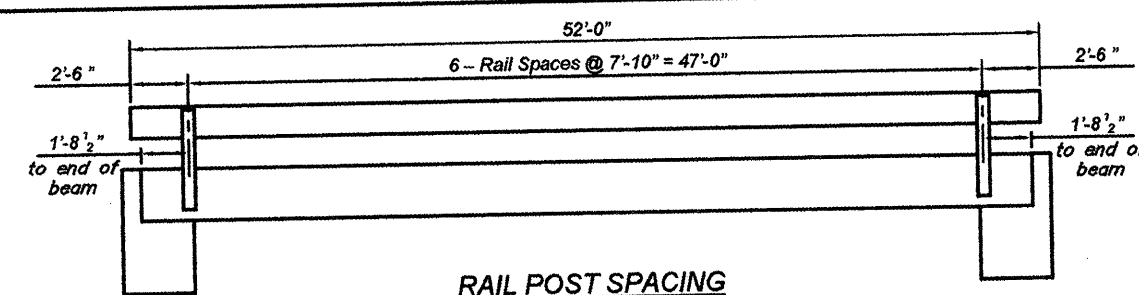
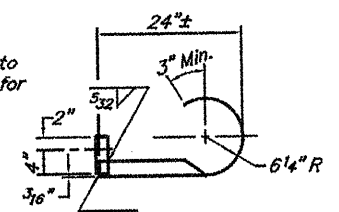


ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 112	09-01162-00-BR	ALEXANDER	10	7
PROJECT NO. BROS-0003(099)			CONTRACT NO. 99424	

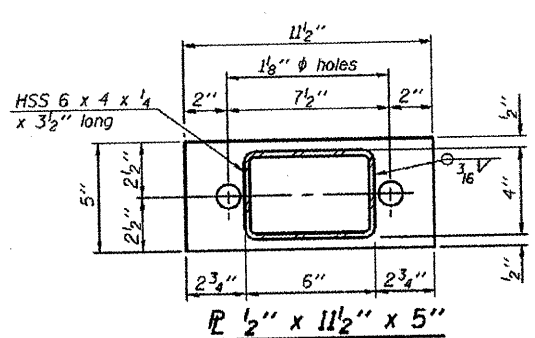


**RAIL POST SPACING**

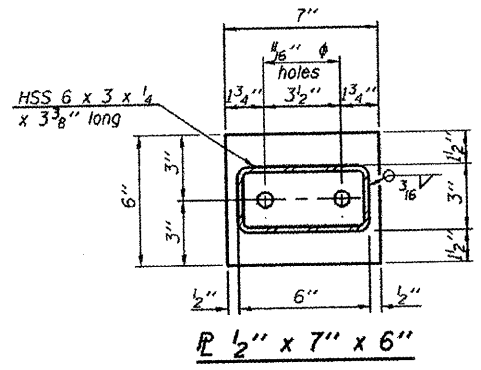
NOTE: Curled End Section to be included in the cost for Steel Railing, Type S1 Four (4) required.



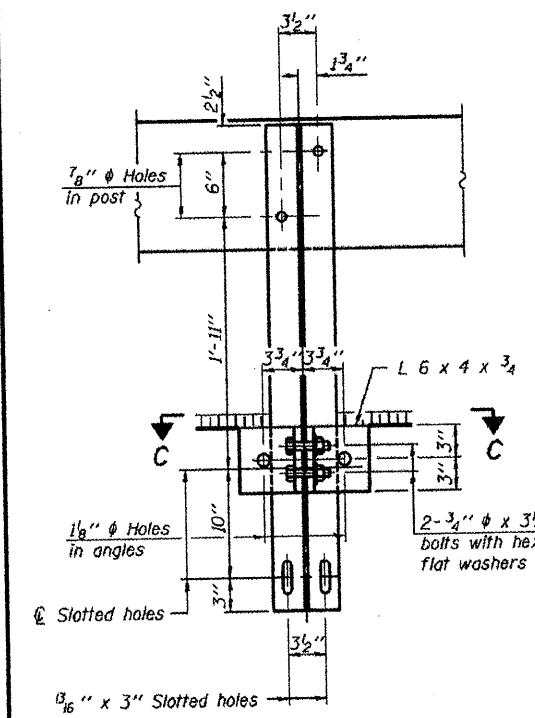
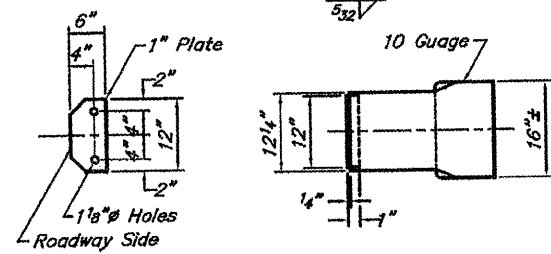
**CURLLED END SECTION DETAILS**



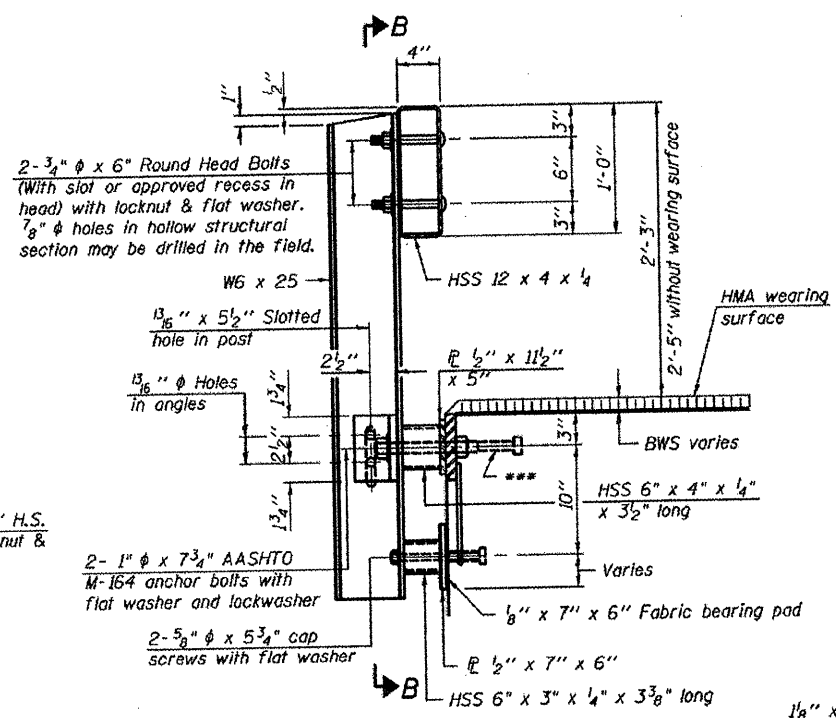
**RAIL POST SPACING**



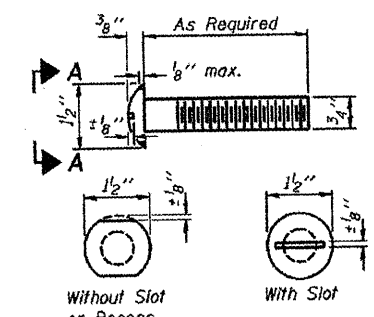
**RAIL POST SPACING**



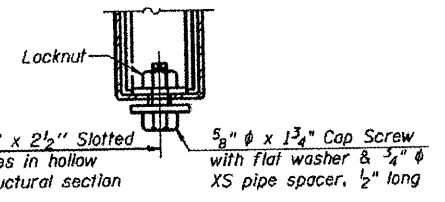
**SECTION B-B**



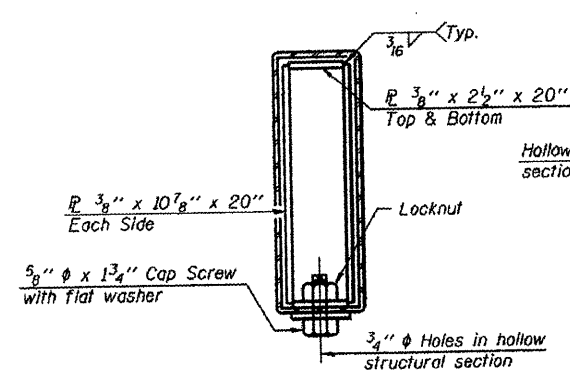
**SECTION AT RAILING POST**



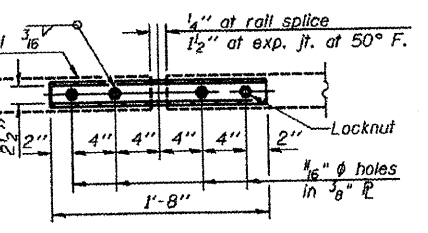
**VIEW A-A ROUND HEAD BOLT**



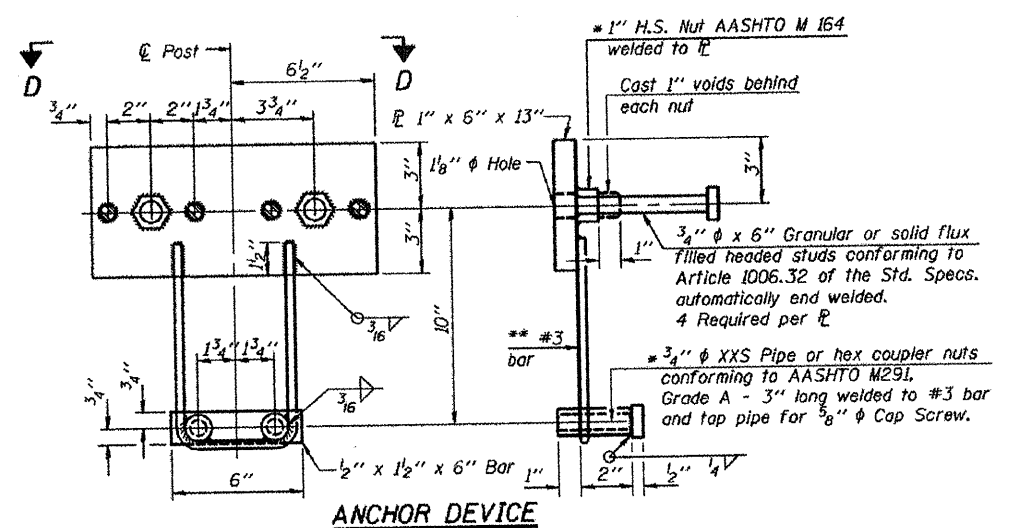
**RAIL SPLICE CONNECTION AT EXPANSION JT.**



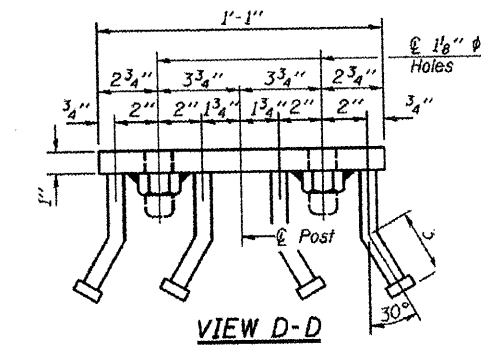
**SECTIONS AT RAIL SPLICE**



**PLAN-BOTT. SPLICE TYPICAL**



**ANCHOR DEVICE**

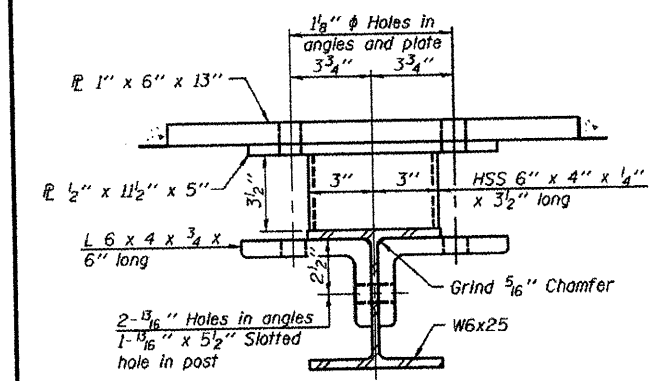


**VIEW D-D**

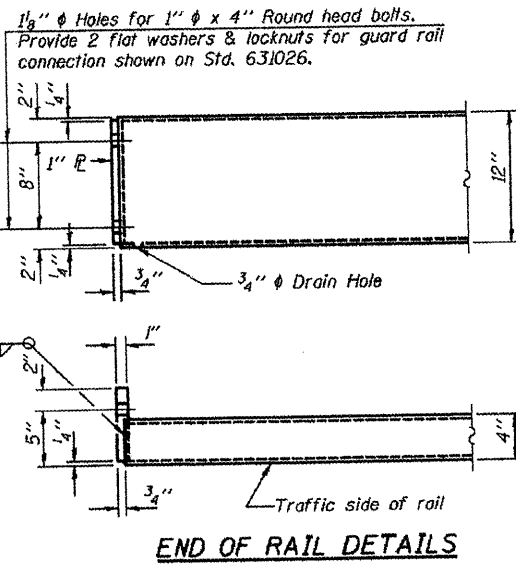
Notes:  
 All field drilled holes shall be coated with an approved zinc rich paint before erection.  
 For multi-span bridges, sufficient 1/4" x 6" x 1'-2" galvanized steel shims shall be provided to align rail between adjacent spans. Cost included with Steel Railing, Type S-1.  
 All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.  
 \* Threaded areas shall be plugged or blocked off during casting of beam.  
 \*\* 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".  
 \*\*\* 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.  
 10'-9" Maximum Post Spacing

**BILL OF MATERIAL**

Item	Unit	Quantity
Steel Railing, Type S-1	Foot	104



**SECTION C-C**



**END OF RAIL DETAILS**

**STEEL RAILING, TYPE S-1**  
 TOWNSHIP ROUTE 112 (WHITNEY HOLLOW ROAD)  
 COOPER CREEK  
 SECTION 09-01162-00-BR  
 ALEXANDER COUNTY  
 STRUCTURE NO. 002-3108