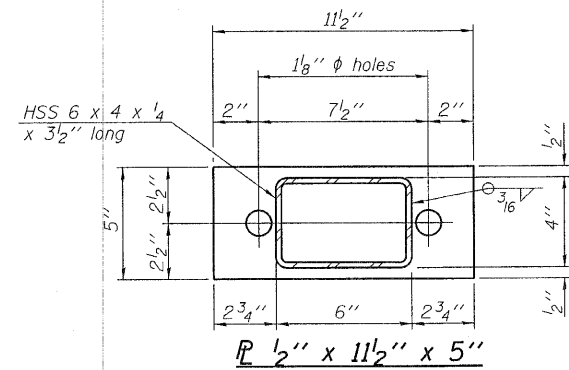
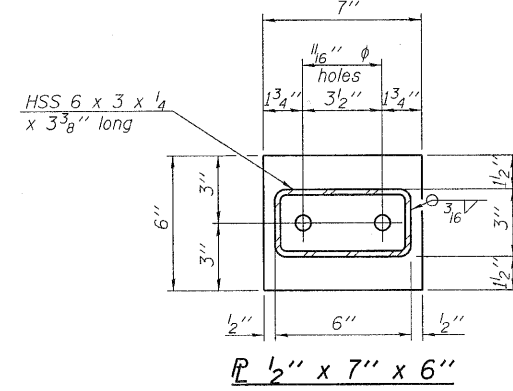


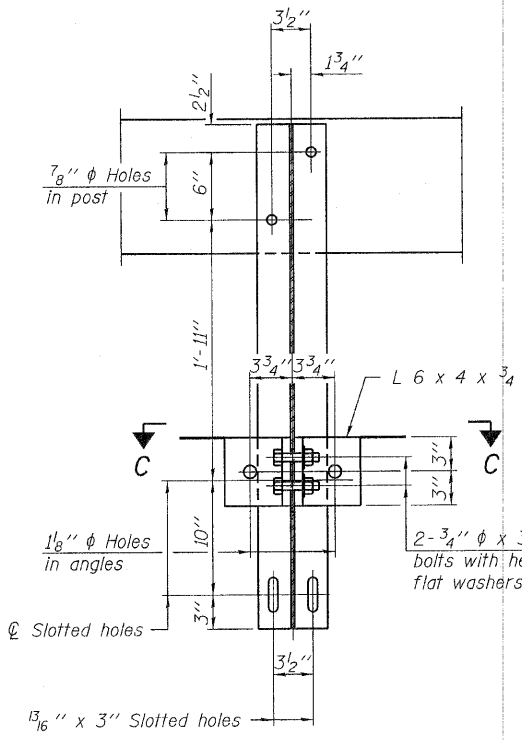
**VIEW A-A
ROUND HEAD BOLT**



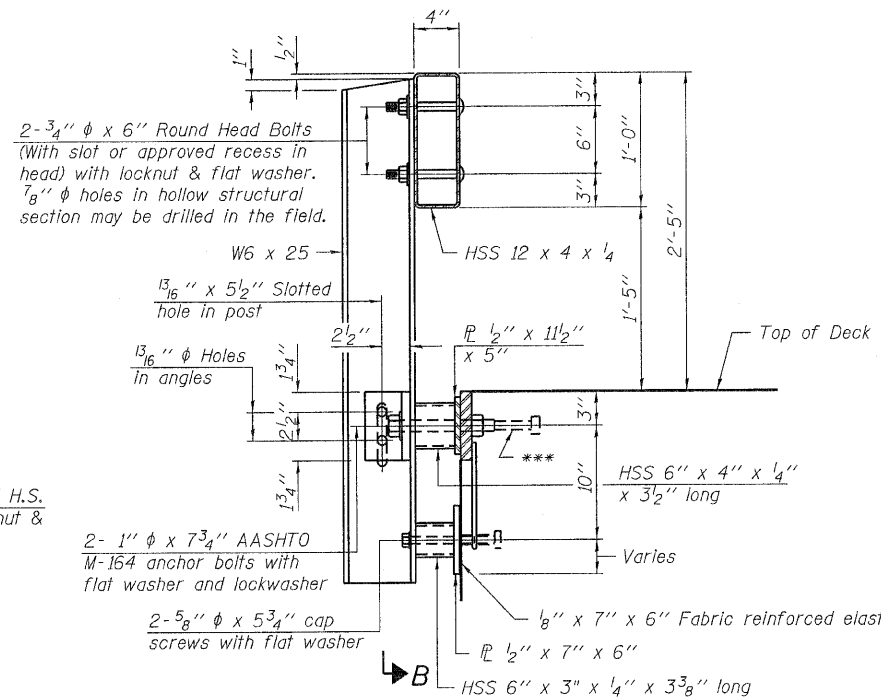
SECTION B-B



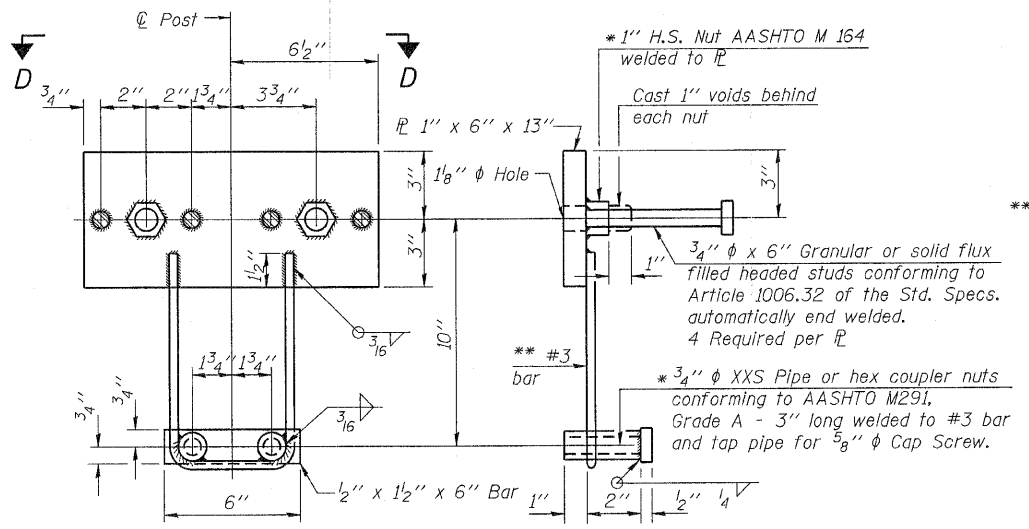
SECTION AT RAILING POST



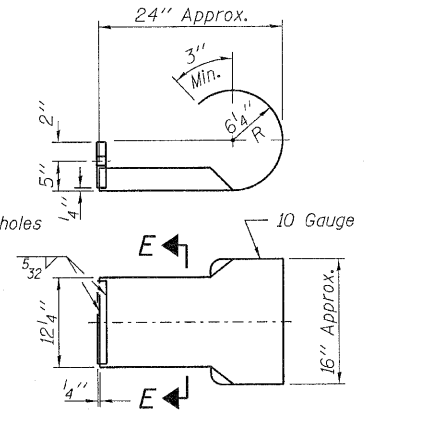
SECTION C-C



SECTION AT RAILING POST

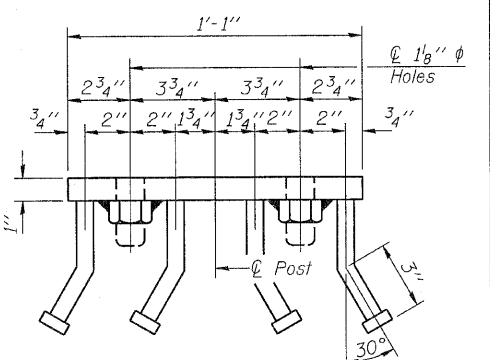


ANCHOR DEVICE

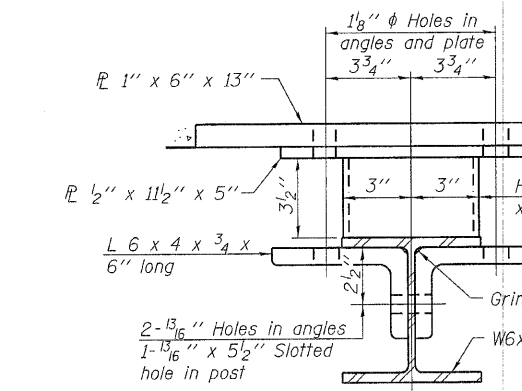


SECTION E-E CURLED END SECTION DETAILS

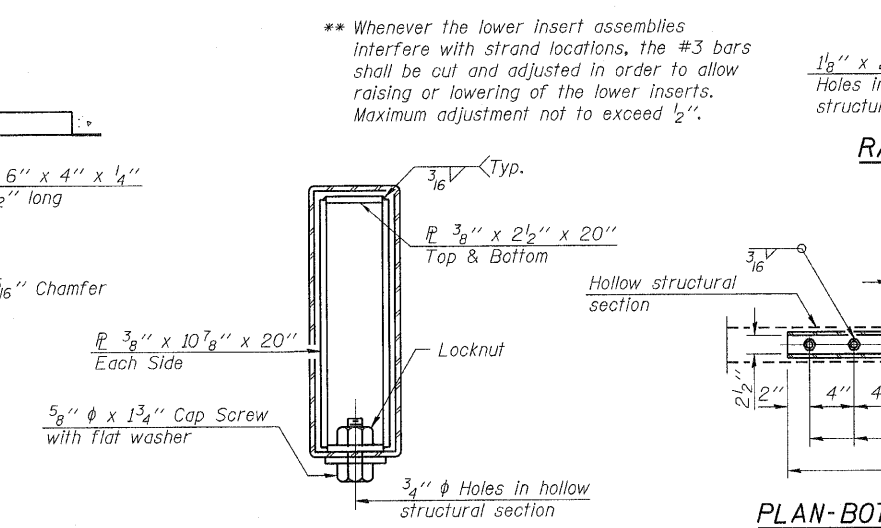
Notes:
All field drilled holes shall be coated with an approved zinc rich paint before erection.
For multi-span bridges, sufficient 1/4" x 6" x 1'-2" galvanized steel shims shall be provided to align rail between adjacent spans. Cost included with Steel Railing, Type S-1.
All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.
*** The studs of the anchor devices shall be placed below the top reinforcement bars and the outermost longitudinal reinforcement bar shall be placed directly above the studs of the rail post anchor device.



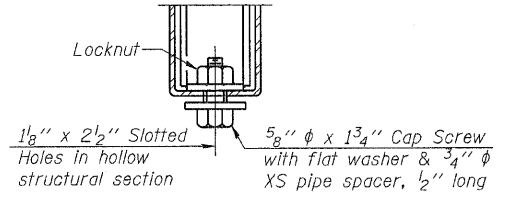
VIEW D-D



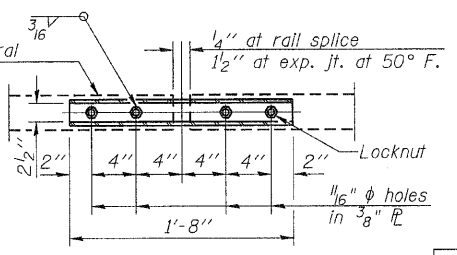
SECTION C-C



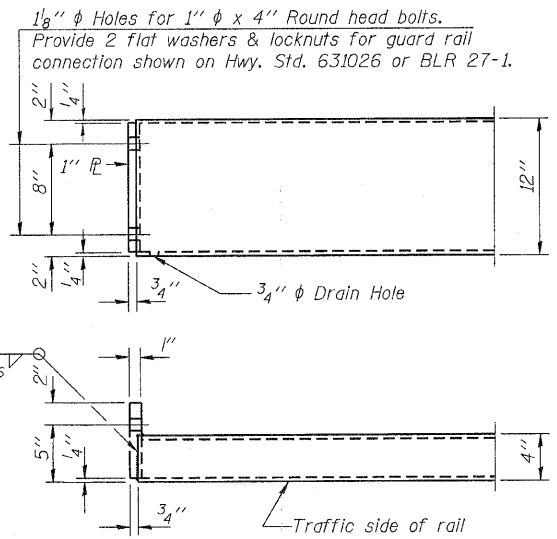
SECTIONS AT RAIL SPLICE



RAIL SPLICE CONNECTION AT EXPANSION JT.



PLAN-BOTT. SPLICE TYPICAL



END OF RAIL DETAILS

BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type S-1	Foot	108

**STEEL RAILING, TYPE S-1
STRUCTURE NO. 024-3138**

DESIGNED - A.S.L.
CHECKED - S.W.M.
DRAWN - D.A.B.
CHECKED - S.W.M.

R-23A

11-1-09

(10'-9" Maximum Post Spacing)

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HLR
184 009899
ILLINOIS PROFESSIONAL DESIGN FIRM L3 / PE / SE CORPORATION

PROJECT NUMBER: 09.0007.130 DATE: 02/23/10

SHEET NO. 5	T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
8 SHEETS	185	07-06115-00-BR	EDWARDS	12	9
ROAD DISTRICT #6			CONTRACT NO. 95633		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT		