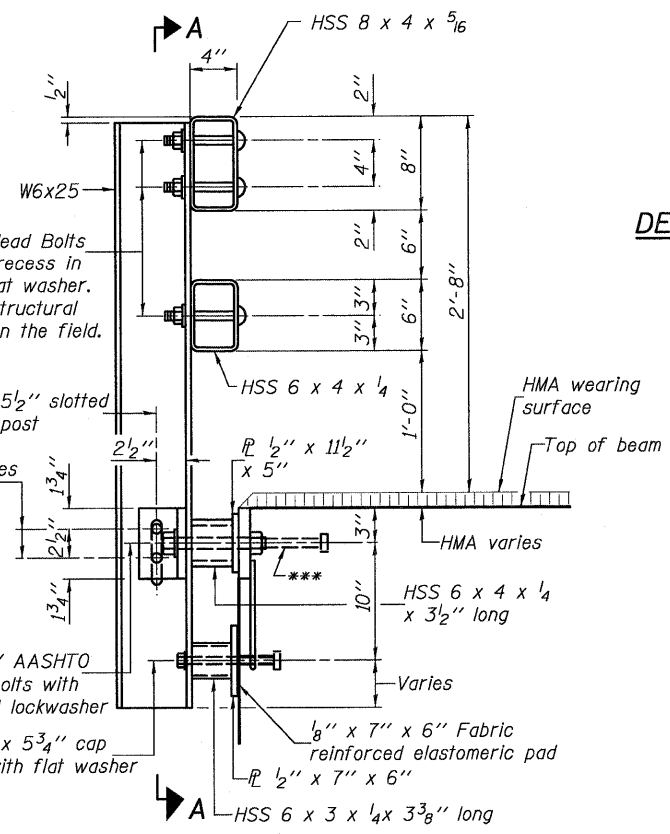
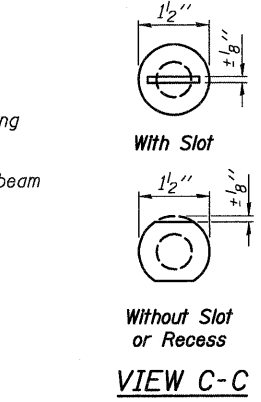
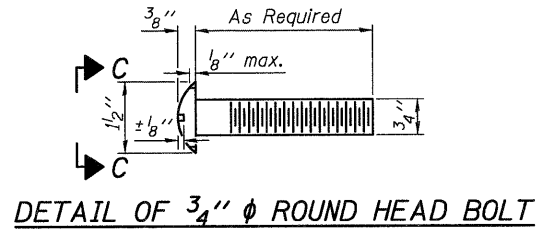


SECTION A-A

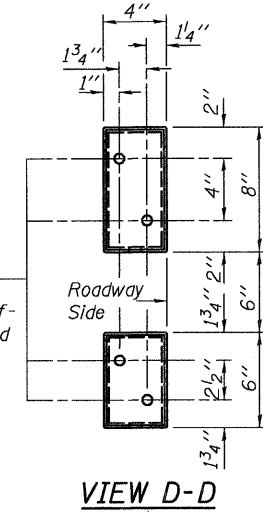
4-3/4" φ x 6" Round Head Bolts (With slot or approved recess in head) with locknut & flat washer. 7/8" φ holes in hollow structural section may be drilled in the field.



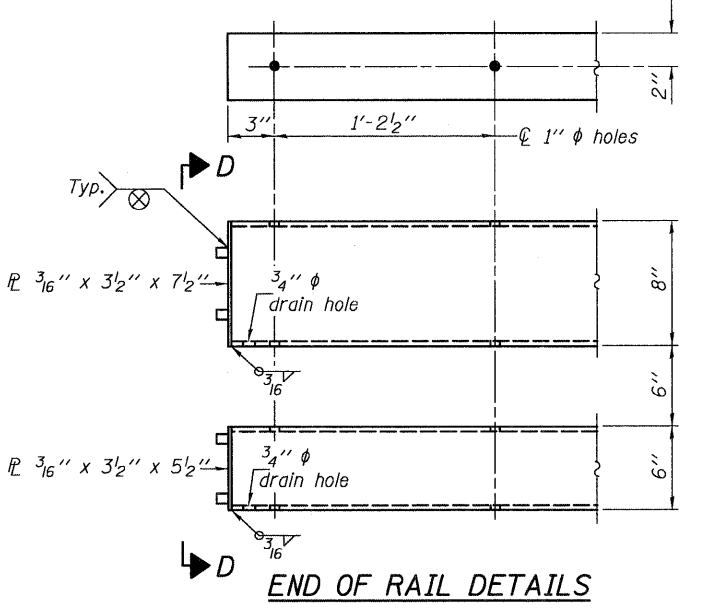
SECTION AT RAIL POST



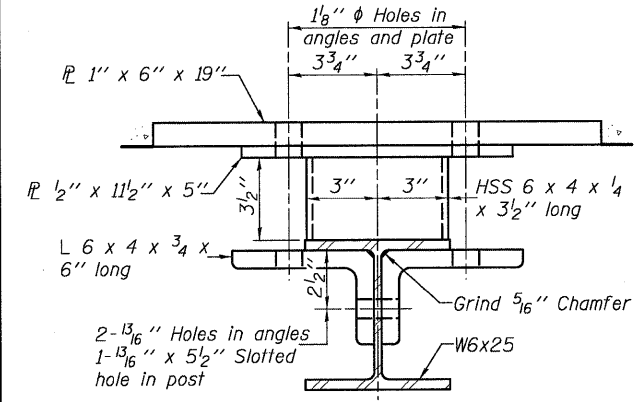
VIEW C-C



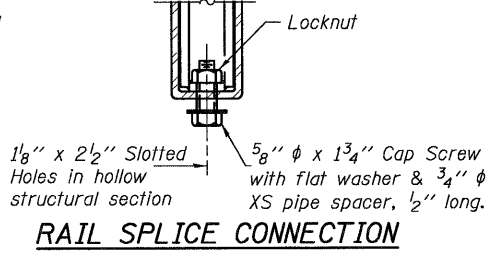
VIEW D-D



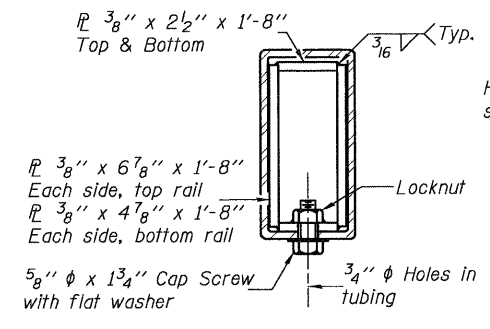
END OF RAIL DETAILS



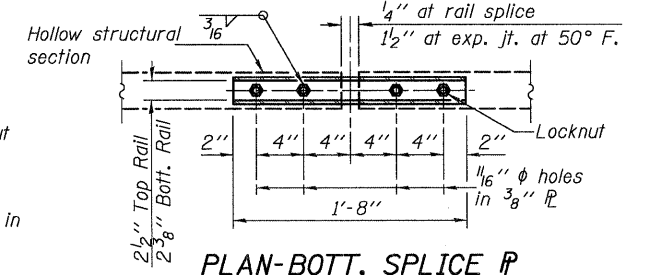
SECTION B-B



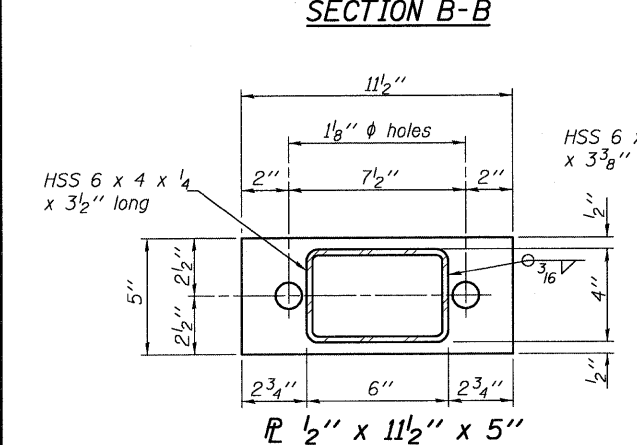
RAIL SPLICE CONNECTION AT EXPANSION JT.



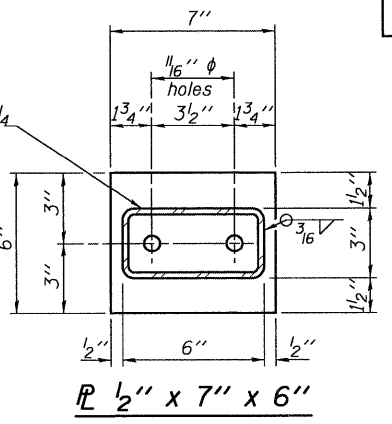
SECTION AT RAIL SPLICE



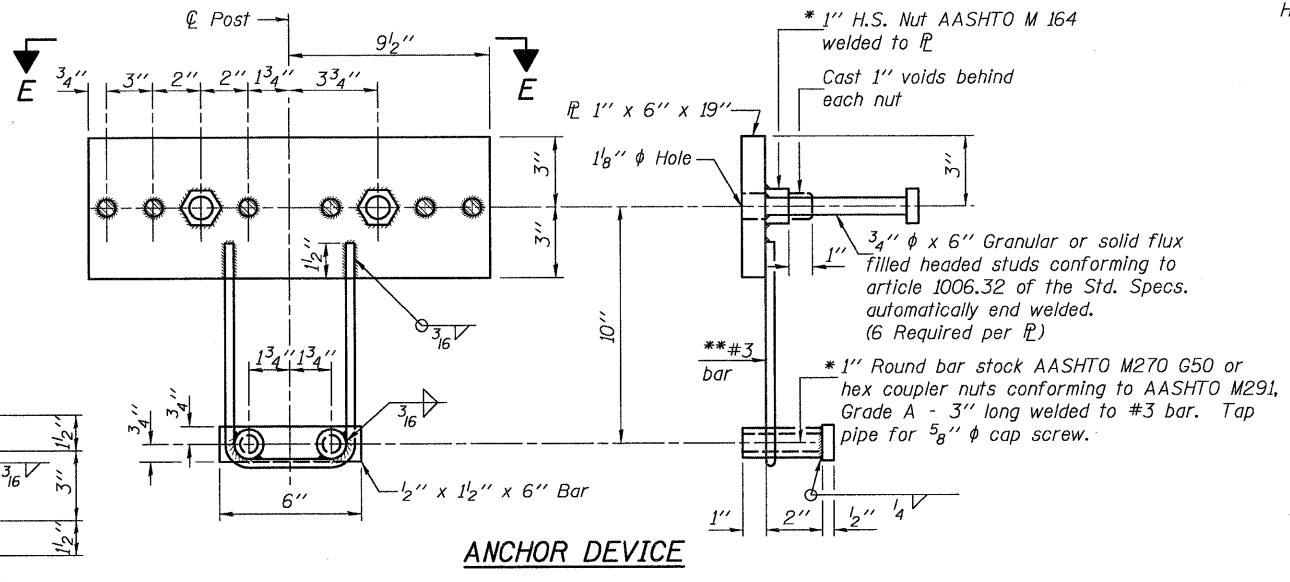
PLAN-BOTT. SPLICE TYPICAL



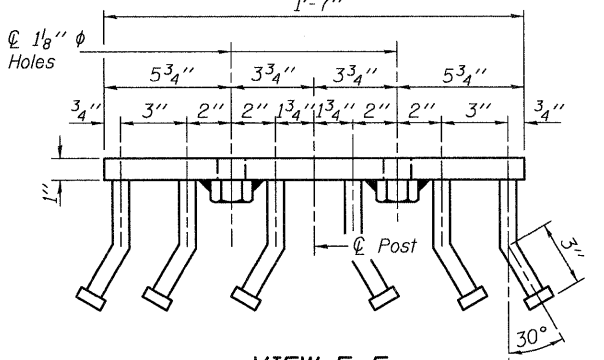
SECTION B-B



Anchor Device



ANCHOR DEVICE



VIEW E-E

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 SM.
 All steel rail members 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 SM	Foot	136

*Whenever the lower insert assemblies interfere with strand locations, the #3 bars shall be cut and adjusted in order to allow raising or lowering of the lower inserts. Maximum adjustment not to exceed 1/2".

*Threaded areas shall be plugged or blocked off during casting of beam. Galvanized after fabrication.

R-34HMAWS

7-1-10 (6'-3" Maximum Post Spacing) (1/4" minimum to 3/8" maximum HMA thickness)

FILE NAME =	USER NAME = .USERDESCR.	DESIGNED - B.I.B.	REVISED -
ha5789\12_r1dt5789.dgn		CHECKED - L.D.G.	REVISED -
	PLOT SCALE = 1.0000 / IN.	DRAWN - K.H.L.	REVISED -
	PLOT DATE = 4/12/2011	CHECKED - B.G.H.	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

STEEL RAILING, TYPE SM WITH HOT-MIX ASPHALT WEARING SURFACE

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
782	07-00084-00-BR/07-00088-00-BR	BOND/CLINTON	19	12
S.N. 003-3052			CONTRACT NO. 97469	
ILLINOIS FED. AID PROJECT				