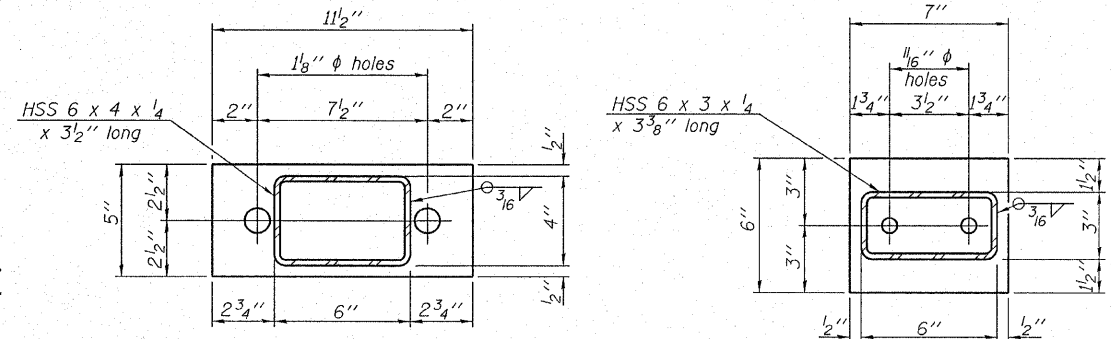
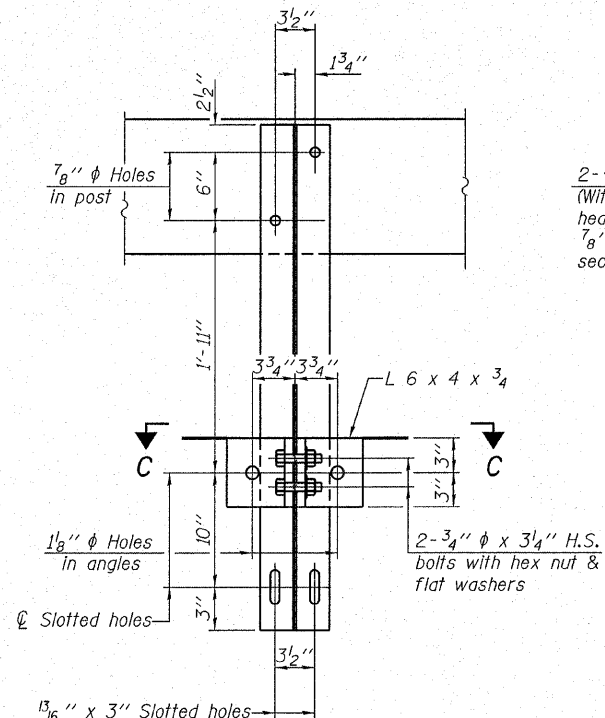


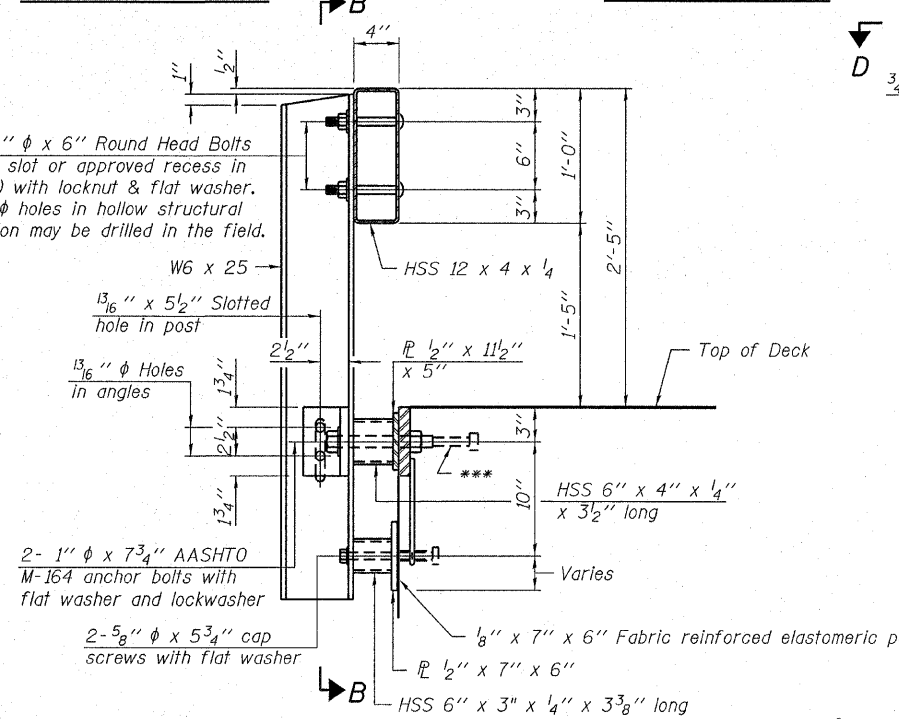
VIEW A-A ROUND HEAD BOLT



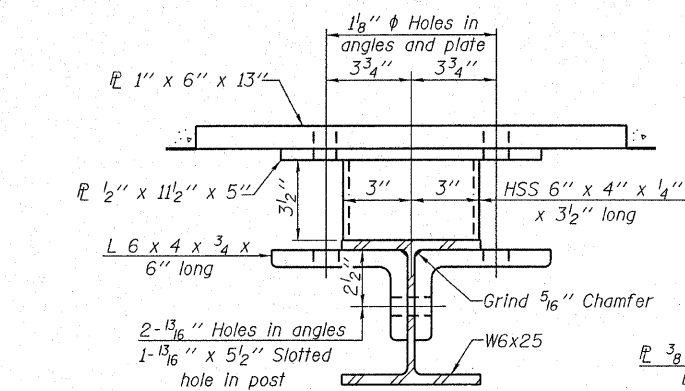
SECTION B-B  
SECTION AT RAILING POST



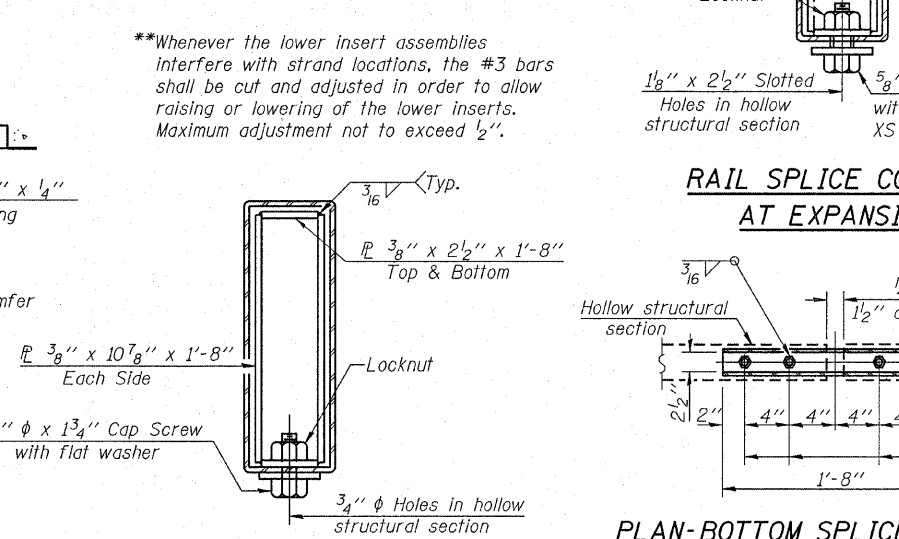
SECTION B-B



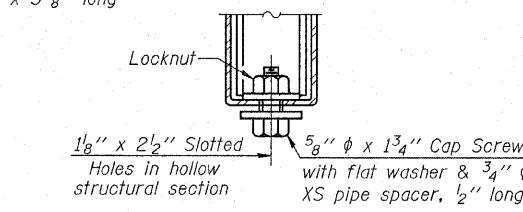
SECTION AT RAILING POST



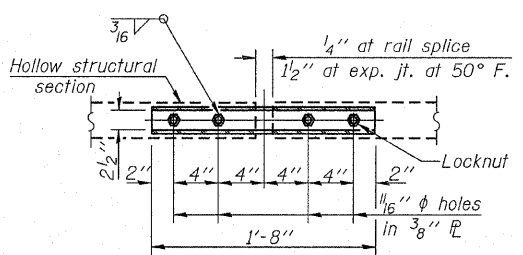
SECTION C-C



SECTIONS AT RAIL SPLICE

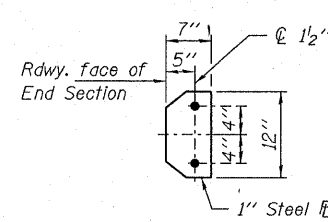


RAIL SPLICE CONNECTION AT EXPANSION JT.

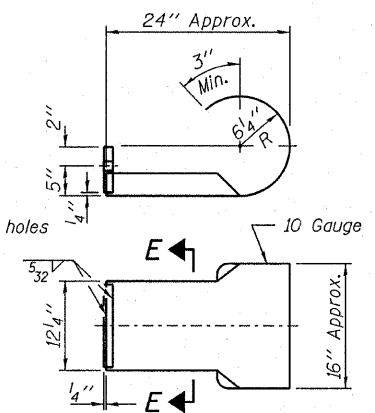


PLAN-BOTTOM SPLICE R TYPICAL

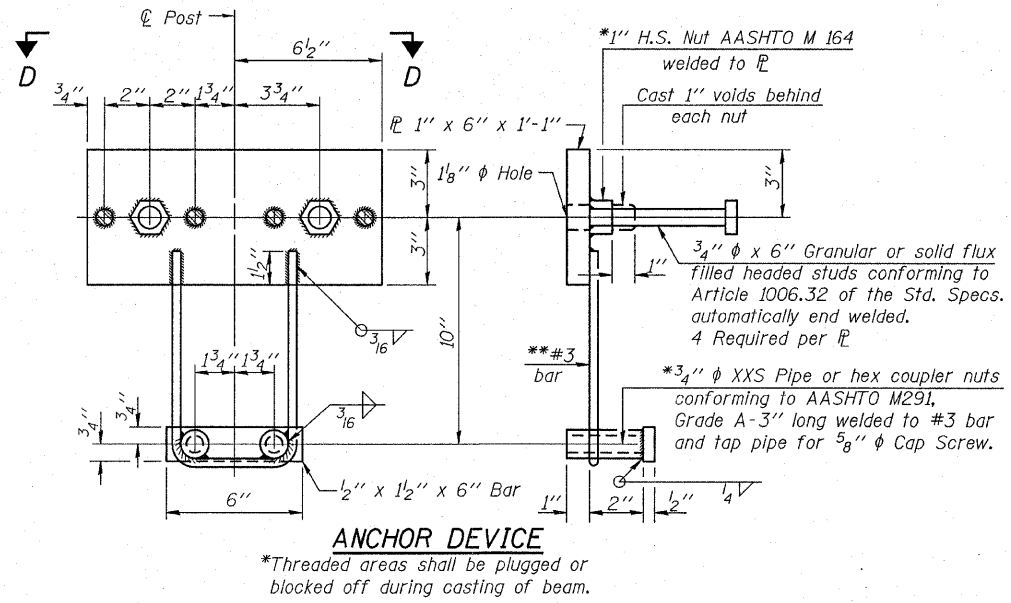
Note: Cost of curled end sections shall be included with the Steel Railing. (4 Required)



SECTION E-E

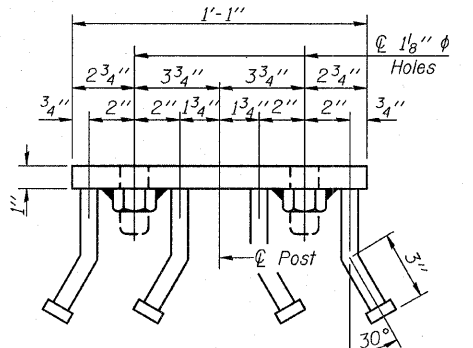


CURLED END SECTION DETAILS

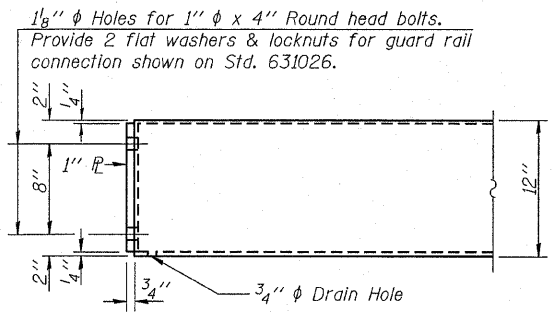


ANCHOR DEVICE

Notes:  
All field drilled holes shall be coated with an approved zinc rich paint before erection.  
For multi-span bridges, sufficient 1/4 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



END OF RAIL DETAILS

BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type S-1	Foot	123

STEEL RAILING, TYPE S-1  
STRUCTURE NO. 024-3136

DESIGNED - S.M.S.
CHECKED - S.W.M.
DRAWN - D.T.M.
CHECKED - D.T.M.

R-23A

5-16-08

(10'-9" Maximum Post Spacing)

HAMPTON, LENZINI & RENWICK, INC.  
CIVIL & STRUCTURAL ENGINEERS  
LAND SURVEYORS  
3085 STEVENSON DRIVE, SUITE 201  
SPRINGFIELD, ILLINOIS 62703  
(217) 546-3400  
PROJECT NUMBER: 08.0184.130 DATE: 11/05/08

SHEET NO. 5	C.H.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
9 SHEETS	4	06-00061-00-BR	EDWARDS	13	9
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT		
CONTRACT NO. 95571					