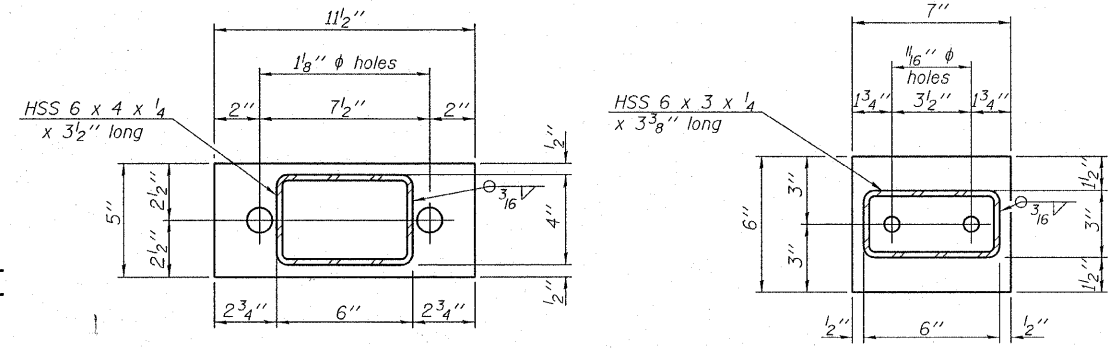
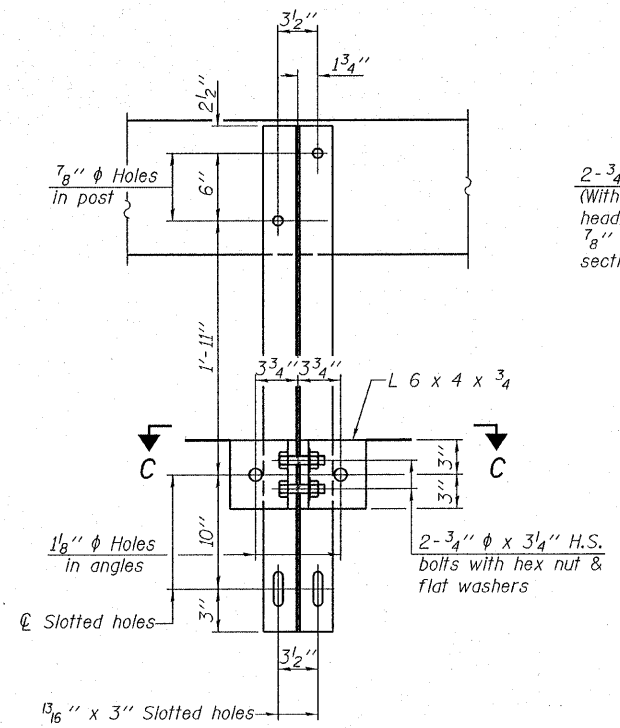


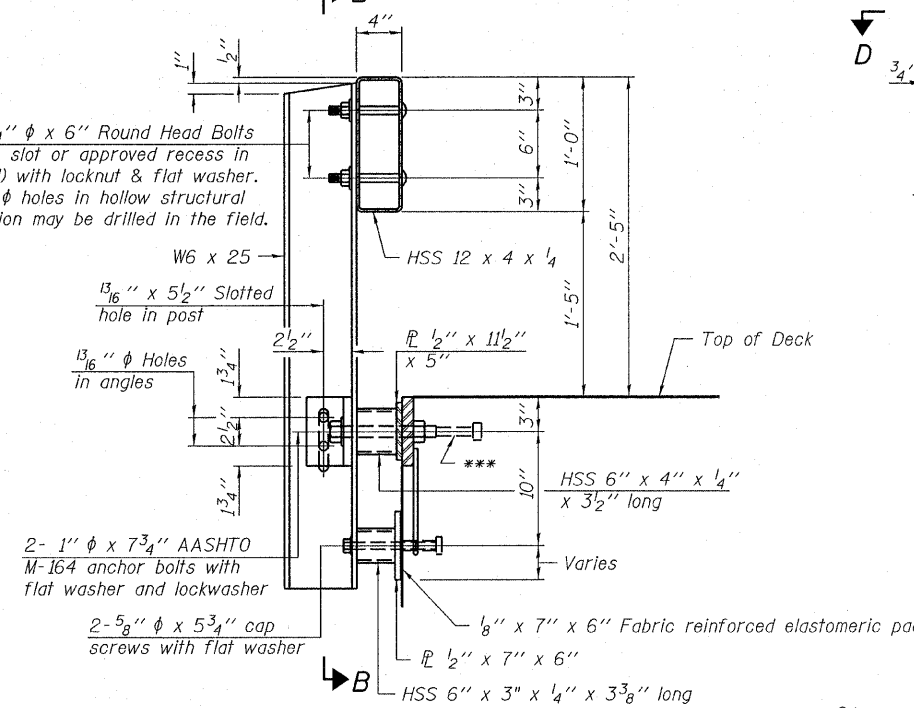
VIEW A-A ROUND HEAD BOLT



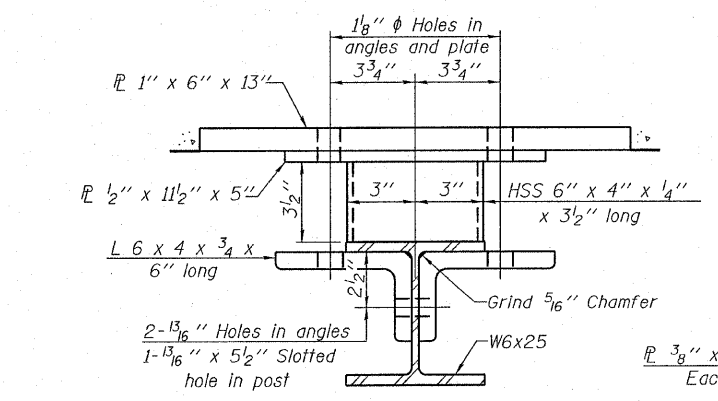
PL 1/2" x 11 1/2" x 5" PL 1/2" x 7" x 6"



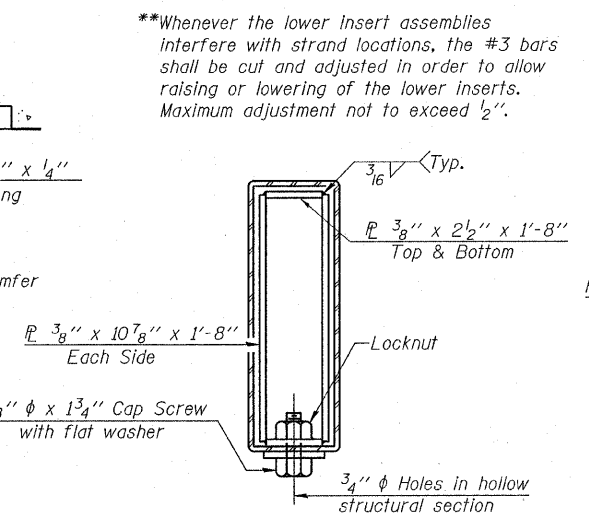
SECTION B-B



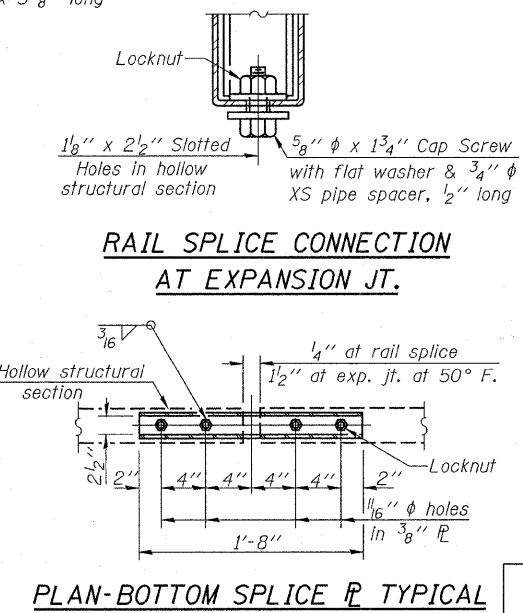
SECTION AT RAILING POST



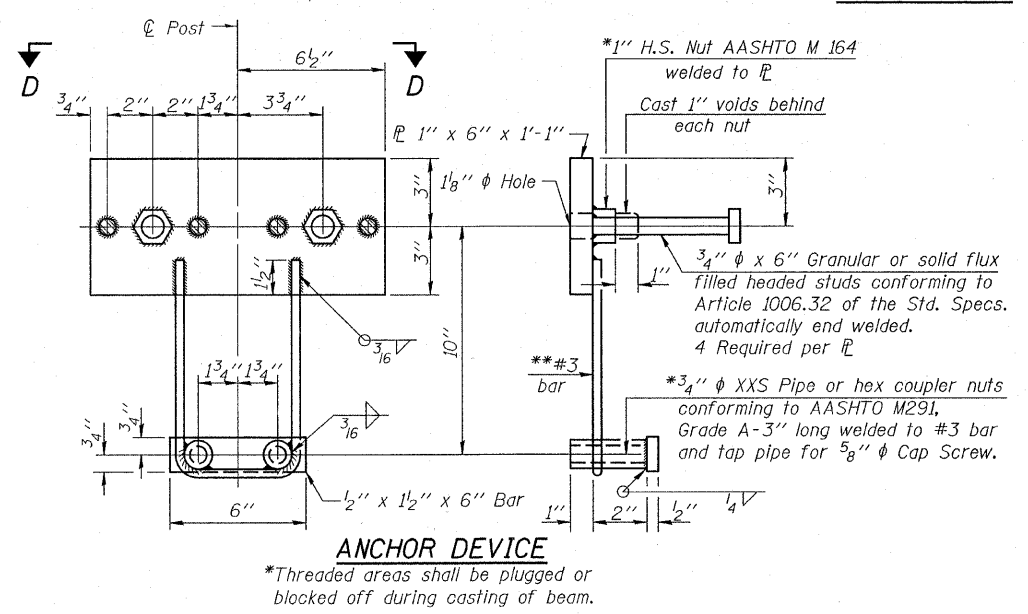
SECTION C-C



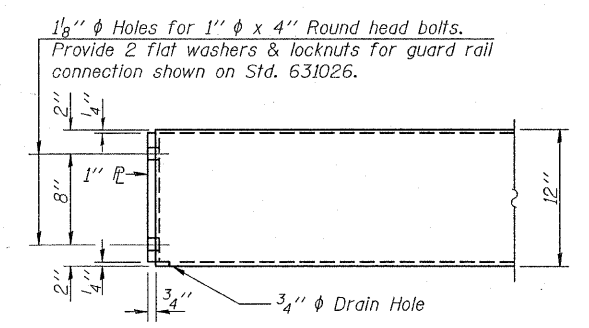
SECTIONS AT RAIL SPLICE



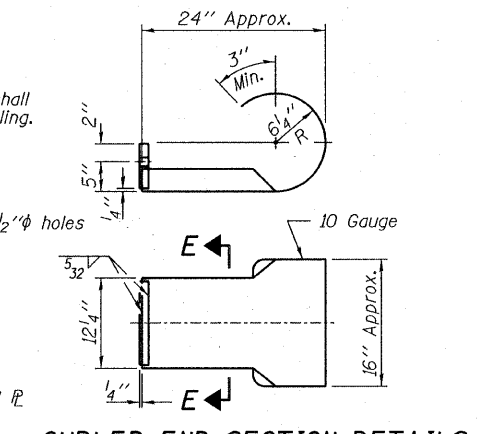
PLAN-BOTTOM SPLICE PL TYPICAL



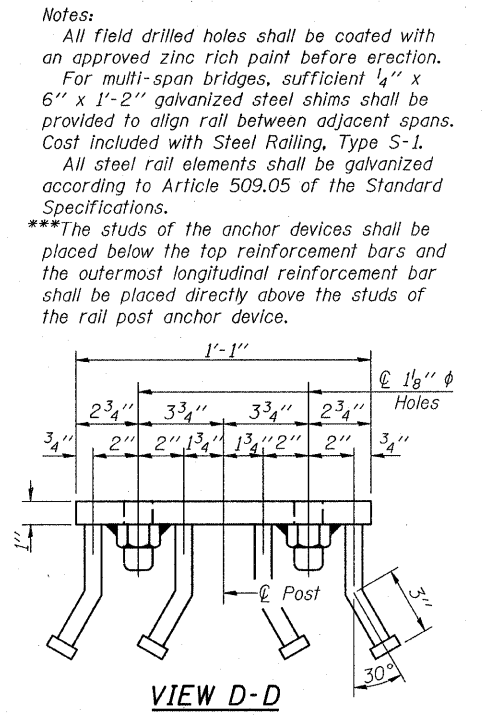
ANCHOR DEVICE



END OF RAIL DETAILS



SECTION E-E CURLED END SECTION DETAILS



VIEW D-D

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

(10'-9" Maximum Post Spacing)

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

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.

BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type S-1	Foot	109

STEEL RAILING, TYPE S-1
 STRUCTURE NO. 033-3310

HAMPTON, LENZINI & RENWICK, INC. CIVIL & STRUCTURAL ENGINEERS LAND SURVEYORS HLR 3085 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 (217) 546-3400 PROJECT NUMBER: 08.0102.130 DATE: 08/25/08	SHEET NO. 5	T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	9 SHEETS	234	08-09113-00-BR	HAMILTON	13	9
SOUTH CROUCH ROAD DISTRICT				CONTRACT NO. 99343		
FED. ROAD DIST. NO. 9 ILLINOIS				FED. AID PROJECT		