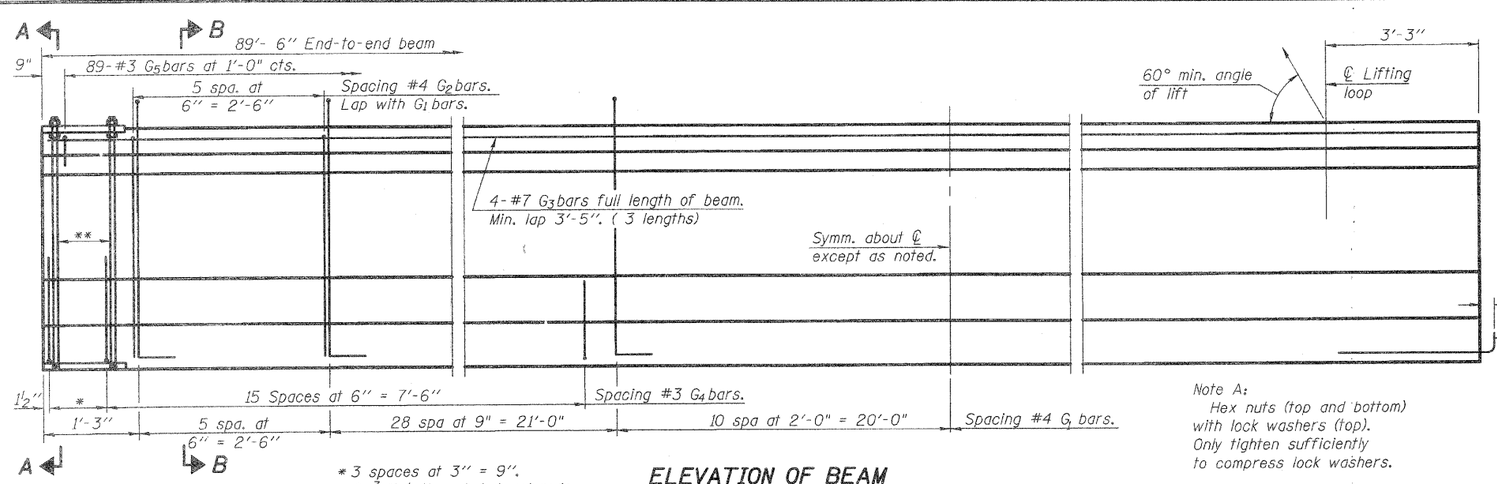
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
310	60-16-1, 42-1	JERSEY	481	209
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

Sheet 25 of 35 Sheets

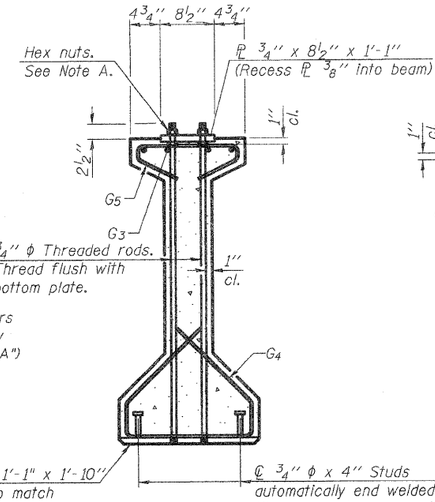
CONTRACT NO. 76318



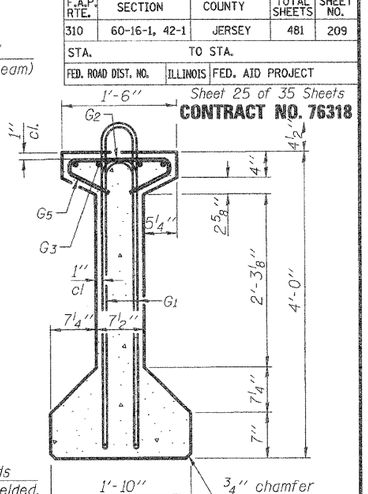
* 3 spaces at 3" = 9".
** 4-¾" ϕ threaded dowel rods at 3" cts., Each Face.

ELEVATION OF BEAM
(Showing reinforcement & dimensions)

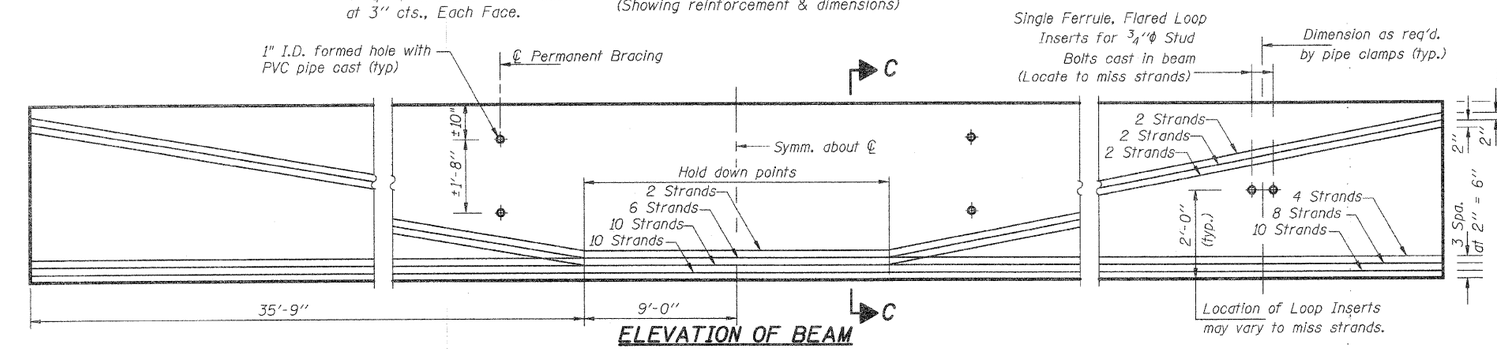
Note A:
Hex nuts (top and bottom) with lock washers (top). Only tighten sufficiently to compress lock washers.



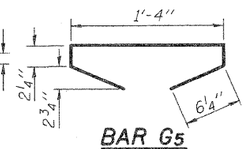
SECTION A-A



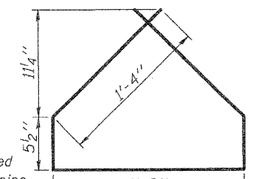
SECTION B-B



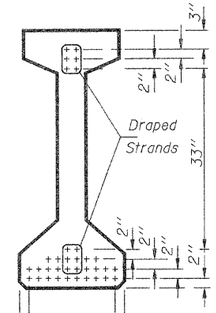
ELEVATION OF BEAM
(Showing Prestressing Steel)



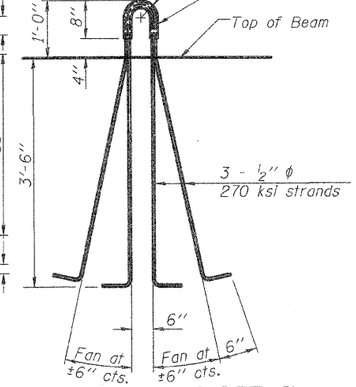
BAR G5



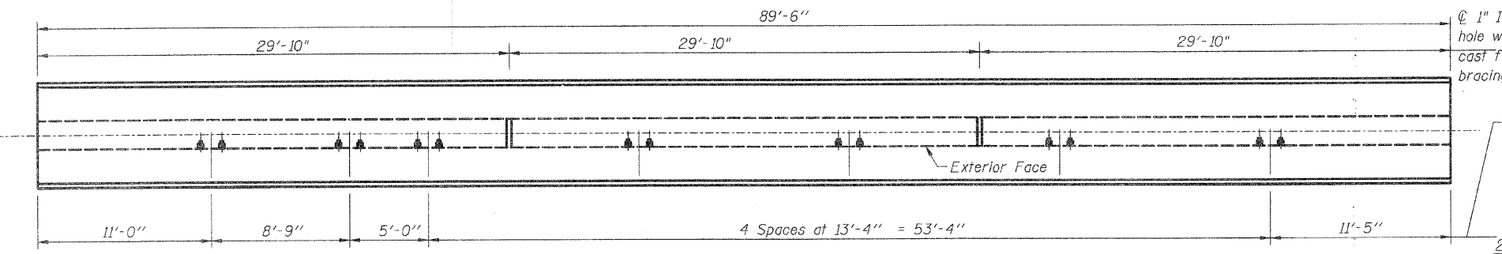
BAR G4



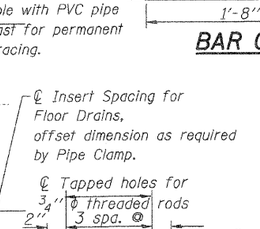
SECTION C-C



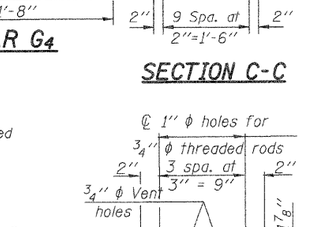
LIFTING LOOP DETAIL



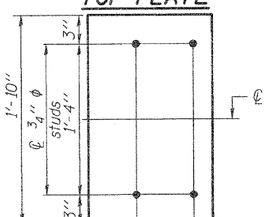
PLAN OF BEAMS 7 AND 14
(Showing Insert Locations for Exterior Beams - Span 2 Shown for Beam Line 14 - Beam Line 7 Opposite Hand)



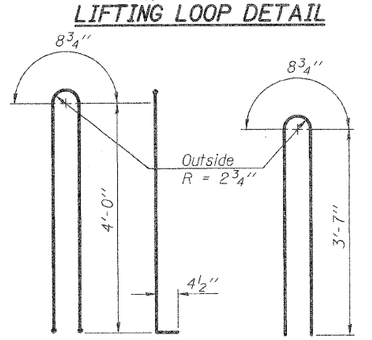
BOTTOM PLATE
(Showing threaded rods)



TOP PLATE



BOTTOM PLATE
(Showing studs)



BAR G1 BAR G2

NOTES

All inserts and threaded dowel rods for inserts, reinforcing and Prestressing Steel, and other items which are cast into the Precast Concrete I-Beams shall be included in the contract unit price per foot of "Furnishing and Erecting Precast Prestressed Concrete I-Beams, 48 in."

Inserts for ¾" ϕ threaded dowel rods, when specified, are to be two strut, ferrule type for interior beams and single ferrule, flared loop type for exterior beams.

Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be ½" and the nominal cross-sectional area shall be 0.153 sq. in.

Reinforcement bars shall conform to ASTM A 706, Grade 60. (See Special Provisions).

A minimum 2½" ϕ lifting pin shall be used to engage the lifting loops during handling.

Tilt G bars when necessary to maintain 1½" clearance.

The top and bottom plates shall be AASHTO M270 Grade 50.

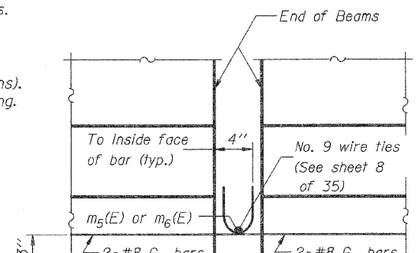
The bottom plates and studs shall be galvanized according to AASHTO M111.

Threaded rods shall be ASTM F 1554 Grade 55.

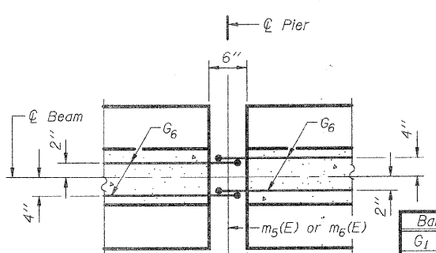
Required release strength, f'ci, shall be 5000 psi.

BILL OF MATERIAL

Item	Unit	Total
Furnishing and Erecting Precast Prestressed Concrete I-Beams, 48"	Ft.	716

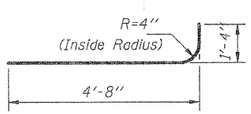


ELEVATION



PLAN

DETAIL "A"



BAR G6

* BAR LIST

Bar	No.	Size	Length	Shape
G1	87	#4	9'-6"	
G2	12	#4	7'-11"	
G3	12	#7	24'-6"	
G4	38	#3	5'-3"	
G5	89	#3	2'-9"	
G6	4	#8	6'-0"	

* For one beam only.

DESIGNED	R.K.M.
CHECKED	M.E.B.
DRAWN	P.W.S.
CHECKED	M.E.B.-R.K.M.

BEAM DETAILS SPAN 2
BEAMS 7-14
NORTHBOUND LANES
FAP-310
SECTION 60-16-1, 42-1
JERSEY COUNTY
STATION 318+48.66
STRUCTURE NO. 042-0027 (N.B.)

HURST - ROSCHE ENGINEERS, INC.
601 NORTH BRUNS LANE
SPRINGFIELD, IL 62702
(217)-787-1199
FAX (217)-793-1199

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