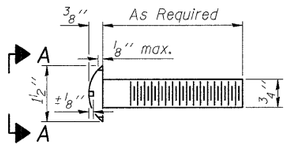
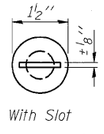
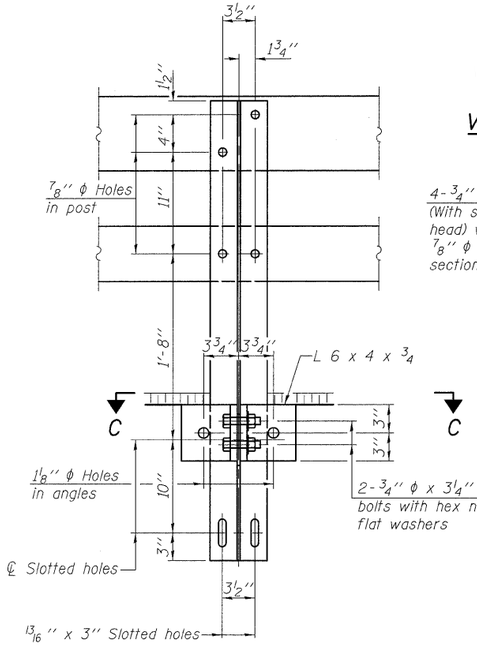
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



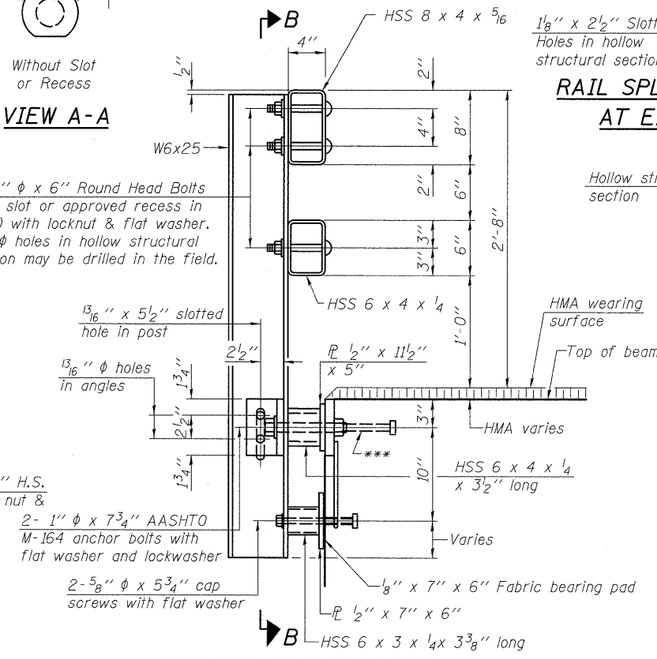
DETAIL OF 3/4" ϕ ROUND HEAD BOLT



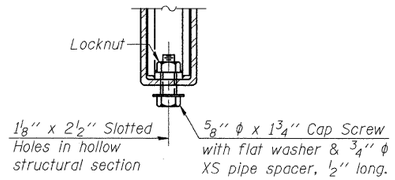
VIEW A-A



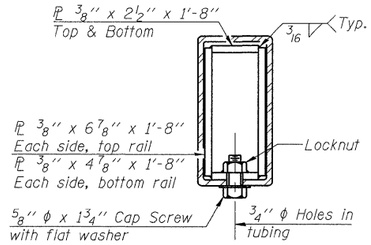
SECTION B-B



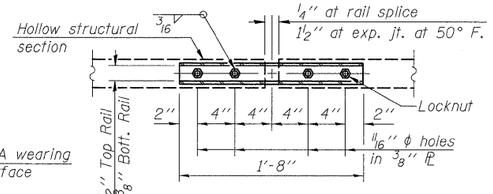
SECTION AT RAIL POST



RAIL SPLICE CONNECTION AT EXPANSION JT.

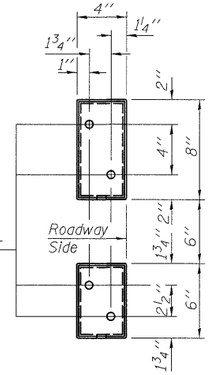


SECTION AT RAIL SPLICE

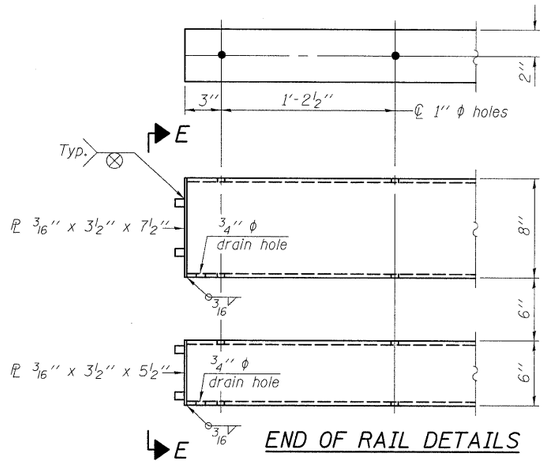


PLAN-BOTT. SPLICE PL TYPICAL

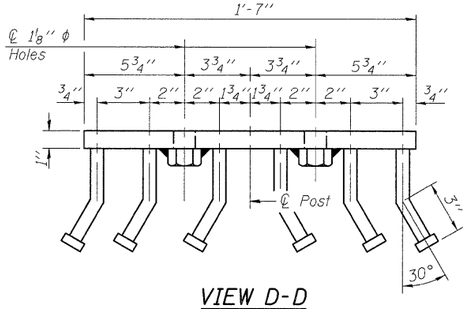
℄ - 5/8" reduced base welded studs. Provide 4 - 5/8" washers and self-locking nuts or nuts and jam nuts for guardrail connection shown on Std. 631032



VIEW E-E

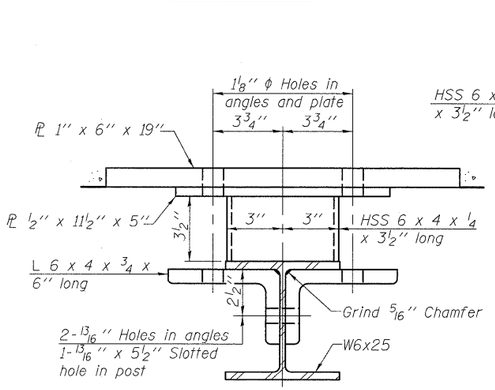


END OF RAIL DETAILS

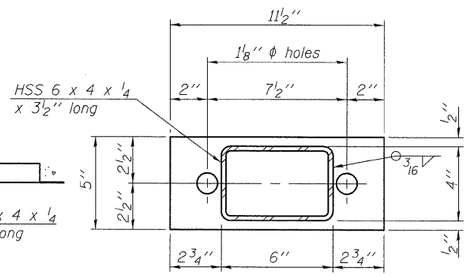


VIEW D-D

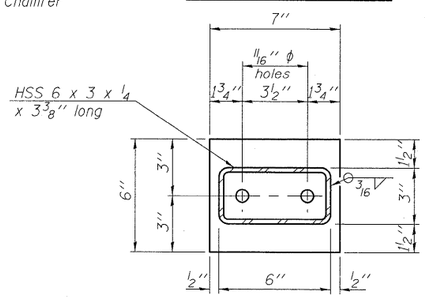
Notes:
All field drilled holes shall be coated with an approved zinc rich paint before erection.
For multi-span bridges, sufficient 1/4" x 6" x 1'-2" galvanized steel shims shall be provided to align rail between adjacent spans. Cost included with Steel Railing, Type SM.
All steel rail members shall 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.
For rail post spacing, see sheet 2 of 11.



SECTION C-C

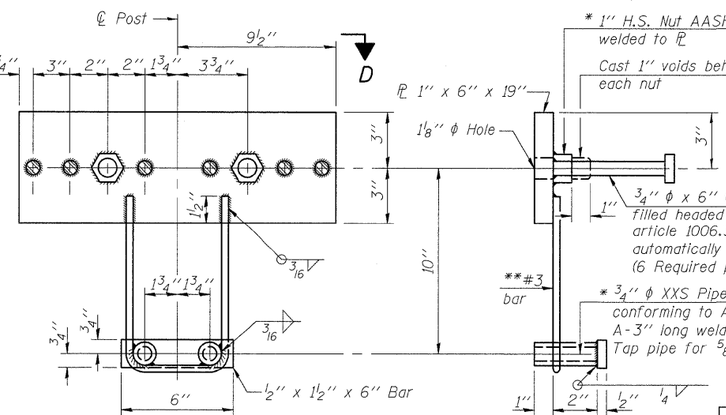


PL 1/2" x 11 1/2" x 5"



PL 1/2" x 7" x 6"

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



ANCHOR DEVICE

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

** 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".

BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type SM	Foot	286

STEEL RAILING, TYPE SM WITH HOT-MIX ASPHALT WEARING SURFACE STRUCTURE NO. 095-3260

DESIGNED	EML
CHECKED	KAK
DRAWN	EML
CHECKED	KAK

R-34HMAWS 10-1-08

HORNER & SHIFRIN, INC. ENGINEERS

SHEET NO. 5	F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
11 SHEETS	836	07-00077-01-BR	WASHINGTON	27	13
			CONTRACT NO. 97402		
	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		