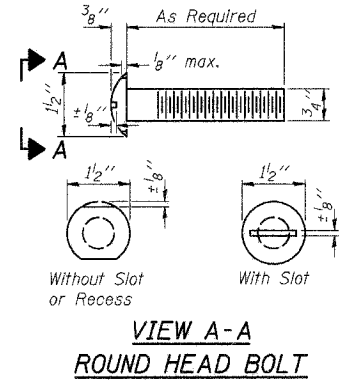
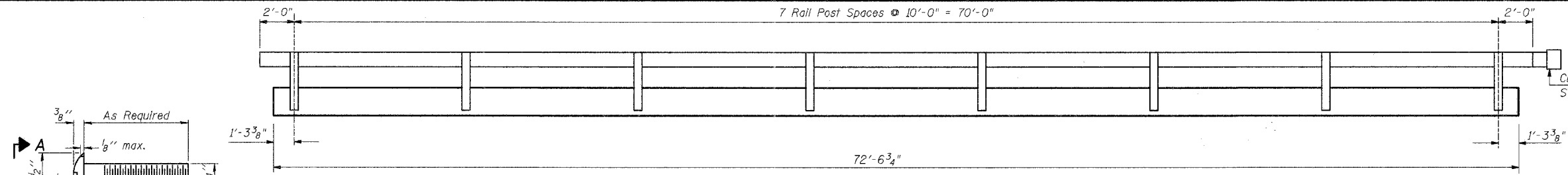
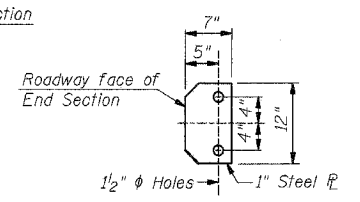


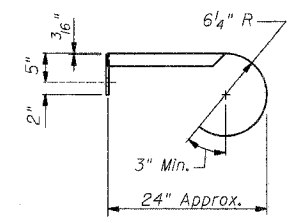
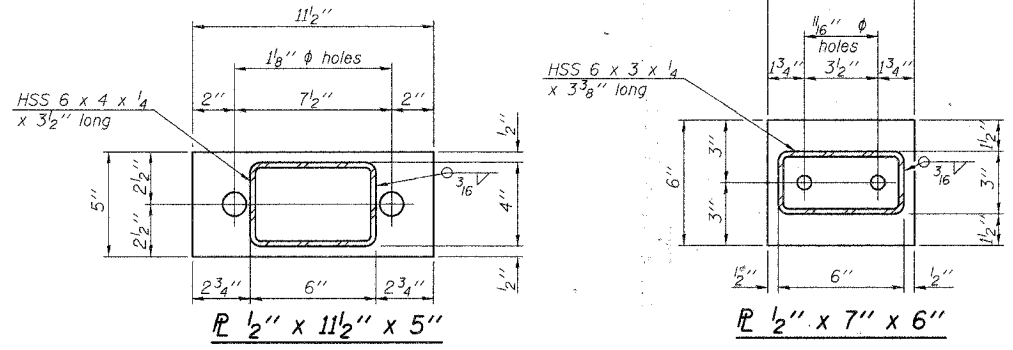
| ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|-----------------------|---------|------------------|------------------|-----------|
| TR 50 | * | CHRISTIAN SHELBY | 20 | 13 |
| FED. ROAD DIST. NO. 7 | | | ILLINOIS PROJECT | |
| *04-12112-00-BR | | | SHEET 3 OF 5 | |



OUTSIDE ELEVATION



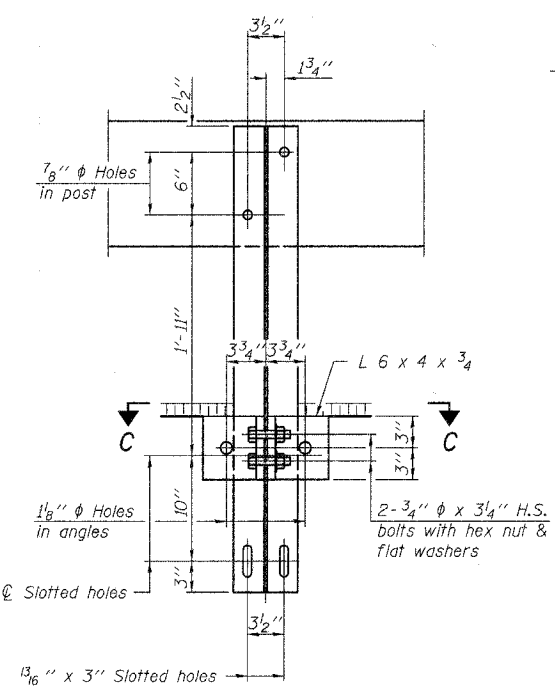
SECTION E-E



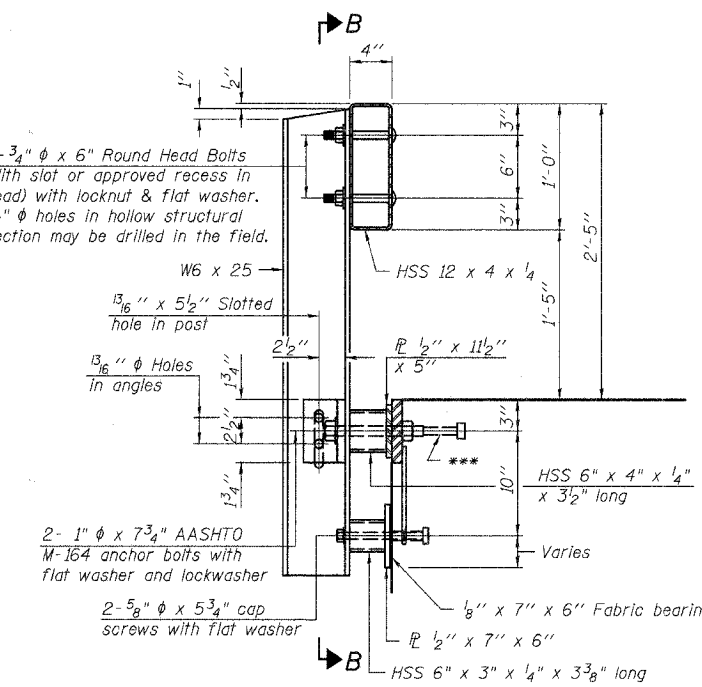
CURLED END SECTION DETAILS

(Cost included with Type S-1 Rail)

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.
 *** 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.

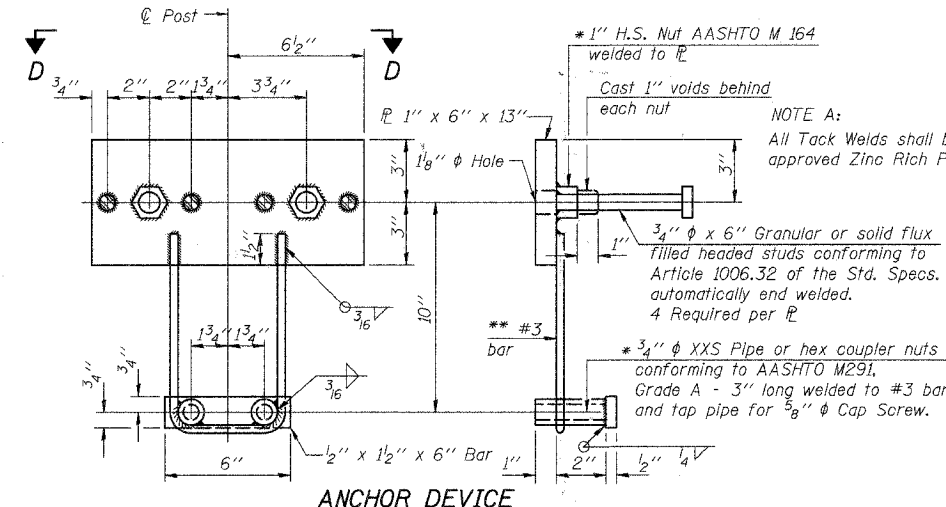


SECTION B-B



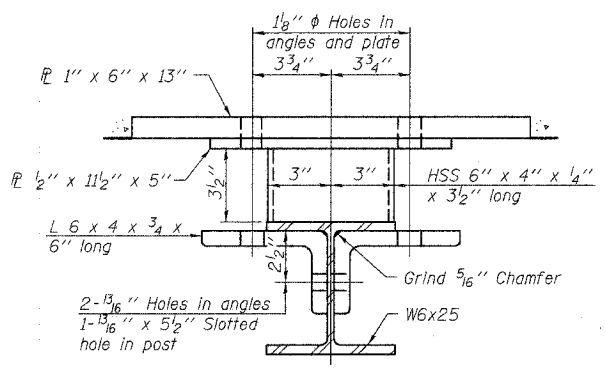
SECTION AT RAILING POST

** 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".

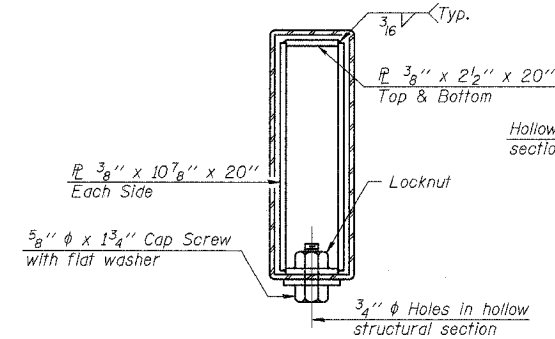


ANCHOR DEVICE

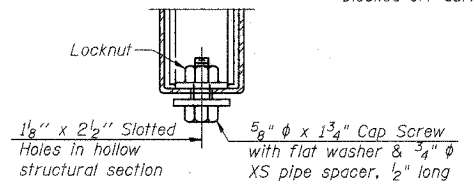
* Threaded areas shall be plugged or blocked off during casting of beam.



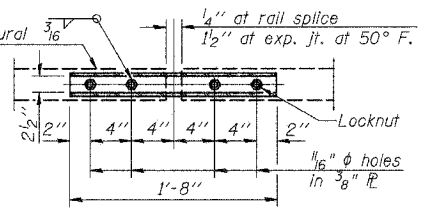
SECTION C-C



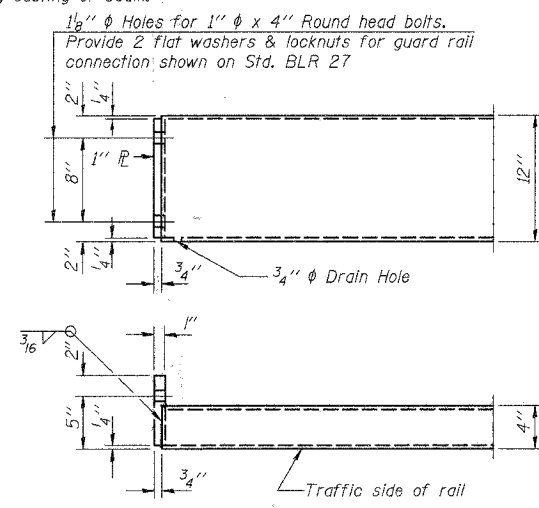
SECTIONS AT RAIL SPLICE



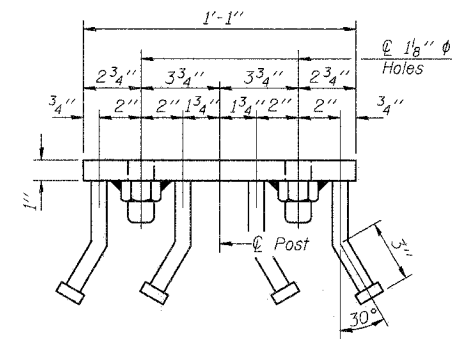
RAIL SPLICE CONNECTION AT EXPANSION JT.



PLAN-BOTT. SPLICE R TYPICAL



END OF RAIL DETAILS



VIEW D-D

BILL OF MATERIAL

| Item | Unit | Quantity |
|------------------------|------|----------|
| Steel Railing Type S-1 | Foot | 148 |

STEEL RAILING TYPE S1 DETAILS
 T.R. 50 OVER LONG GROVE CREEK TRIB.
 SECTION 04-12112-00-BR
 CHRISTIAN COUNTY
 S.N. 011-3407
 STA. 15+74.50

ie consultants
 DESIGNED: SCD CHECKED: DRB
 DRAWN: TRF DATE: FEB. 2008