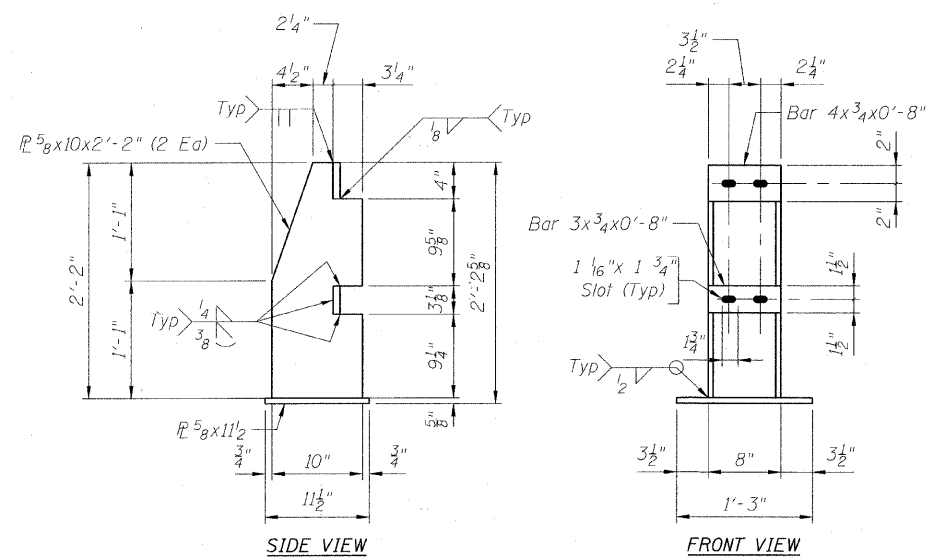
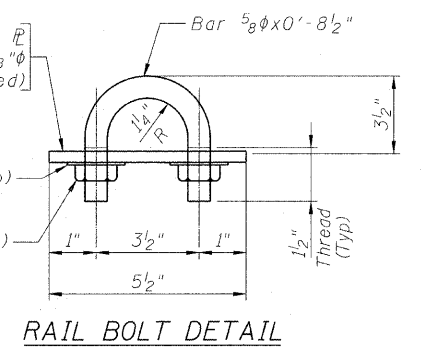
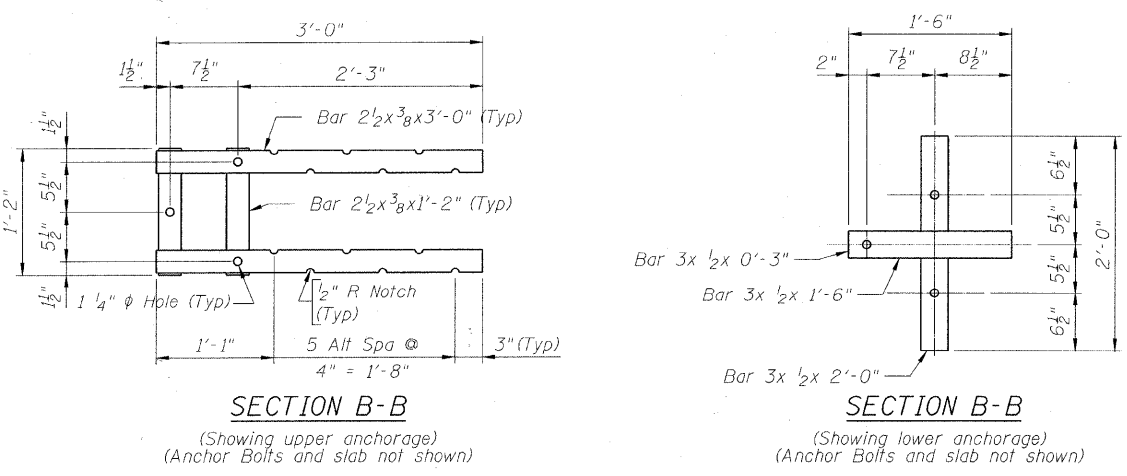


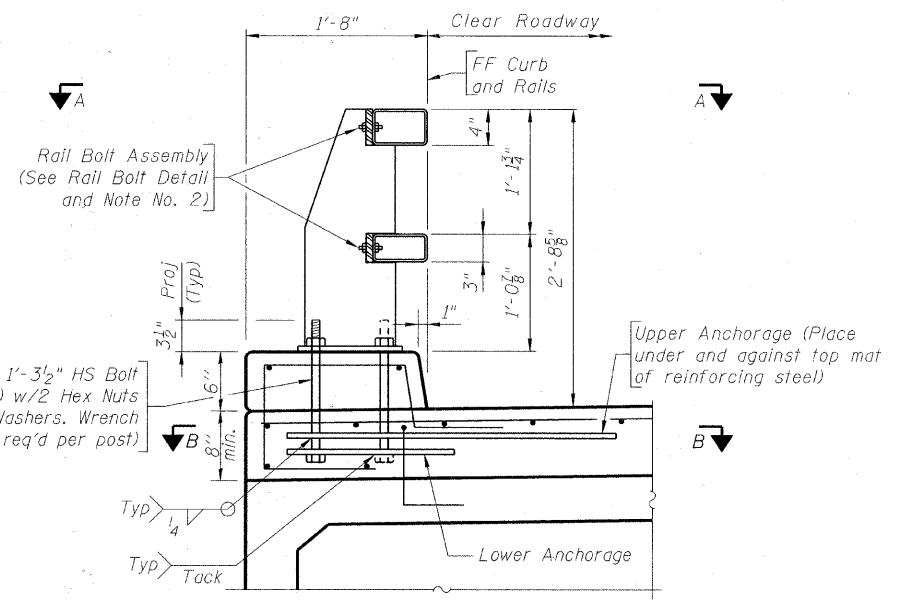
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POST DETAILS
(See View A-A for anchor bolt hole spacing)



RAIL BOLT DETAIL

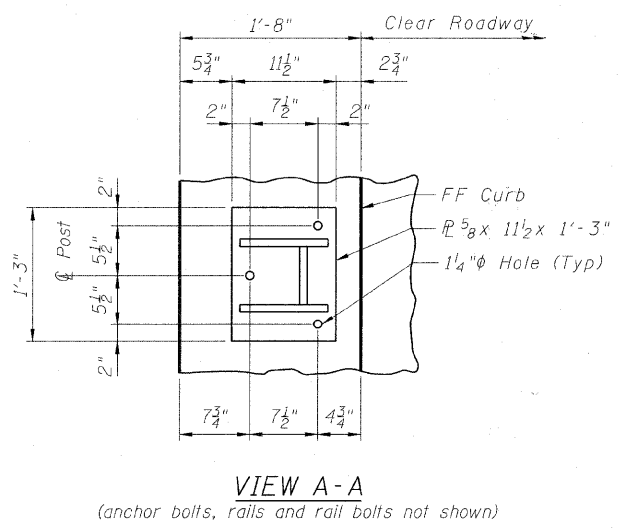


ASSEMBLY DETAIL
(Shown near ϕ Post)
(Bridge slab shown, approach slab similar)

- Note:
- 1) Anchor bolts may be tack welded to lower anchorage (Shop or field).
 - 2) At post locations, drill two $1 1/16" \phi$ holes in the rails to receive rails bolts (Shop or field). See Post Details for hole spacing.
 - 3) Before installing rails, paint all cut, drilled or otherwise damaged surface areas of the railing components with two coats of zinc rich paint conforming to the requirements of ASTM A 780.
 - 4) After installing the rails, paint all exposed bolt threads with two coats of zinc rich paint conforming to the requirements of ASTM A 780.
 - 5) Steel components shall be galvanized according to AASHTO M111, unless noted otherwise.
 - 6) Shim Plates shall be provided in accordance with Article 509.05(a) of the Standard Specifications.

BILL OF MATERIAL

Item	Unit	Total
Steel Railing (Special)	Foot	231



VIEW A-A
(anchor bolts, rails and rail bolts not shown)



USER NAME =	DESIGNED - BLB	REVISED - 12/30/10 PER MCDOT
PLOT SCALE =	CHECKED - BAB	REVISED -
PLOT DATE =	DRAWN - BCD	REVISED -
	DATE - 10/08/10	REVISED -

MCHENRY COUNTY DIVISION OF TRANSPORTATION
GRAF ROAD BRIDGE OVER
WEST BRANCH PISCASAW CREEK

WYOMING 2-TUBE BRIDGE RAILING DETAILS
STRUCTURE NO. 056-3183
 SHEET NO. 11 OF 18 SHEETS

TR RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0037	06-00322-01-BR	MCHENRY	52	34
C-91-258-11			CONTRACT NO. 63580	
FED. ROAD DIST. NO. 1			ILLINOIS FED. AID PROJECT BR05-0111064	