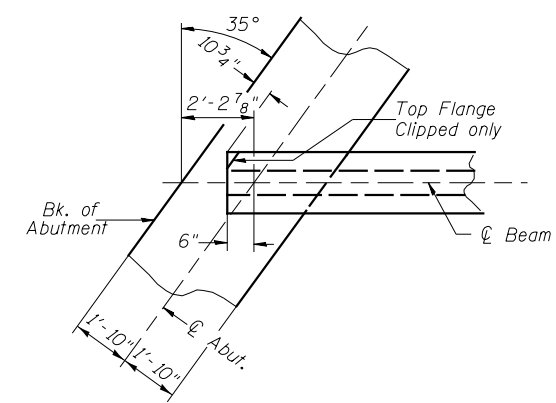
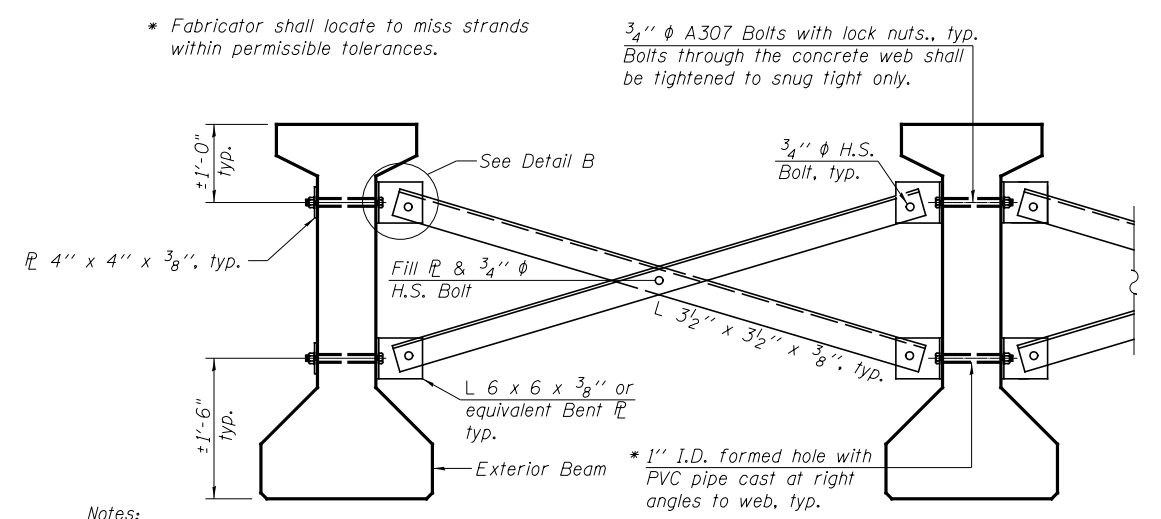


PLAN



DETAIL A

(South Abutment Shown, North Abutment Similar)



DETAIL B

Notes:
 All material for bracing shall be hot dip galvanized according to AASHTO M111 unless otherwise noted.
 Two hardened washers are required for each set of oversized holes.
 All holes shall be 15/16" 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.
 All structural steel for permanent bracing shall be AASHTO M270 Gr. 50.

PERMANENT BRACING DETAILS FOR 54" PPC I-BEAMS

INTERIOR BEAM MOMENT TABLE	
	0.5 Sp. 1
I	(in ⁴) 213715
I'	(in ⁴) 505995
S _b	(in ³) 8559
S _b '	(in ³) 12771
S _t	(in ³) 7362
S _t '	(in ³) 35187
DC1	(k/ft) 1.365
M _{DC1}	(k) 1415
DC2	(k/ft) 0.263
M _{DC2}	(k) 273
DW	(k/ft) 0.35
M _{DW}	(k) 363
M _{L + IM}	(k) 1540

INTERIOR BEAM REACTION TABLE	
	Abut.
R _{DC1}	(k) 62.2
R _{DC2}	(k) 12.0
R _{DW}	(k) 15.9
R _{L + IM}	(k) 85.5
R _{Total}	(k) 175.6

I: Non-composite moment of inertia of beam section (in⁴).
 I': Composite moment of inertia of beam section (in⁴).
 S_b: Non-composite section modulus for the bottom fiber of the prestressed beam (in³).
 S_b': Composite section modulus for the bottom fiber of the prestressed beam (in³).
 S_t: Non-composite section modulus for the top fiber of the prestressed beam (in³).
 S_t': Composite section modulus for the top fiber of the prestressed beam (in³).
 DC1: Un-factored non-composite dead load (kips/ft.).
 M_{DC1}: Un-factored moment due to non-composite dead load (kip-ft.).
 DC2: Un-factored long-term composite (superimposed excluding future wearing surface) dead load (kips/ft.).
 M_{DC2}: Un-factored moment due to long-term composite (superimposed excluding future wearing surface) dead load (kip-ft.).
 DW: Un-factored long-term composite (superimposed future wearing surface only) dead load (kips/ft.).
 M_{DW}: Un-factored moment due to long-term composite (superimposed future wearing surface only) dead load (kip-ft.).
 M_{L + IM}: Un-factored live load moment plus dynamic load allowance (impact) (kip-ft.).