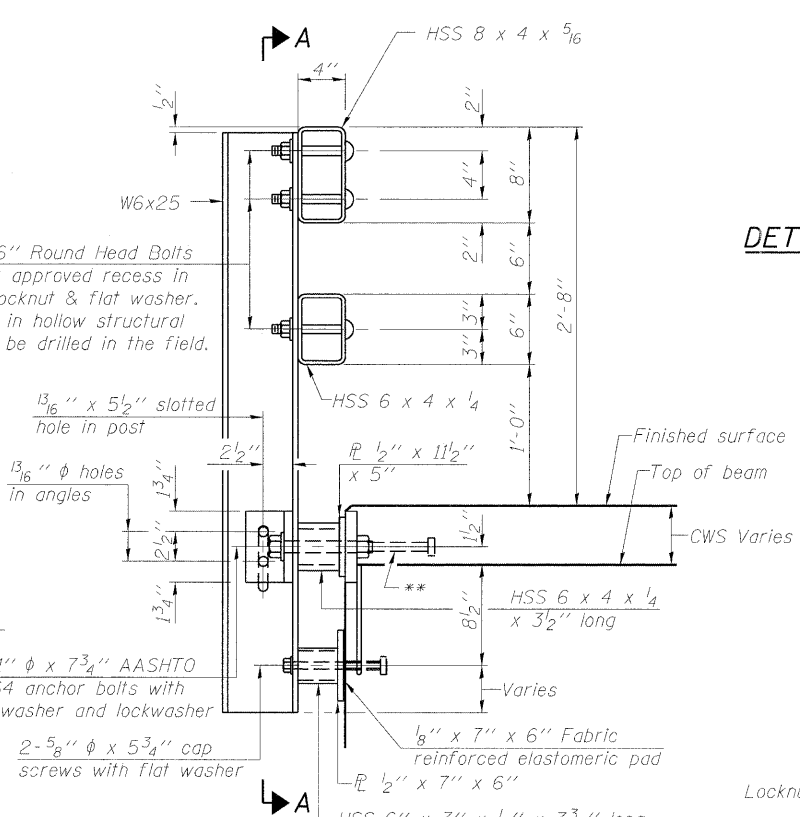
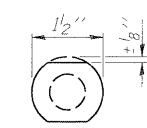
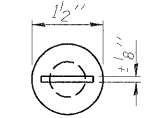
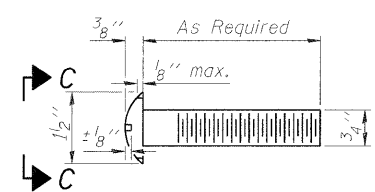


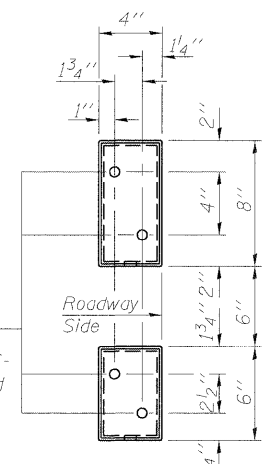
4-3/4" φ x 6" Round Head Bolts (With slot or approved recess in head) with locknut & flat washer. 7/8" φ holes in hollow structural section may be drilled in the field.



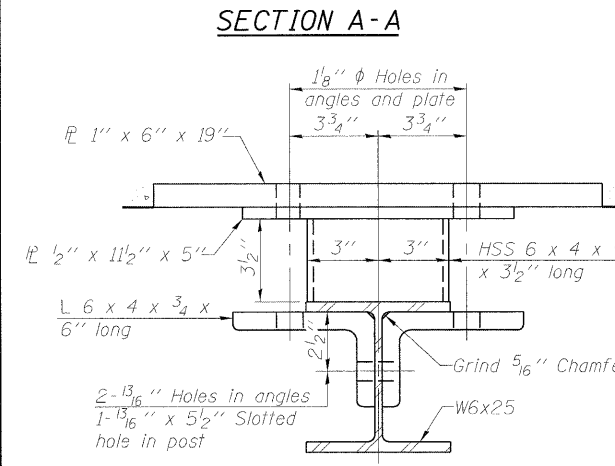
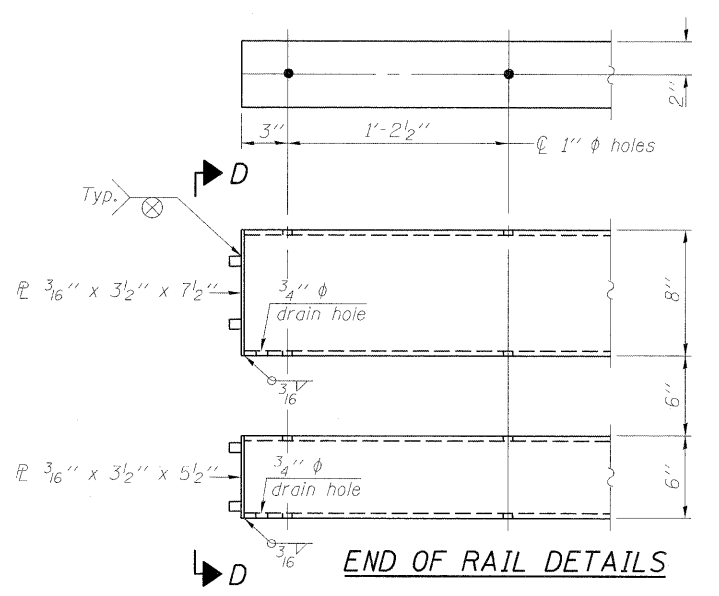
DETAIL OF 3/4" φ ROUND HEAD BOLT



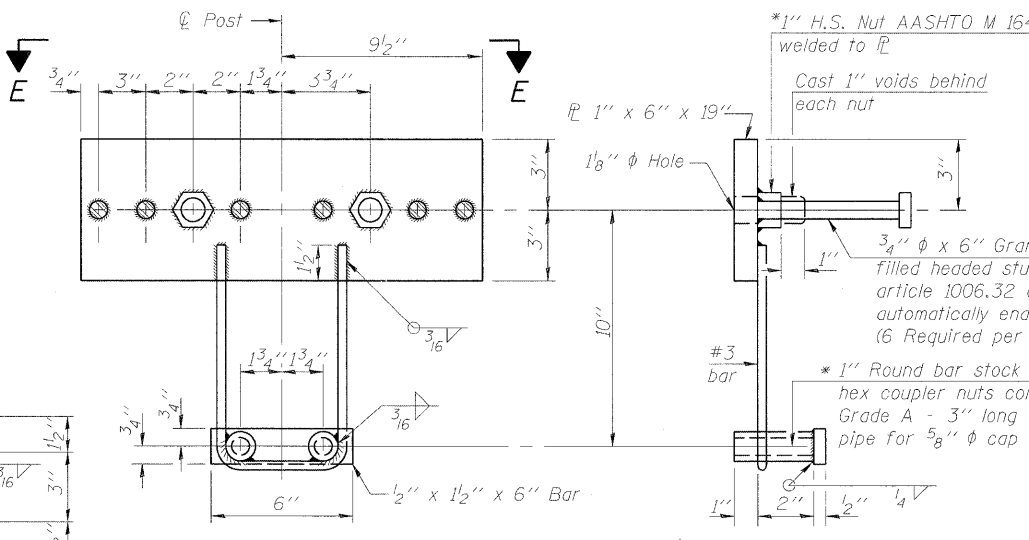
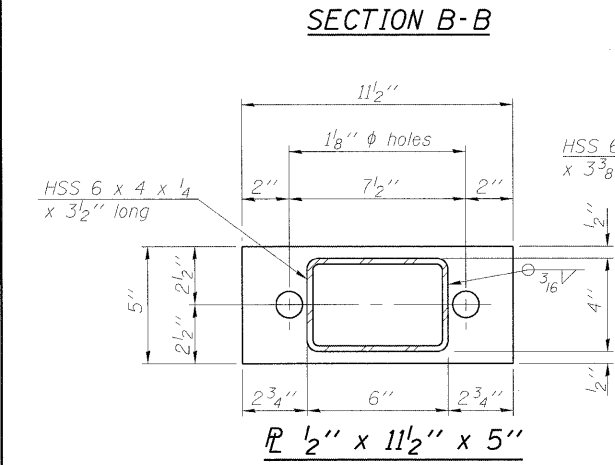
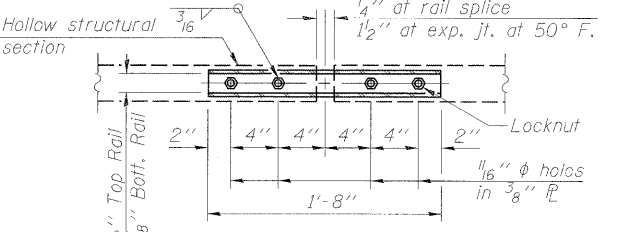
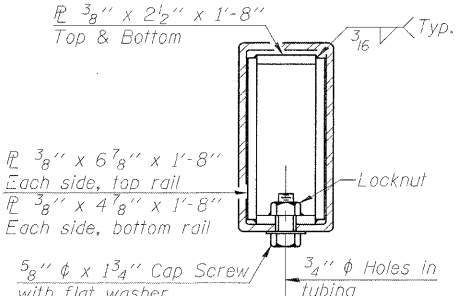
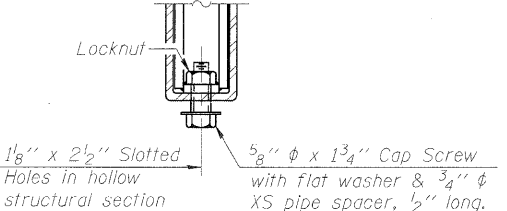
VIEW C-C



1/2" 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.



RAIL SPLICE CONNECTION AT EXPANSION JT.



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

BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type SM	Foot	585

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.
 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.

R-34CWS 7-1-10 (6'-3" Maximum Post Spacing) (5" minimum to 7/8" maximum CWS thickness)

FILE NAME = 0760025_78164-016-Steel-Railing.rpd	USER NAME = cov01283	DESIGNED - BWC	REVISED -
		CHECKED - BWC	REVISED -
		DRAWN - BWC	REVISED -
		CHECKED - MNM	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

STEEL RAILING, TYPE SM WITH CONCRETE WEARING SURFACE
 STRUCTURE NO. 076-0025

F.A.P. RTE. 132	SECTION 103BR-1	COUNTY POPE	TOTAL SHEETS 38	SHEET NO. 32
				CONTRACT NO. 78164

SHEET NO. 16 OF 22 SHEETS

ILLINOIS FED. AID PROJECT