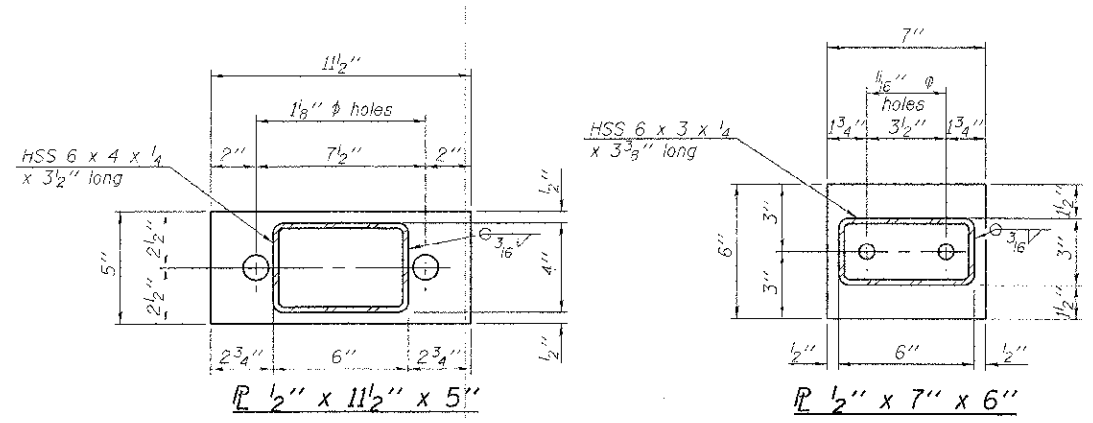
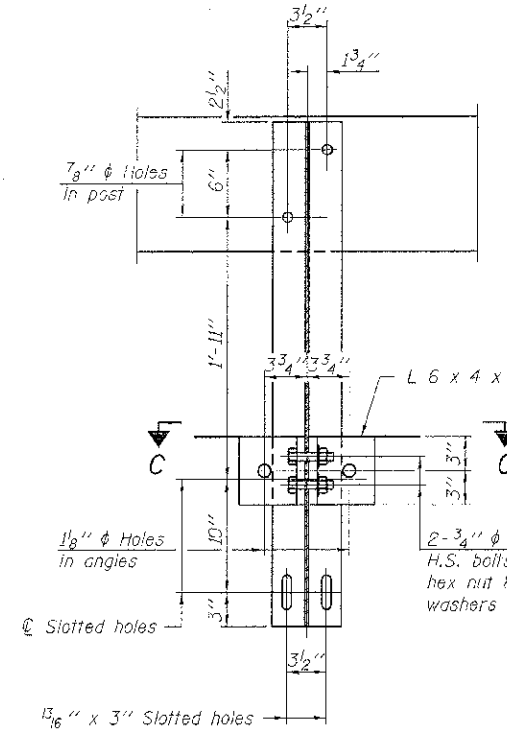


**VIEW A-A
ROUND HEAD BOLT**

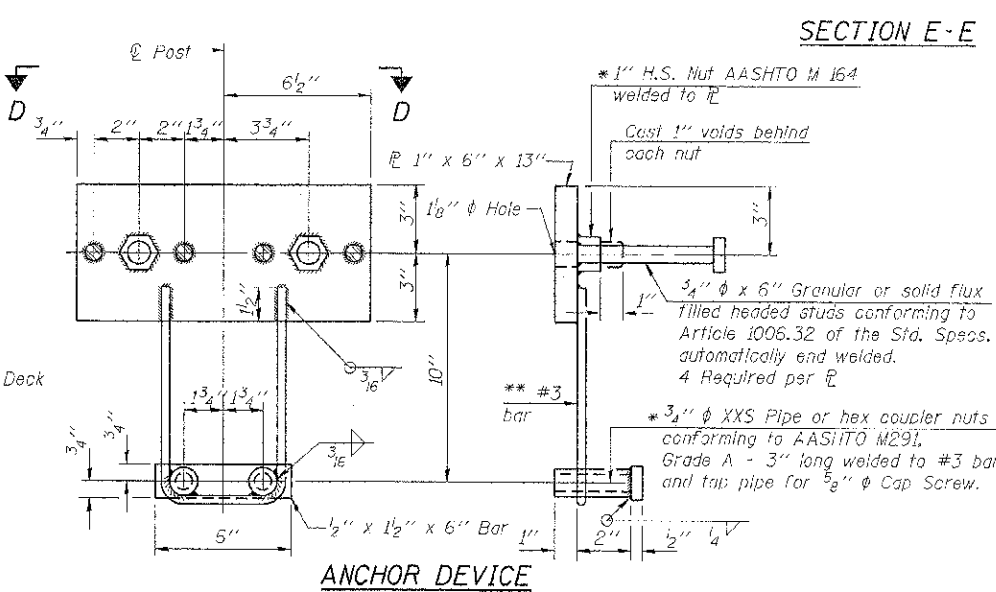


2- 3/4" φ x 6" Round Head Bolts (With slot or approved recess in head) with locknut & flat washer. 7/8" φ holes in hollow structural section may be drilled in the field.

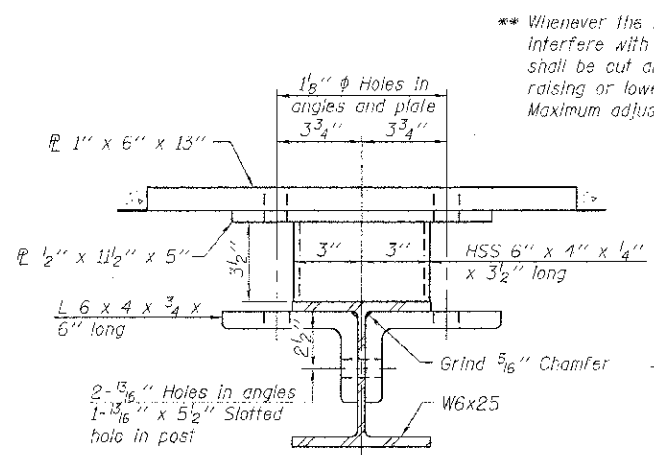


SECTION B-B

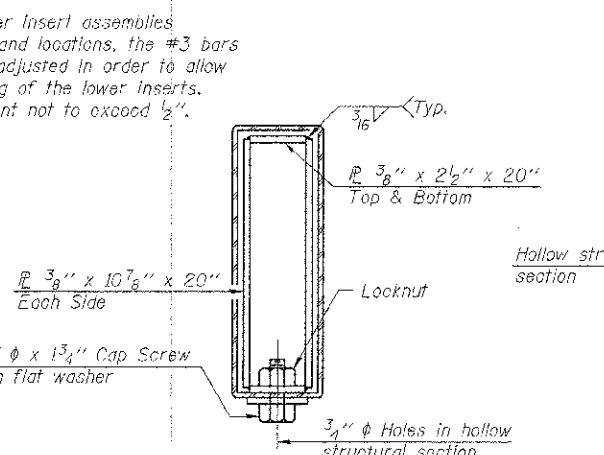
SECTION AT RAILING POST



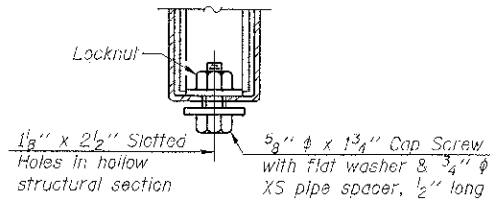
ANCHOR DEVICE



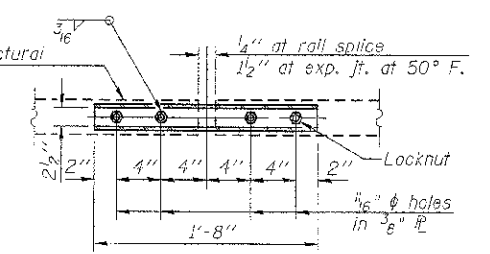
SECTION C-C



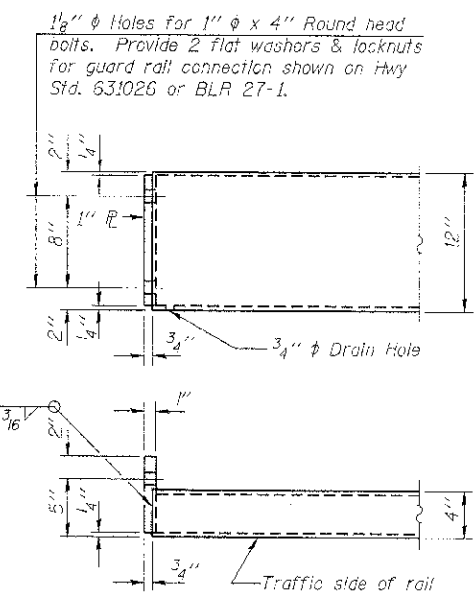
SECTIONS AT RAIL SPLICE



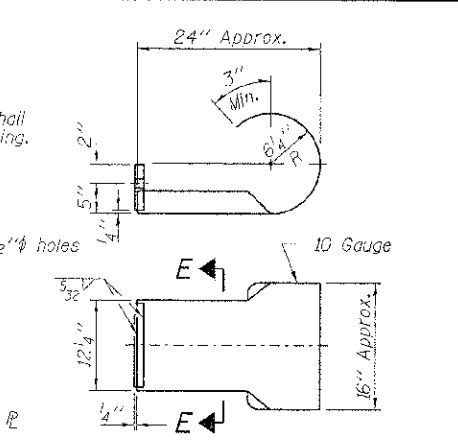
**RAIL SPLICE CONNECTION
AT EXPANSION JT.**



**PLAN-BOTT. SPLICE
TYPICAL**



END OF RAIL DETAILS



**SECTION E-E
CURLED END SECTION DETAILS**

Notes:
All field drilled holes shall be coated with an approved zinc rich paint before erection.
For multi-span bridges, sufficient 1/2" 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.

BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type S-1	Foot	136

R-23A 7-1-10 (10'-9" Maximum Post Spacing)
FILE NAME = 110072-ent-brdgs.dwg USER NAME =
DESIGNED - A.S.L. REVISIONS -
CHECKED - S.W.M. REVISIONS -
DRAWN - D.A.B. REVISIONS -
CHECKED - S.W.M. REVISIONS -

STATE OF ILLINOIS
WHITE COUNTY HIGHWAY DEPARTMENT

STEEL RAILING, TYPE S-1
STRUCTURE NO. 097-3279
SHEET NO. 5 OF 9 SHEETS

T.R.	SECTION	COUNTY	TOTAL SHEET NO.
27	10-05117-00-BR	WHITE	13
GRAY ROAD DISTRICT			9
CONTRACT NO. 99484 (ILLINOIS FED. AID PROJECT BR05-193058)			