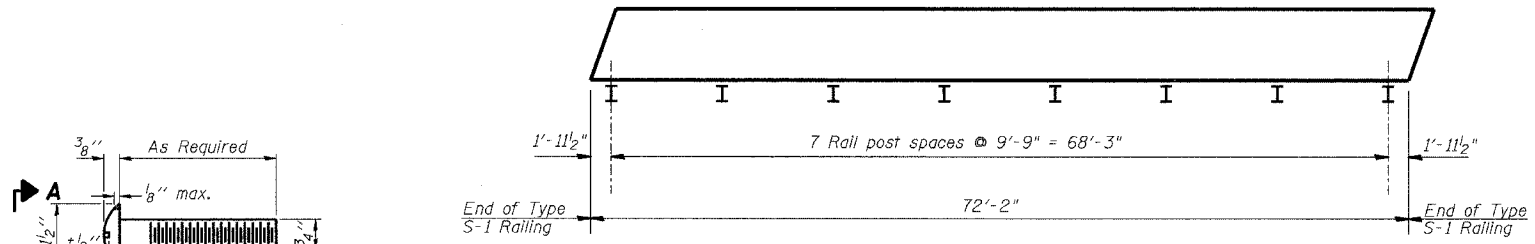
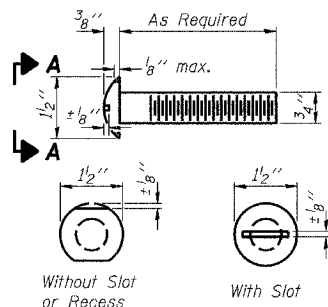


ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
C.H. 54	05-00197-00-BR	MACON	ii	10
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		

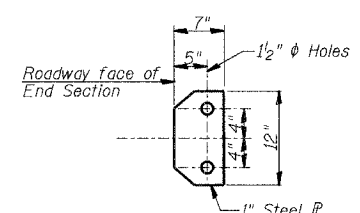
CONTRACT NO. 91344



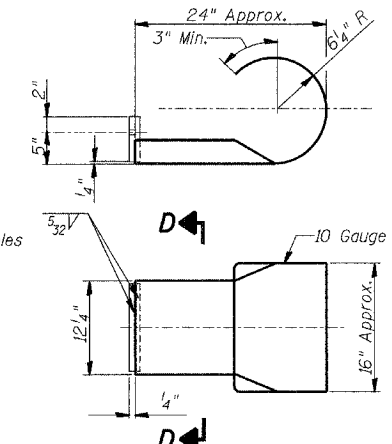
PLAN VIEW - EXTERIOR BEAM
(Showing Rail Post Spacing)



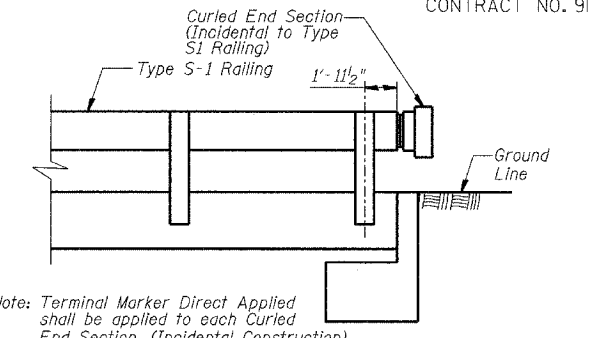
VIEW A-A
ROUND HEAD BOLT



SECTION D-D



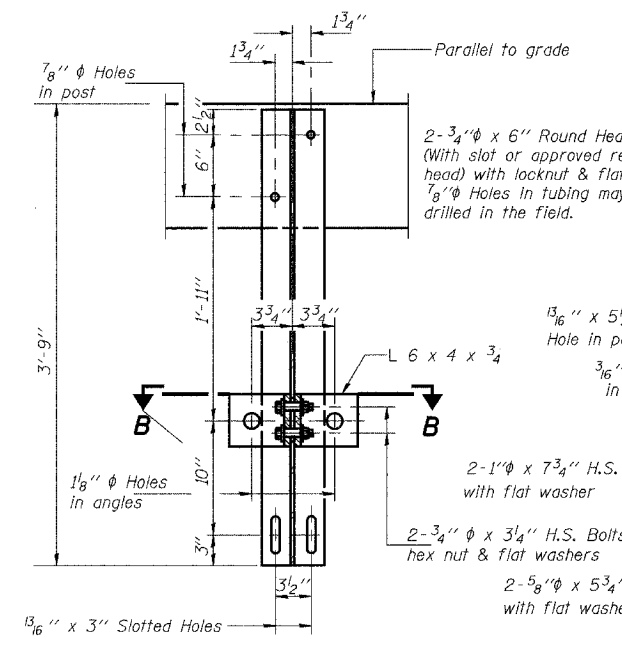
CURLLED END SECTION DETAILS
(4 Required)



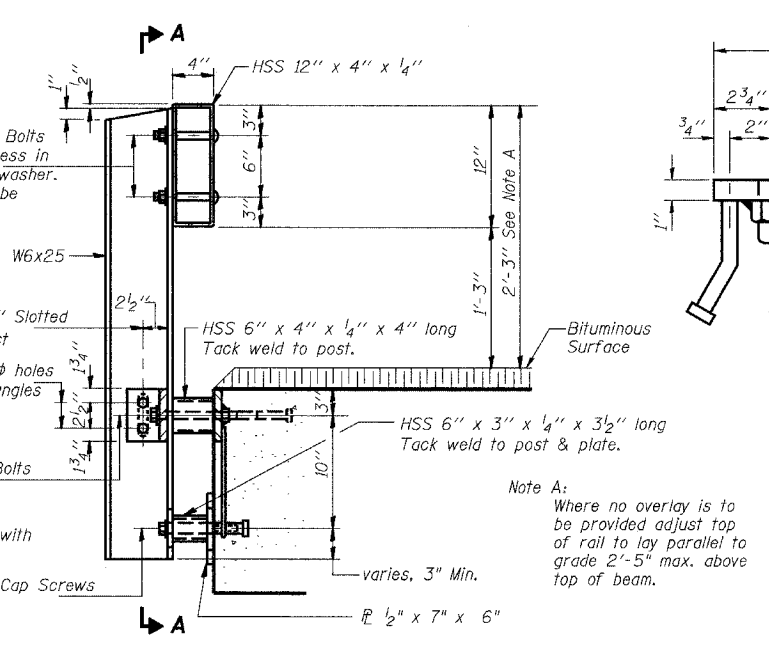
Note: Terminal Marker Direct Applied shall be applied to each Curled End Section. (Incidental Construction)

NOTES

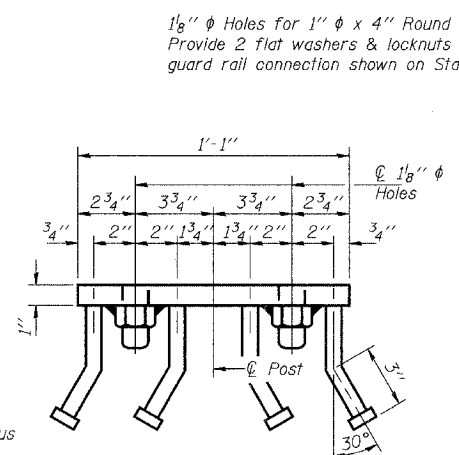
Hollow structural sections shall conform to the requirements of ASTM designation A 500 Grade B Structural Steel Tubing and shall meet the longitudinal CVN requirements of 15 ft-lbs at 0° F. All other steel shapes and plates shall conform to the requirements of AASHTO M 270 Grade 36 except posts and angles shall conform to AASHTO M 270, Grade 50. Bolts, cap screws, and nuts shall conform to the requirements of ASTM designation A 307 except for high strength bolts, nuts and washers noted which shall conform to AASHTO M 164. All bolts, nuts, cap screws, washers and lock washers shall be galvanized according to AASHTO M 232. All posts, railing, rail splices, anchor devices and angles shall be galvanized after shop fabrication according to AASHTO M 111 and ASTM A 385. Galvanized rail shall not be painted. Railing shall be according to Section 509 of the Standard Specifications, except as noted, and will be paid for at the contract unit price per foot for STEEL RAILING, TYPE S-1. All field drilled holes shall be coated with an approved zinc rich paint before erection. The 1/2" x 7" x 6" plates that come in contact with concrete shall either receive two coats of asphalt paint conforming to Section 1060.07 Type II, or 1/8" fabric bearing pads shall be placed between the plates and concrete. The 3/4" high strength bolts used to connect the 6 x 4 x 3/4 angles to the post shall be tightened according to Article 505.04(F)(2) of the Standard Specifications. The 1" high strength bolts connecting the angles to the concrete shall be tightened to a snug fit and given an additional 1/8 turn. The 5/8" cap screws in bottom of posts shall be tightened to a snug fit only. 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.



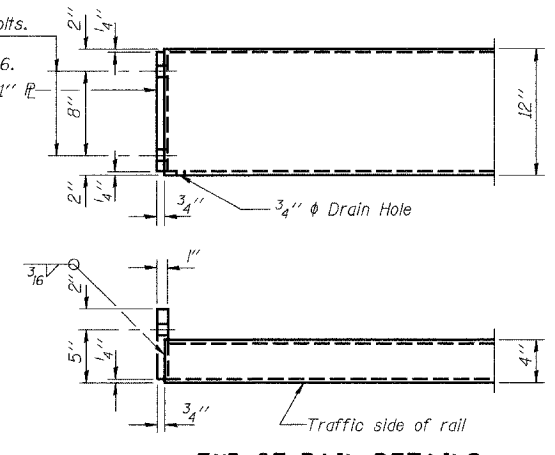
SECTION A-A



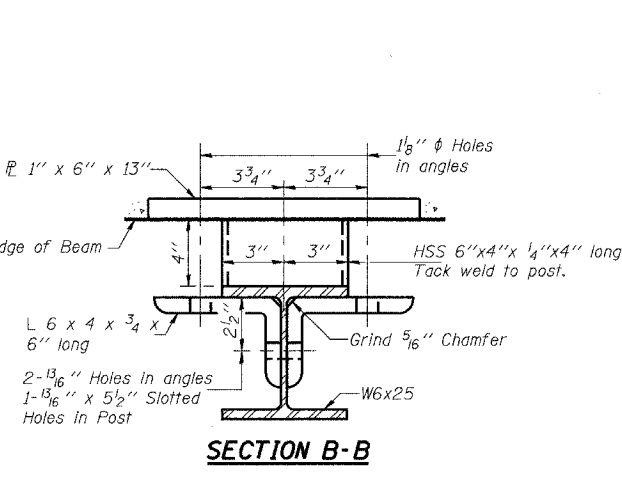
SECTION AT RAIL POST



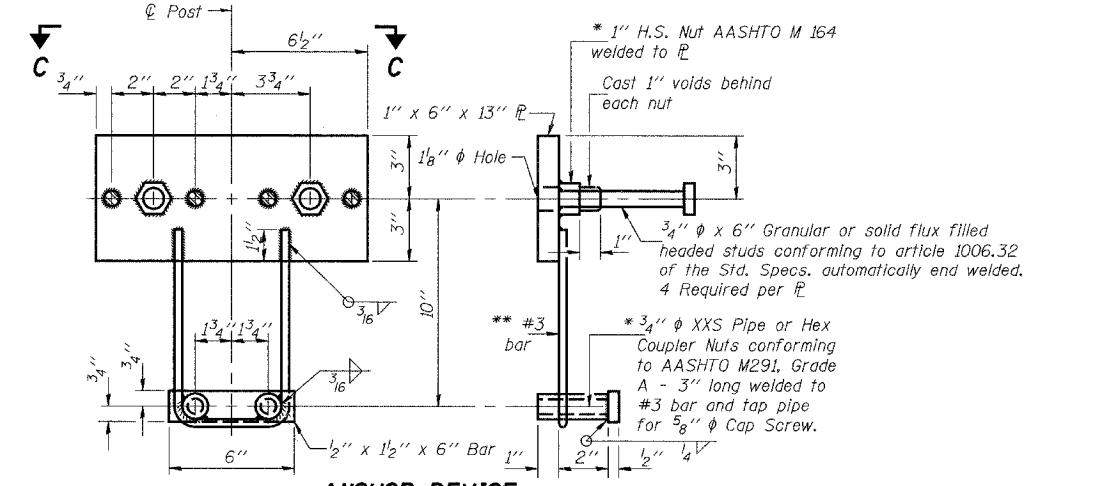
VIEW C-C



END OF RAIL DETAILS

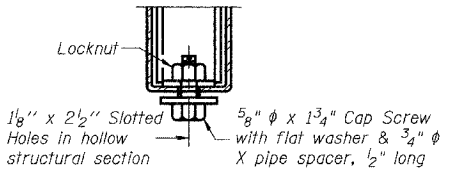


SECTION B-B

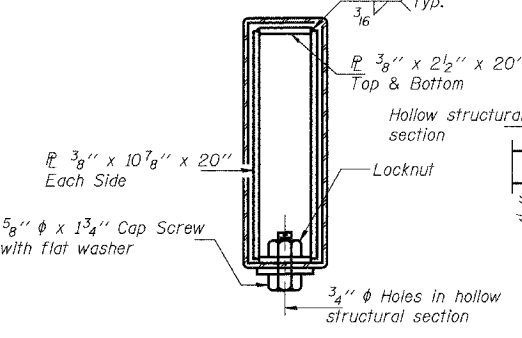


ANCHOR DEVICE

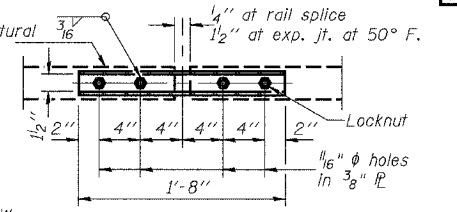
* Threaded areas shall be plugged or blocked off during casting of beam.



RAIL SPLICE CONNECTION AT EXPANSION JT.



SECTIONS AT RAIL SPLICE



PLAN-BOTT. SPLICE TYPICAL

BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing Type S-1	Foot	145

TYPE S-1 STEEL RAILING

Date		Designed BKN		C.H. 54 OVER DRAINAGE DITCH		Sheet No.	
Revisions		Drawn BKN		SECTION 05-00197-00-BR		3	
		Checked KWB		MACON COUNTY		of 4	
		Approved KWB		STA. 15+61.42		URS Job No.	
Prepared by:		URS		PROP. STR. NO. 058-3379		36431470	
		3040 North University Avenue					
		Decatur, IL 62526					