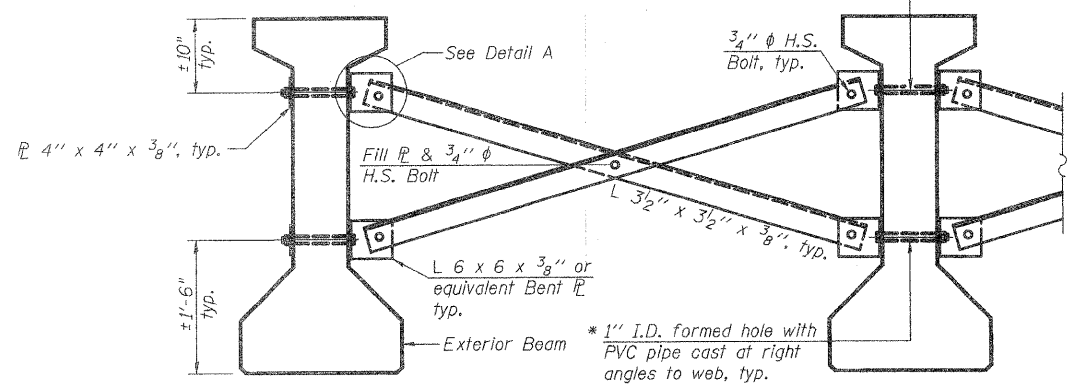
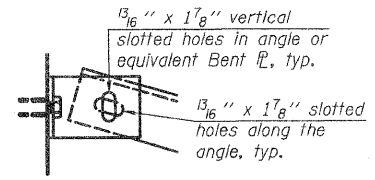


* Fabricator shall locate to miss strands within permissible tolerances.

3/4" φ A307 Bolts with lock nuts, typ. Bolts through the concrete web shall be tightened to snug tight only.



Notes:
 All material for bracing shall be hot dip galvanized according to AASHTO M11 unless otherwise noted.
 Two hardened washers are required for each set of oversized holes.
 All holes shall be 5/16" φ unless otherwise noted.
 5/16" x 3" x 3" plate washers are required over all slotted holes.
 All bolts shall be galvanized according to AASHTO M232.
 Bracing shall be installed as beams are erected and tightened as soon as possible during erection.
 Permanent bracing shall not be paid for separately, but shall be included in the cost of Furnishing and Erecting Precast Prestressed Concrete I-Beams.



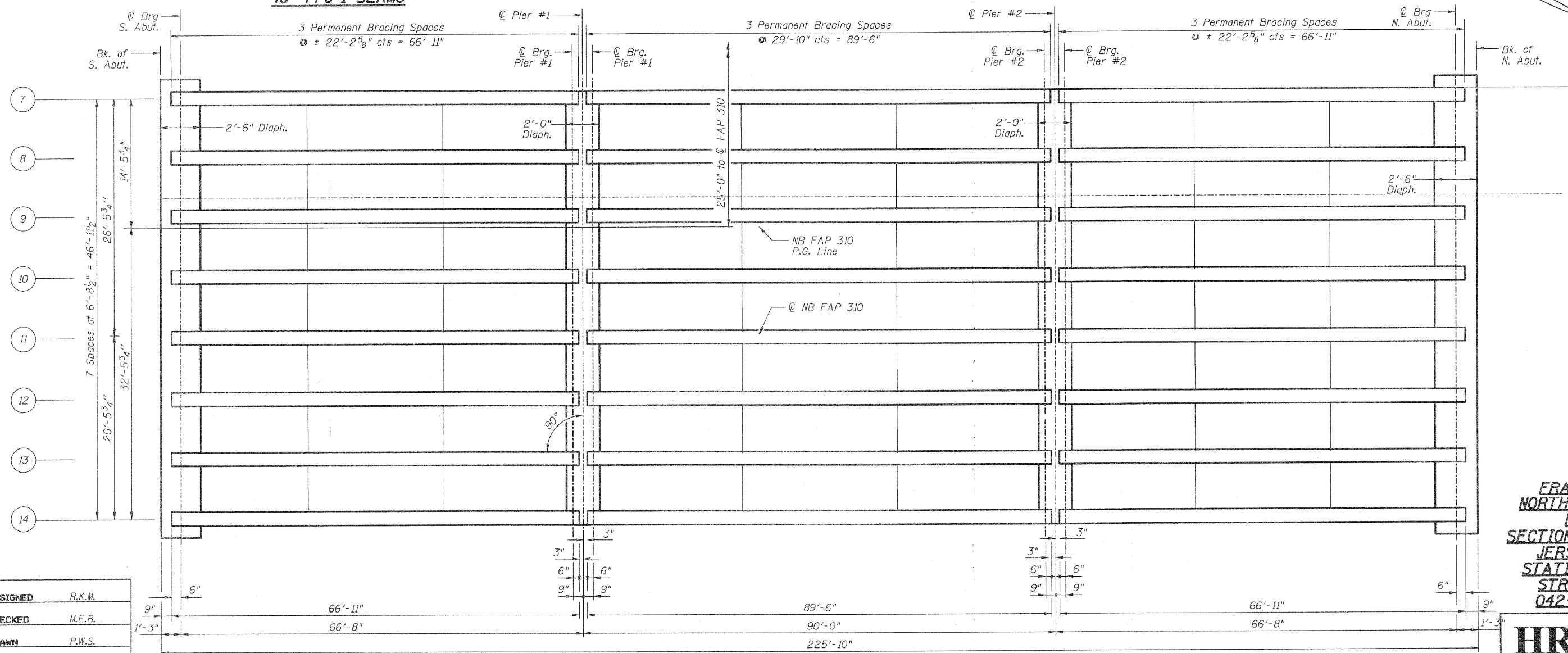
DETAIL A

PERMANENT BRACING DETAILS FOR 48" PPC I-BEAMS

INTERIOR BEAM MOMENT TABLE STRUCTURE NO. 042-0027 (N.B.)				
		0.4 Sp. #1 or 0.6 Sp. #3	Pier 1 or 2	0.5 Span 2
I	(in ⁴)	144117		144117
I'	(in ⁴)	386078		386078
S _b	(in ³)	6834		6834
S _b '	(in ³)	11090		11090
S _t	(in ³)	5355		5355
S _t '	(in ³)	29277		29277
D	(k/')	1.234		1.234
M _D	(k)	686		1249
s _D	(k/')	0.438	0.438	0.438
M _s D	(k)	122	278	165
M _L	(k)	460	431	506
M (Imp)	(k)	120	106	118

INTERIOR BEAM REACTION TABLE STRUCTURE NO. 042-0027 (N.B.)				
		Abuts.	Pier 1 Span 1 Pier 2 Span 3	Pier 1 Span 2 Pier 2 Span 2
R _D	(k)	42	42	56
R _s D	(k)	10	19	19
R _L	(k)	36	26	26
Imp.	(k)	9	6	6
R (Total)	(k)	97	93	107

I and I' are the moment of inertia and composite moment of inertia of the beam section.
 S_b and S_b' are the non-composite and composite section modulus for the bottom fiber of the prestressed beam.
 S_t and S_t' are the non-composite and composite section modulus for the top fiber of the prestressed beam.
 M_D is the moment due to dead loads on the non-composite prestressed beam. It is conservatively calculated at 0.5 of the span.
 M_sD is the moment due to dead loads on the composite section.
 M_L is the moment due to live load on the composite section.
 M (Imp) is the moment due to live load impact on the composite section.
 R (Total) is the sum of the reaction per bearing due to R_D (non-composite) + R_sD (composite) + R_L + I (composite).



FRAMING PLAN

**FRAMING PLAN
 NORTHBOUND LANES
 FAP-310
 SECTION 60-16-1, 42-1
 JERSEY COUNTY
 STATION 318+48.66
 STRUCTURE NO.
 042-0027 (N.B.)**

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