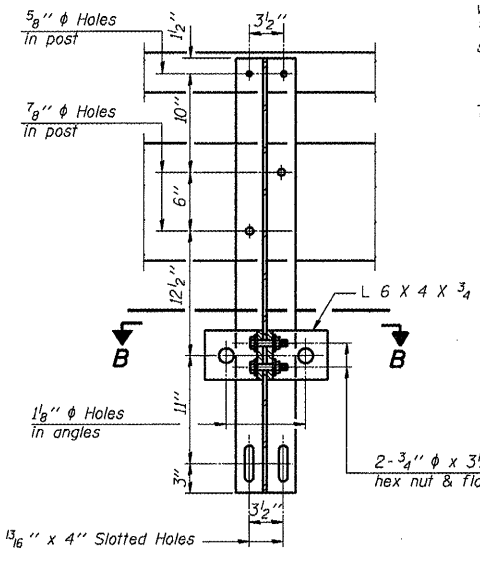
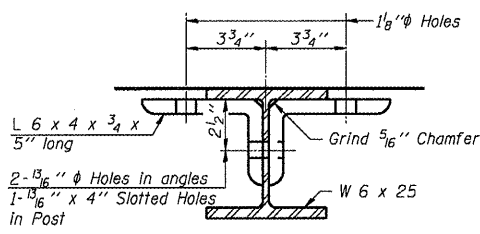


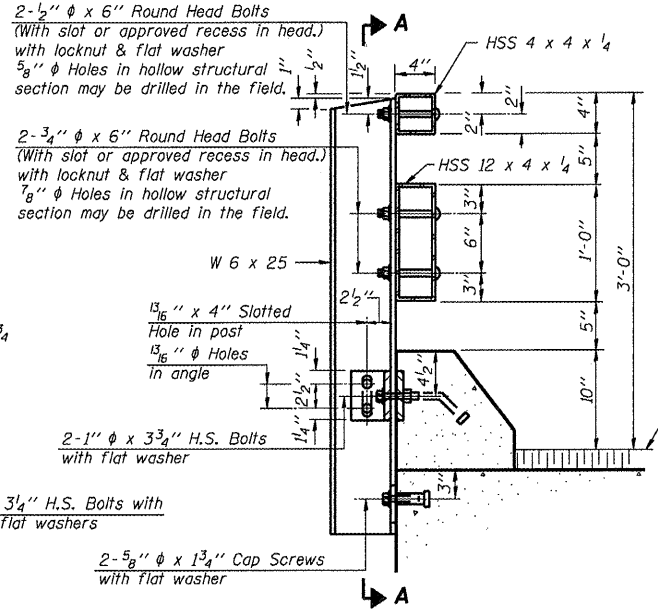
**VIEW A-A  
ROUND HEAD BOLT**



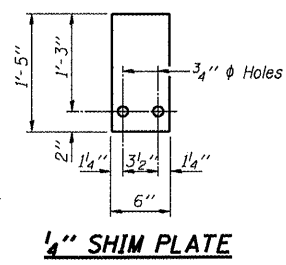
**SECTION A-A**



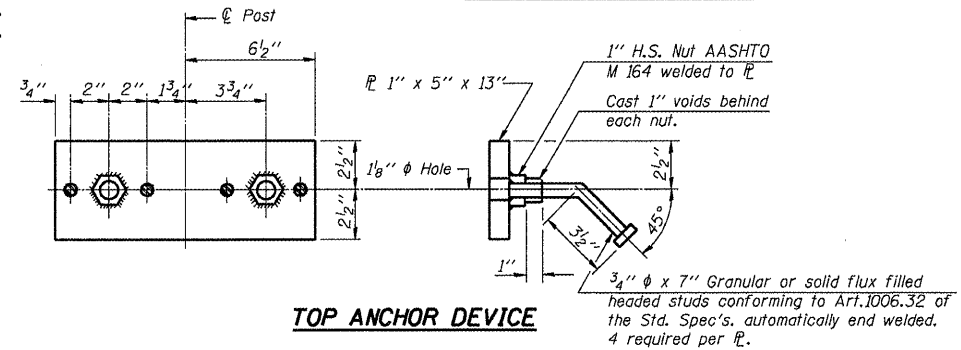
**SECTION B-B**



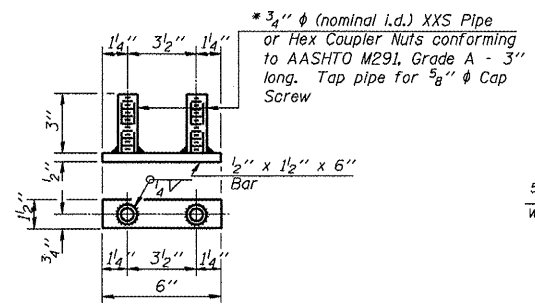
**SECTION AT RAIL POST**



**1/4" SHIM PLATE**



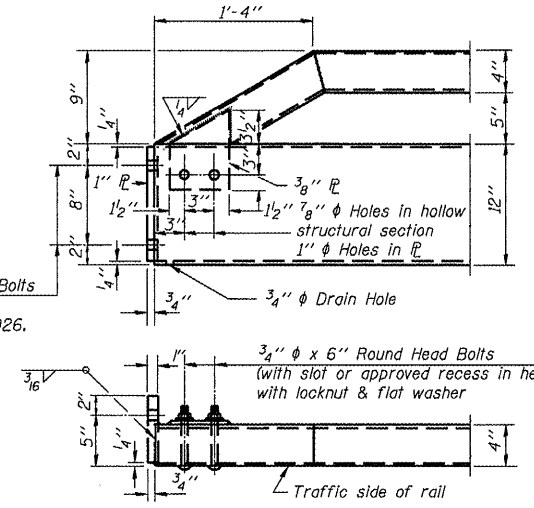
**TOP ANCHOR DEVICE**



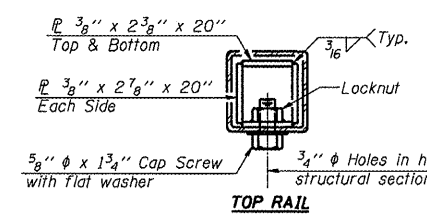
**BOTTOM ANCHOR DEVICE**

1 1/8"  $\phi$  Holes for 1"  $\phi$  x 4" Round Head Bolts  
Provide 2 flat washers & locknuts for guard rail connection shown on Std. 631026.

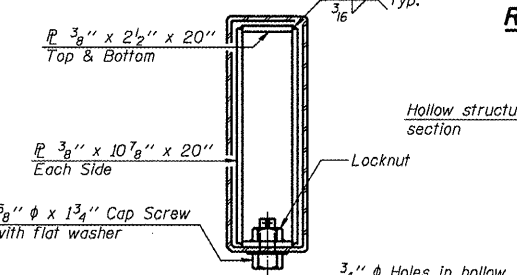
\* Threaded areas shall be plugged or blocked off during casting of beam.



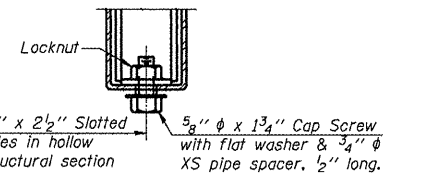
**END OF RAIL DETAILS**



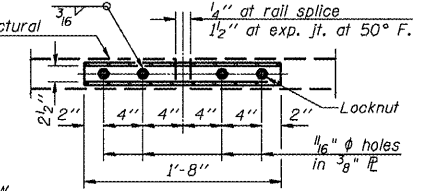
**TOP RAIL**



**SECTIONS AT RAIL SPLICE**



**RAIL SPLICE CONNECTION AT EXPANSION JT.**



**PLAN-BOTT. SPLICE R TYPICAL**

Notes:  
The existing bridge rail posts are to remain in place and be reused with the new bridge rail. The contractor shall be responsible for taking field measurements of the existing rail and fabricating a new rail to match the existing. All work and materials necessary for measuring, fabricating, furnishing, and erecting the new bridge rail shall be included in the bid price for remove and replace steel bridge rail, type T-1 special. The details included on this page are for information only.  
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'-5" galvanized steel shims shall be provided to align rail between adjacent spans. Cost included with Steel Railing, Type T-1.  
All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.

**BILL OF MATERIAL**

| Item                    | Unit | Quantity |
|-------------------------|------|----------|
| Steel Railing, Type T-1 | Foot |          |

**STEEL RAILING, TYPE T-1  
STRUCTURE NO.**

STEEL RAILING, TYPE T-1  
FAP 510 (IL 96)  
SECTION 120 GUARDRAIL  
HANCOCK COUNTY