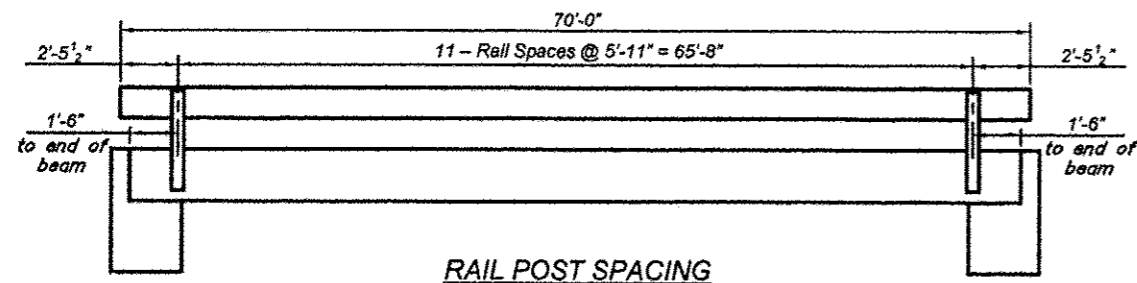
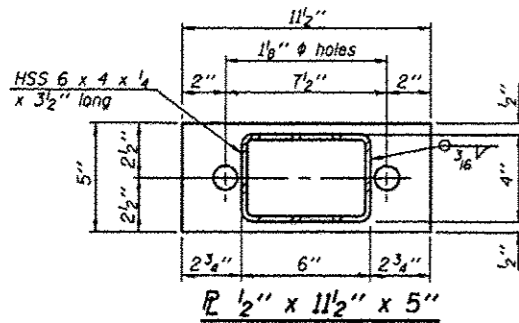


ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 3	10-01163-00-BR	ALEXANDER	12	9
PROJECT NO. BROS-003(125)			CONTRACT NO. 99521	

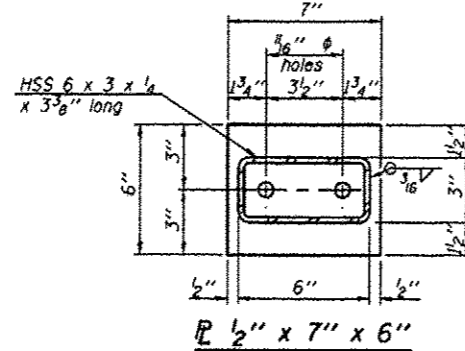


RAIL POST SPACING

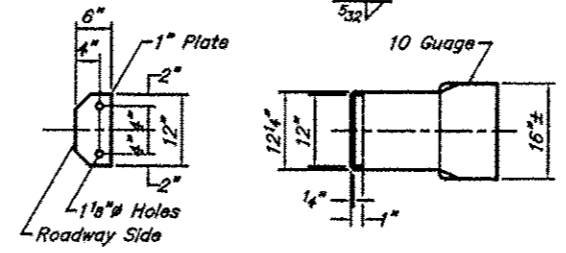
NOTE: Curled End Section to be included in the cost for Steel Railing, Type S1 Two (2) required.



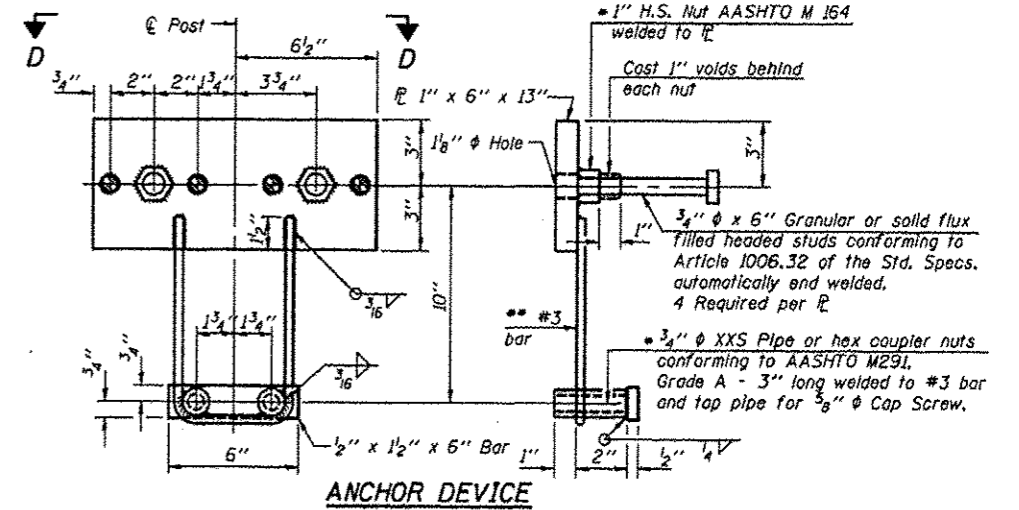
1/2" x 11 1/2" x 5"



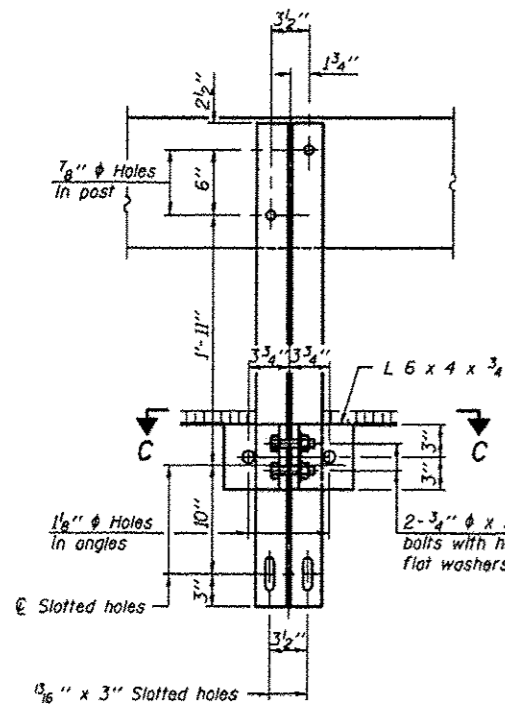
1/2" x 7" x 6"



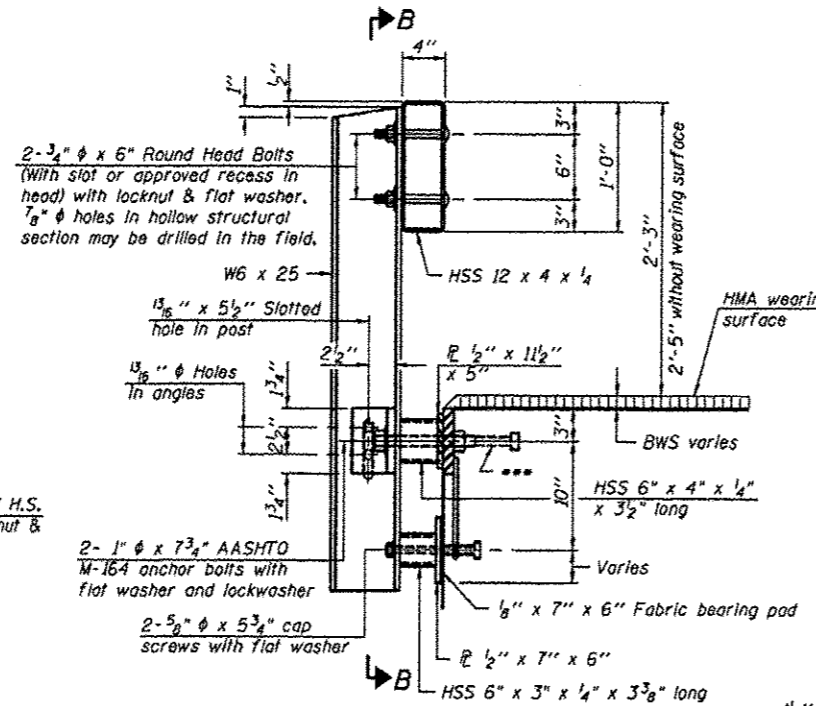
CURLLED END SECTION DETAILS



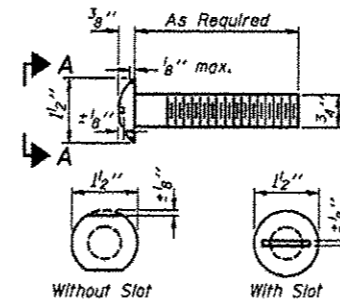
ANCHOR DEVICE



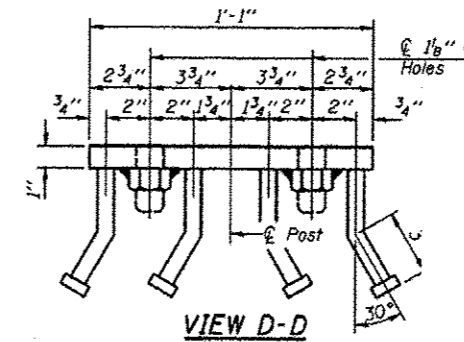
SECTION B-B



SECTION AT RAILING POST

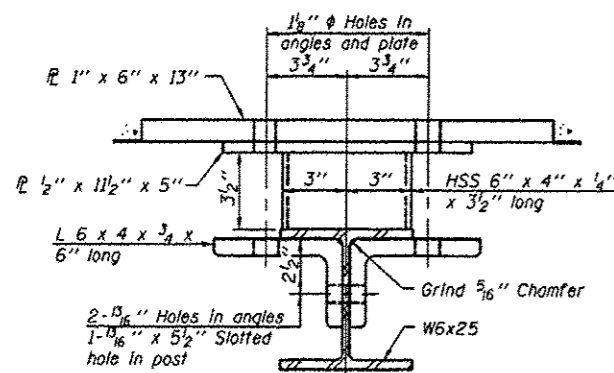


VIEW A-A ROUND HEAD BOLT

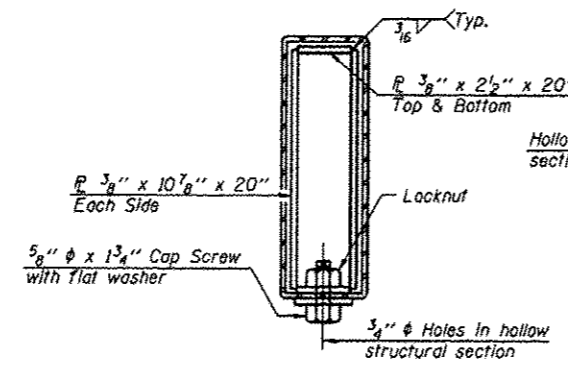


VIEW D-D

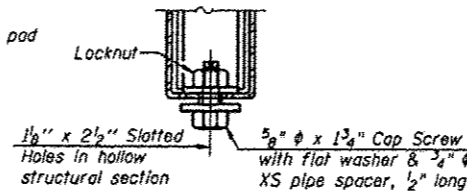
- Notes:
- All field drilled holes shall be coated with an approved zinc rich paint before erection.
 - For multi-span bridges, sufficient 1/4" x 6" x 1'-2" galvanized steel shims shall be provided to align rail between adjacent spans. Cost included with Steel Railing, Type S-1.
 - All steel rail elements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



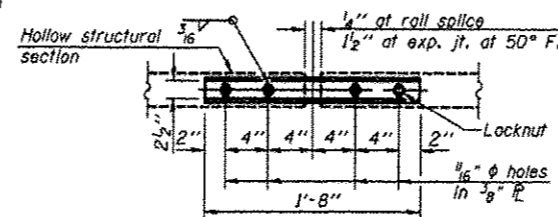
SECTION C-C



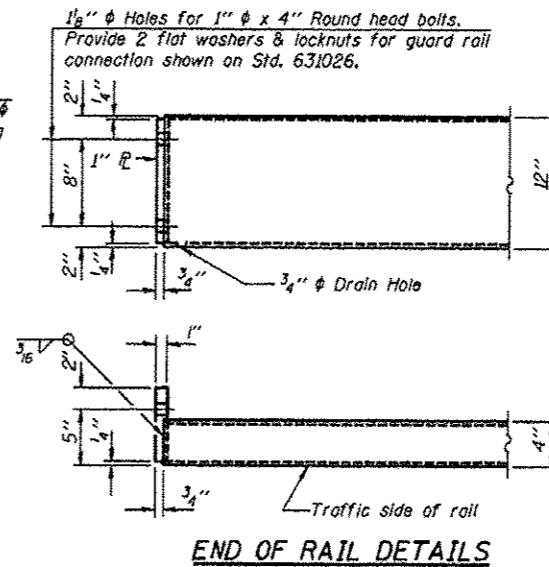
SECTIONS AT RAIL SPLICE



RAIL SPLICE CONNECTION AT EXPANSION JT.



PLAN-BOTT. SPLICE R TYPICAL



END OF RAIL DETAILS

BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type S-1	Foot	140

**STEEL RAILING, TYPE S-1
TOWNSHIP ROUTE 3 (COUNTY LINE ROAD)
TRIBUTARY TO COOPER CREEK
SECTION 10-01163-00-BR
ALEXANDER COUNTY
STRUCTURE NO. 002-3111**