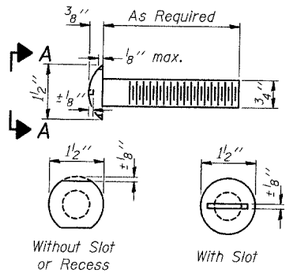
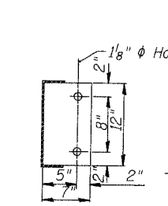
CONTRACT NO. 95471

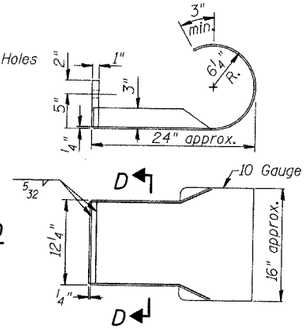
RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR183	99-01120-00-BR	SHELBY	14	6
STA. 10+00	TO STA. 20+00			



VIEW A-A
ROUND HEAD BOLT

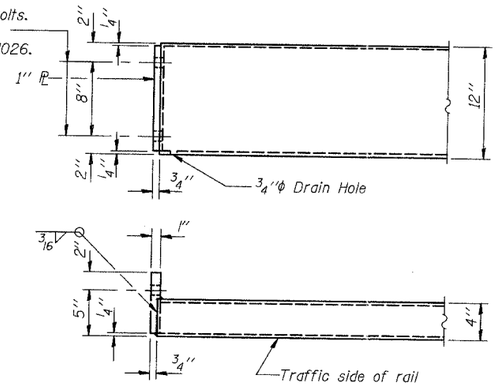


SECTION D-D



CURLED END SECTION

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



END OF RAIL DETAILS

NOTES

Hollow structural steel tubing shall conform to the requirements of ASTM designation A 500 Grade B Structural Steel Tubing and shall meet the longitudinal CVN requirements of 15 ft-lbs at 0° F.

All other steel shapes and plates shall conform to the requirements of AASHTO M 270 Grade 36 except posts and angles shall conform to AASHTO M 270, Grade 50.

Bolts, cap screws, and nuts shall conform to the requirements of ASTM designation A 307 except for high strength bolts, nuts and washers noted which shall conform to AASHTO M 164.

All bolts, nuts, cap screws, washers and lock washers shall be galvanized according to AASHTO M 232.

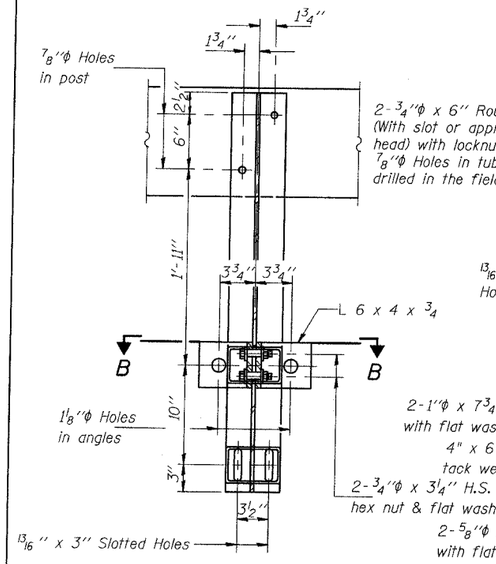
All posts, railing, rail splices, anchor devices and angles shall be galvanized after shop fabrication according to AASHTO M 111 and ASTM A 385. Galvanized rail shall not be painted.

Railing shall be according to Section 509 of the Standard Specifications, except as noted, and will be paid for at the contract unit price per foot for STEEL RAILING, TYPE S-1.

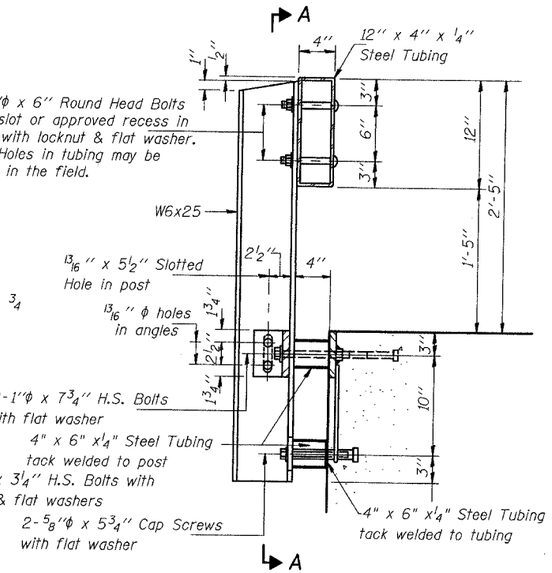
All field drilled holes shall be coated with an approved zinc rich paint before erection.

The lower portion of the post flange in contact with concrete shall receive two coats of asphalt paint conforming to Section 1060.07 Type II or place 1/8" fabric bearing pad between the post and concrete.

The 3/4"ϕ high strength bolts used to connect the 6 x 4 x 3/4 angles to the post shall be tightened according to Article 505.04(f)(2) of the Standard Specifications. The 1"ϕ high strength bolts connecting the angles to the concrete shall be tightened to a snug fit and given an additional 1/8 turn. The 5/8"ϕ cap screws in bottom of posts shall be tightened to a snug fit only.

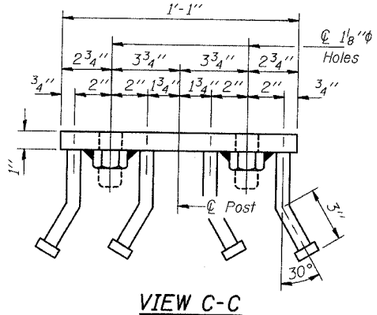


SECTION A-A

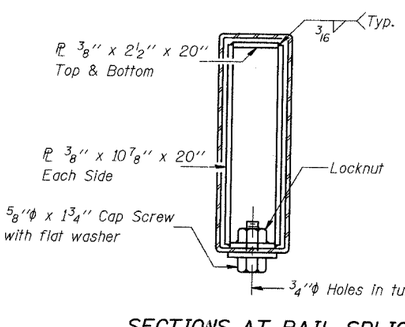


SECTION AT RAIL POST

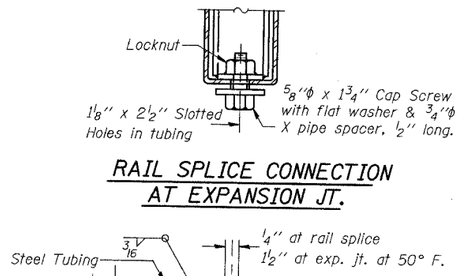
2-3/4"ϕ x 6" Round Head Bolts (With slot or approved recess in head) with locknut & flat washer. 7/8"ϕ Holes in tubing may be drilled in the field.



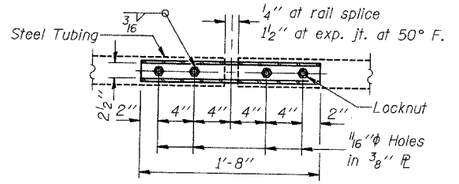
VIEW C-C



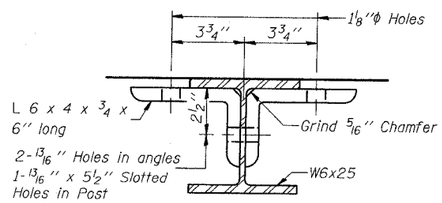
SECTIONS AT RAIL SPLICE



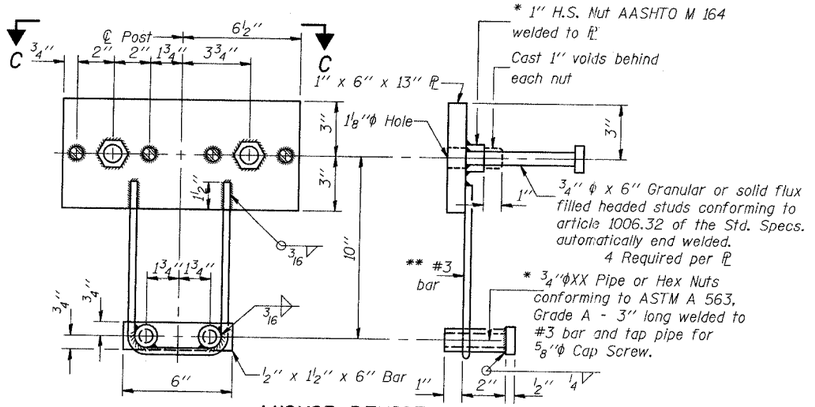
RAIL SPLICE CONNECTION AT EXPANSION JT.



PLAN-BOTT. SPLICE ℄ TYPICAL



SECTION B-B



ANCHOR DEVICE

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

BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing Type S-1	Foot	120

** 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".

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

DECK RAILING DETAILS
TR 183 OVER CLEAR CREEK
SECTION 99-01120-00-BR
SHELBY COUNTY STA. 14+95
STRUCTURE NO. 087-3516

SCALE: N.T.S.
DATE 04/08/03
DRAWN BY BJF
CHECKED BY

THE UPCHURCH GROUP
architects engineers surveyors environmental consultants
HILLSIDE, IL. (708) 449-2323
MATTOON, IL. (217) 236-3177

RAIL PBB 1-30-02