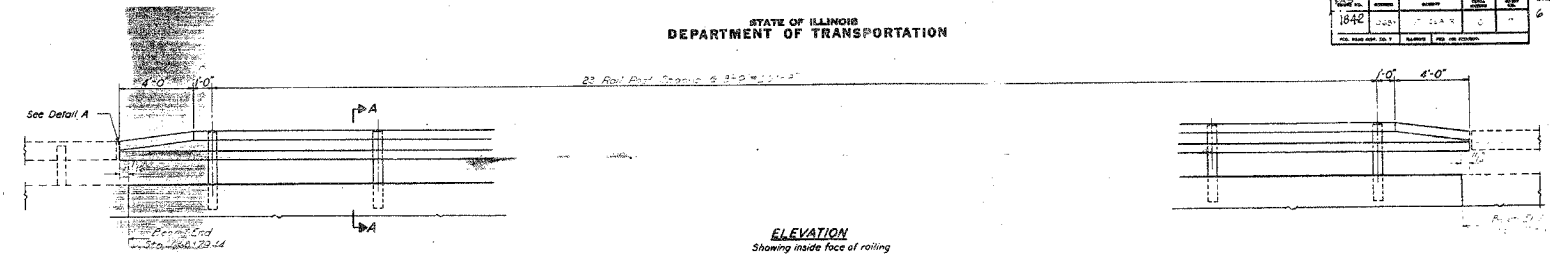
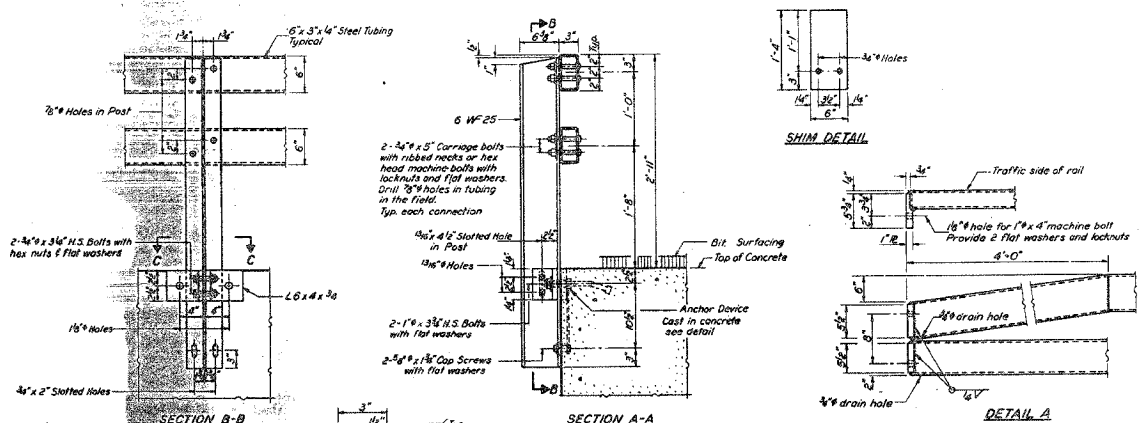


F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
789	54BR-1	MADISON	61	46
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



ELEVATION
Showing inside face of railing



SHIM DETAIL

NOTES

1. Hollow structural steel tubing shall conform to the requirements of ASTM designation A-301 "Hot Formed Welded and Seamless Carbon Steel Structural Tubing."

2. All other steel shapes and plates shall conform to the requirements of ASTM designation A-36 except posts shall conform to ASTM designation A-307 except for high strength bolts, nuts and washers noted which shall conform to ASTM designation A-193.

3. All bolts, nuts, cap screws, washers and lock washers shall be galvanized in accordance with ASTM designation A-153.

4. All posts, railing, rail splices, anchor devices and angles shall be galvanized after shop fabrication in accordance with ASTM designation A-153.

5. Galvanized rail shall not be painted.

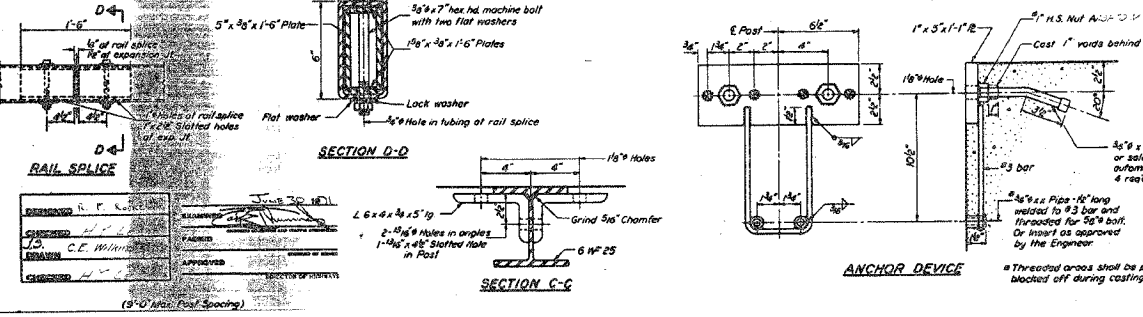
6. Railing shall be in accordance with Section 508 of the Standard Specifications, except as noted, and shall be paid for of the contract unit price per linear foot for STEEL RAILING, TYPE N.

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

8. The lower portion of the post flange in contact with concrete shall receive two coats of asphalt paint conforming to Section 714.08 Type B or place 1/2" fabric bearing pad between the post and concrete.

9. The 1/2" high strength bolts used to connect the 6" x 4" x 1/2" angles to the post shall be tightened in accordance with Article 710.11 of the Standard Specifications. The 1/2" high strength bolts connecting the angles to the concrete beam shall be tightened to a snug fit and given an additional 1/2 turn.

10. For multi-span bridges, sufficient 1/2" x 6" x 1/4" galvanized steel shim shall be provided to align rail between adjacent spans. Cast incidental to Steel Railing.



BILL OF MATERIAL

Item	Unit	Quantity
STEEL RAILING, TYPE N	LN. FT.	106.67

TYPE N
STEEL RAILING
FOR RT 1842 SEC 106BR
ST CLAIR COUNTY
STA. 659 + 54.34

DESIGNED BY	C.E. Williams
CHECKED BY	
DATE	

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
EXISTING STRUCTURE PLANS

FAS ROUTE 1842
SECTION 106BR
ST CLAIR COUNTY

SCALE: VERT. DRAWN BY
 HORIZ. CHECKED BY

DATE

FOR INFORMATION ONLY

PLOT DATE = 11/2/2005
FILE NAME = I:\projects\1195\plan\p01.dgn
PLOT SCALE = 50.0000 / IN.
REFERENCE = REF