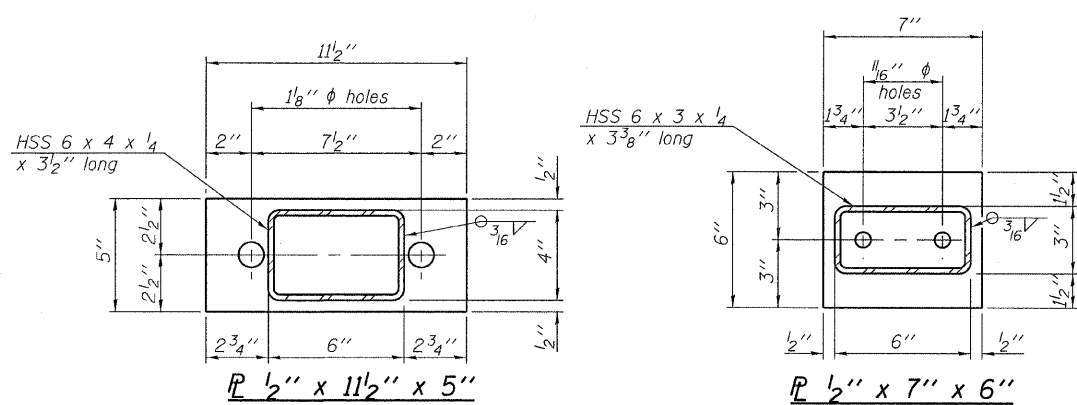
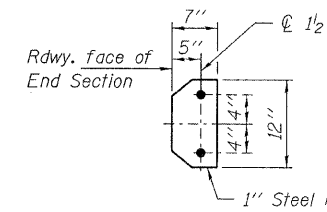


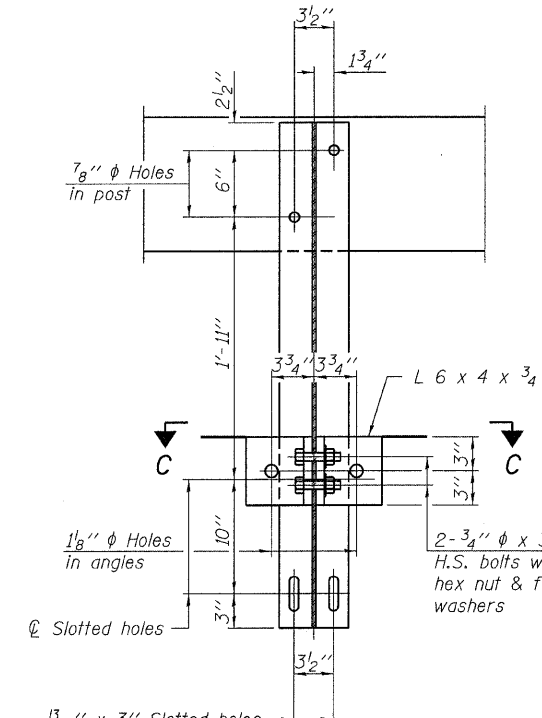
**VIEW A-A  
ROUND HEAD BOLT**



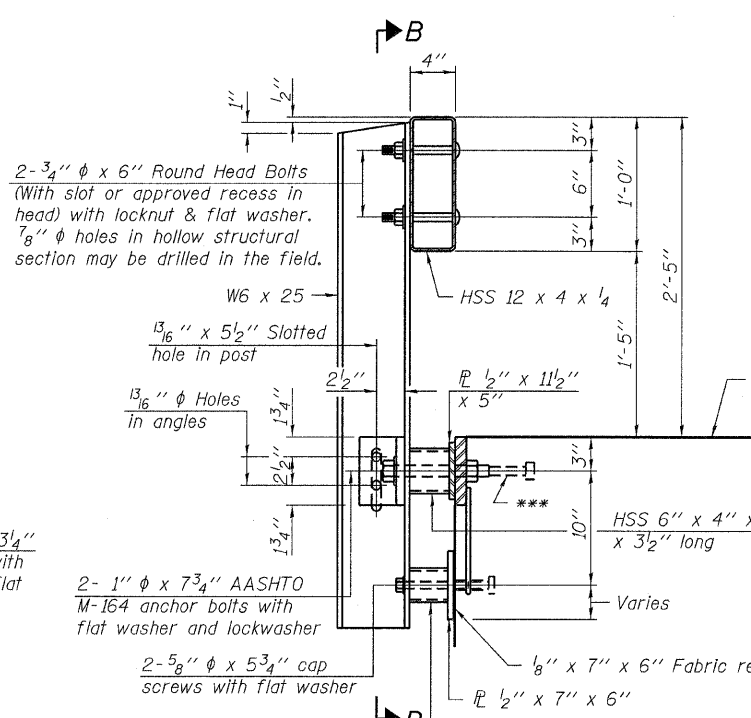
Note: Cost of curled end sections shall be included with the Steel Railing. (2 Required)



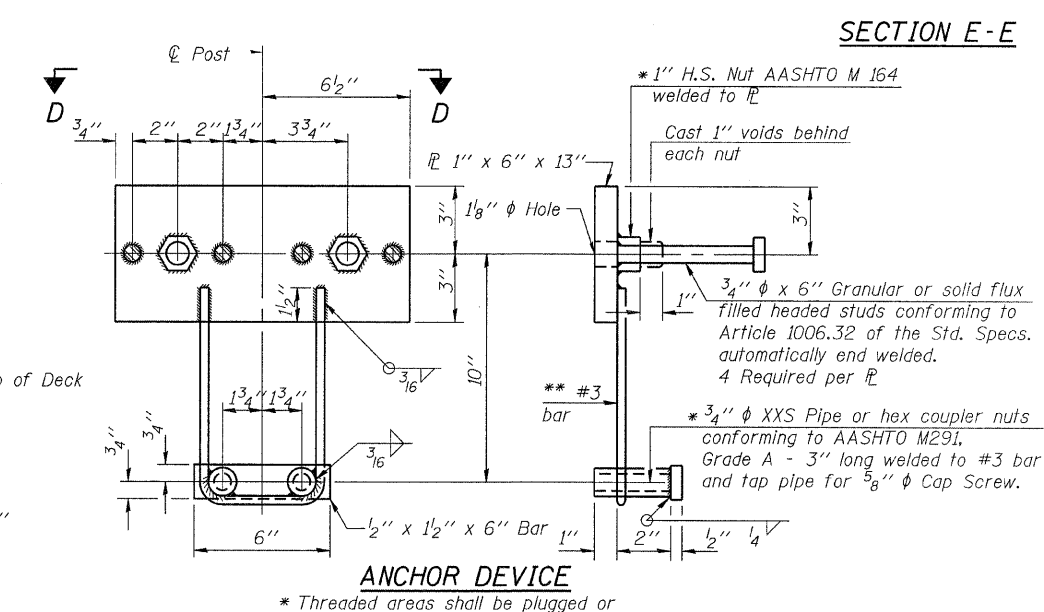
**SECTION E-E  
CURLLED END SECTION DETAILS**



**SECTION B-B**

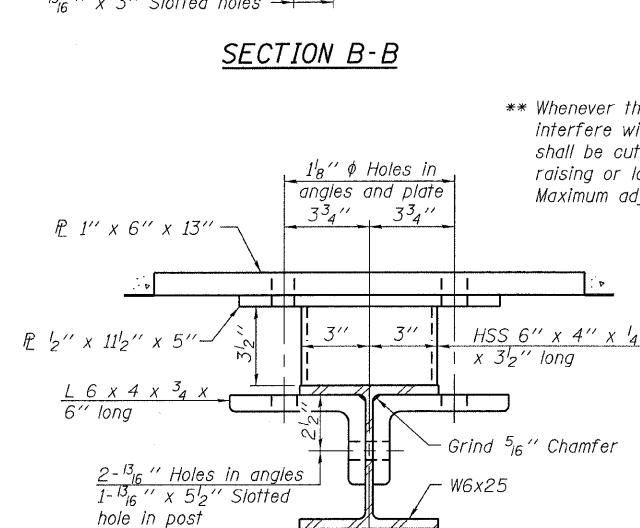


**SECTION AT RAILING POST**

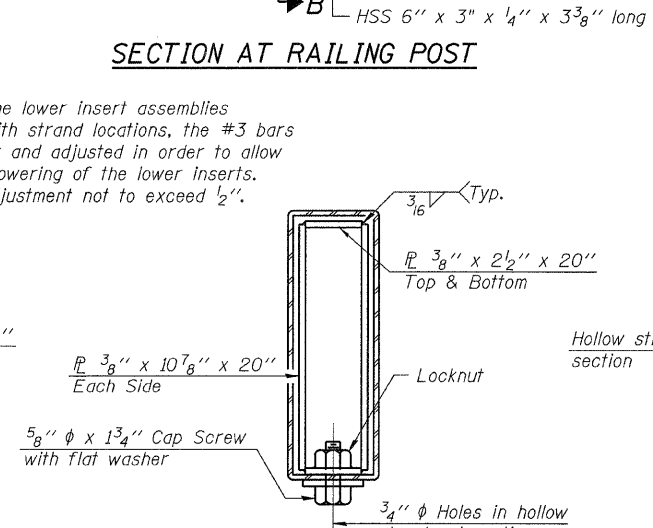


**ANCHOR DEVICE**

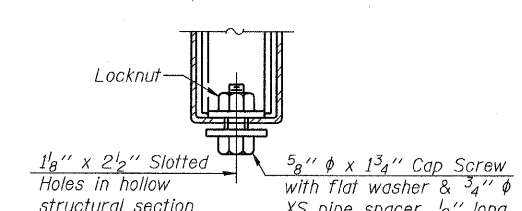
Notes:  
All field drilled holes shall be coated with an approved zinc rich paint before erection.  
For multi-span bridges, sufficient 1/4 inch x 6 inch x 1-2 inch galvanized steel shims shall be provided to align rail between adjacent spans. Cost included with Steel Railing, Type S-1.  
All steel rail 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.



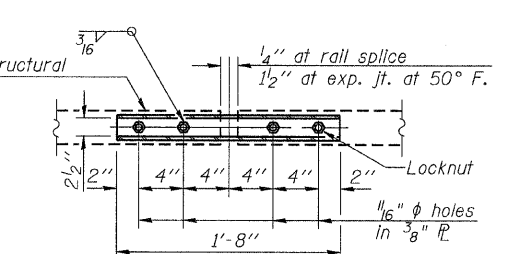
**SECTION C-C**



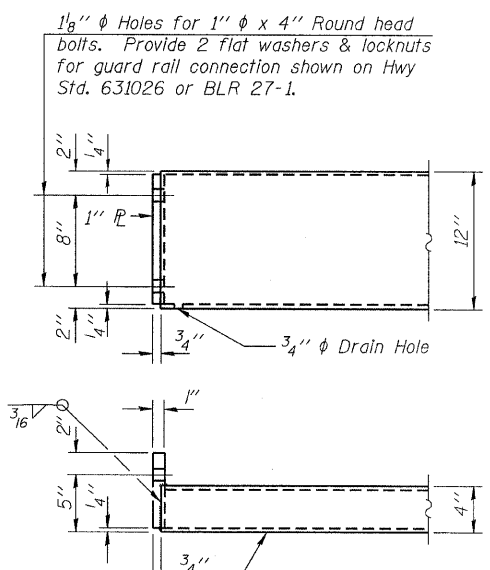
**SECTIONS AT RAIL SPLICE**



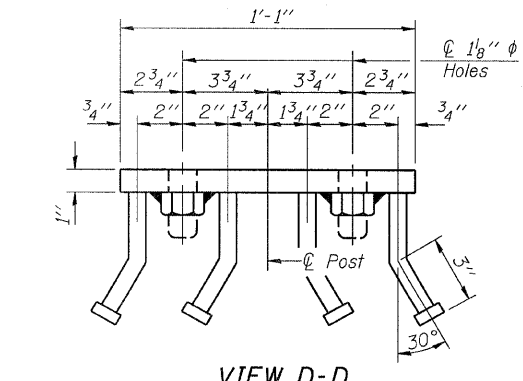
**RAIL SPLICE CONNECTION  
AT EXPANSION JT.**



**PLAN-BOTT. SPLICE PL  
TYPICAL**



**STEEL RAILING, TYPE S-1  
END OF RAIL DETAILS**



**VIEW D-D**

**BILL OF MATERIAL**

Item	Unit	Quantity
Steel Railing, Type S-1	Foot	205

R-23A 7-1-10 (10'-9" Maximum Post Spacing)

FILE NAME = 118266-shr-bridge.dgn	USER NAME =	DESIGNED - A.S.L.	REVISED -
HAMPTON, LENZINI AND RENWICK, INC. 2308 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62705	PLLOT SCALE =	CHECKED - S.W.M.	REVISED -
ILLINOIS PROFESSIONAL DESIGN FIRM L.S./P.E./S.E. CDMP 194-000959	PLLOT DATE = 2/28/2012	DRAWN - D.A.B.	REVISED -
		CHECKED - S.W.M.	REVISED -

**STATE OF ILLINOIS  
JEFFERSON COUNTY HIGHWAY DEPARTMENT**

**STEEL RAILING, TYPE S-1  
STRUCTURE NO. 041-3748**  
SHEET NO. 8 OF 12 SHEETS

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
91	09-06122-00-BR	JEFFERSON	37	33
FARRINGTON ROAD DISTRICT			CONTRACT NO. 99471	
[ILLINOIS] FED. AID PROJECT BR05-00810631				