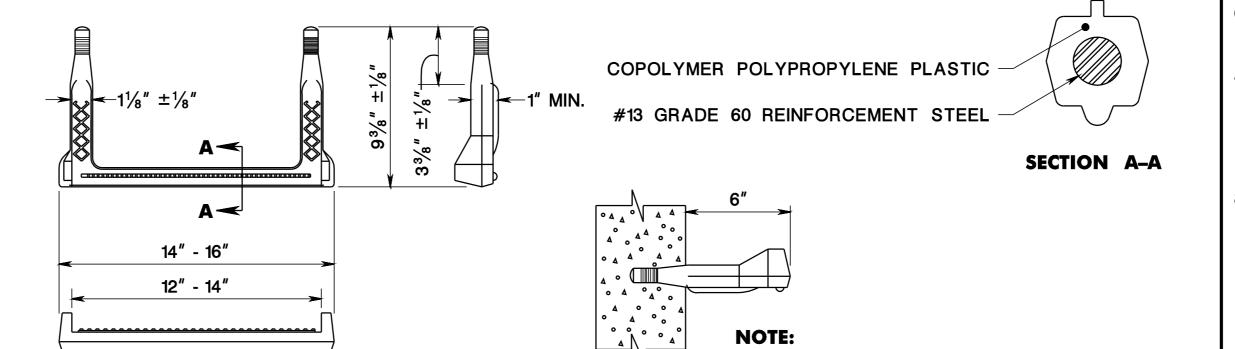
STAGE 2 STAGE 1 SECTION B-B

**NOTE:** 

FOUNDATION AND INVERT TO BE CONSTRUCTED IN TWO STAGES. THE TOP SURFACE OF STAGE 1 TO BE LEFT ROUGH.

# DETAIL OF INVERT FOR INLET WITHOUT CONTINUOUS PIPE

CD-602-1.4



## COPOLYMER POLYPROPYLENE PLASTIC LADDER RUNG

CD-602-1.5

CD-602-1.8

RIBS TAPER 3/4" TO 1" PICK HOLE <sup>3</sup>/<sub>4</sub>" TO <sup>1</sup>/<sub>2</sub>" - 3/4" TO 1/2" → 3/4" TO 1" 53"

**NOTE:** SEE GENERAL NOTE 9, CD-602-1.6

MINIMUM WEIGHTS WEIGHT OF FRAME = 630# WEIGHT OF COVER = 400#

SQUARE FRAMED MANHOLE CASTING, CIRCULAR COVER

37/8"  $A \leftarrow$ 21/2"  $A \leftarrow$ SECTION A-A SECTION B-B

WEIGHT 300  $\pm$  15 LBS.

3'-11<sup>3</sup>/<sub>4</sub>" - 3/8" 4 3/8"

SECTION C-C

**NOTE:** 

CD-602-1.7

SEE GENERAL NOTE 9, CD-602-1.6

**BICYCLE SAFE GRATE** (CAST IRON)

- INLETS MAY BE CONSTRUCTED OF BRICK, CONCRETE, CONCRETE BLOCK, OR PRECAST CONCRETE. WALLS TO BE 8 INCHES THICK IF BRICK AND 6 INCHES THICK IF CONCRETE, CONCRETE BLOCK, OR PRECAST CONCRETE. INLET FOUNDATIONS AND INVERTS TO BE CLASS B CONCRETE.
- CORBELLING OF INLET WALLS WILL BE PERMITTED AT THE RATE OF 1/2 INCH PER 8 INCHES OF HEIGHT; MAXIMUM CORBEL 6 INCHES PER WALL.
- EXCEPT FOR INLETS TYPE A AND C, FOUNDATIONS AND INVERTS TO BE CONSTRUCTED IN TWO STAGES, AND THE BOTTOM OF THE FOOTINGS TO BE 8 INCHES BELOW THE OUTER WALL OF THE LOWEST PIPE IN THE INLET.
- WHEN THE DEPTH OF AN INLET THAT IS NOT PRECAST EXCEEDS 10 FEET AS MEASURED FROM TOP OF GRATE TO INVERT, WALLS BELOW A DEPTH OF 8 FEET TO BE 12 INCHES THICK AND THE DEPTH OF FOUNDATION INCREASED TO 12 INCHES. WHEN ROCK IS ENCOUNTERED, THE DEPTH OF THE FOUNDATION NOT TO BE INCREASED.
- PLACE INLET FOUNDATIONS WHICH ARE PRECAST ON A 6 INCH THICK BED OF COMPACTED COARSE AGGREGATE #57. EXTEND THE COARSE AGGREGATE 6 INCHES BEYOND THE HORIZONTAL LIMITS OF THE INLET FOUNDATION.
- ADJUST CASTINGS FOR PRECAST INLETS TO GRADE WITH COURSES OF BRICK, AS REQUIRED, 12 INCHES MAXIMUM.
- WHEN THE DEPTH OF A PRECAST INLET EXCEEDS 10 FEET AS MEASURED FROM TOP OF GRATE TO INVERT, THE FOUNDATION IS TO BE INCREASED TO 12 INCHES. WHEN ROCK IS ENCOUNTERED, THE DEPTH OF THE FOUNDATION IS NOT TO BE INCREASED.
- MINIMUM WALL REINFORCEMENT FOR PRECAST INLETS TYPES A, B, C, E, D-1, D-2, AND B MODIFIED:

DEPTH BELOW	HORIZONTAL	VERTICAL	WALL
TOP OF GRATE	REINF.	REINF.	THK.
0' TO 10'-0"	#13 @ 10" C.C.	#13 @ 18" C.C.	6"
10'-1" TO 15'-0"	#13 @ 8" C.C.	#13 @ 18" C.C.	6"
15'-1" T0 20'-0"	#13 @ 6" C.C.	#13 @ 18" C.C.	6"

REINFORCEMENT SHOWN FOR PRECAST INLETS IS THE MINIMUM REQUIRED. ADDITIONAL REINFORCEMENT FOR HANDLING IS THE RESPONSIBILITY OF THE CONTRACTOR

ALTERNATE REINFORCEMENT

**DEPTH BELOW** TOP OF GRATE

**GENERAL NOTES:** 

0' TO 10'-0" WWF 3 x 6 W6 WIRES SPACED AT 3" TO RUN HORIZONTAL IN ALL CASES.

WWF 3 x 6 W6 ADD #10 REINFORCEMENT 10'-1" TO 15'-0"

STEEL @ 18" HORIZONTAL. WWF 3 x 6 W6 ADD #10 REINFORCEMENT 15'1" TO 20'0"

STEEL @ 9" HORIZONTAL OR ADD #13 REINFORCEMENT STEEL AT 15" HORIZONTAL

- DIMENSIONS, WEIGHTS, AND OTHER CRITERIA SHOWN ON THESE DETAILS ARE FOR CLASS 35B CAST IRON.
- 10. PAY ITEM INCLUDES EXCAVATION, SUBBASE, CLASS B CONCRETE (ROADWAY), HMA COURSES, AND REMOVAL AND RESTORATION OF EXISTING PIPES TO COMPLETE THE INSTALLATION OF INLET OR MANHOLE.
- 11. REINFORCEMENT STEEL IS IN METRIC UNITS
- 12. ALL INLETS, REGARDLESS OF TYPE, SHALL HAVE PERMANENT WORDING CAST INTO THE GRATE AND/OR CURB PIECE STATING "NO DUMPING, DRAINS TO WATERWAYS" OR OTHERWISE APPROVED BY THE RE. CD-602-1.6

#### INLET GENERAL DETAILS

N.T.S.

CD-602-1

NEW JERSEY DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS

38 164

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