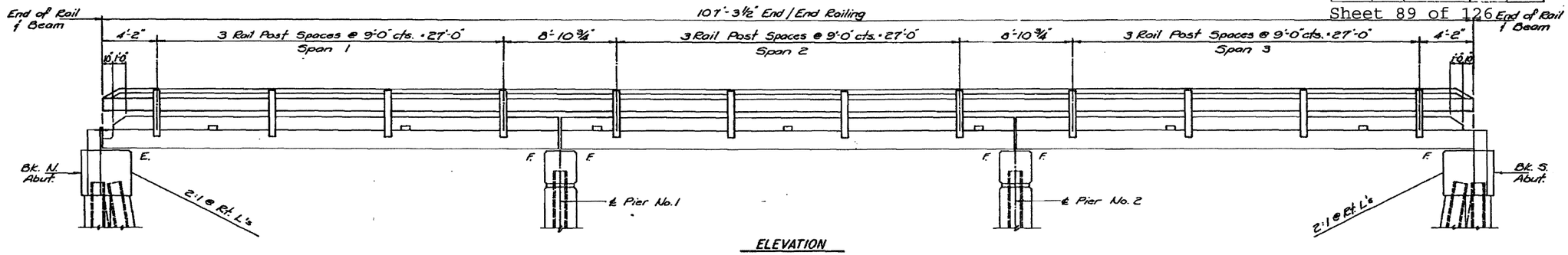
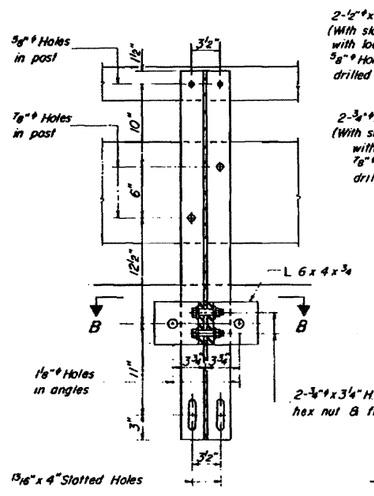
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

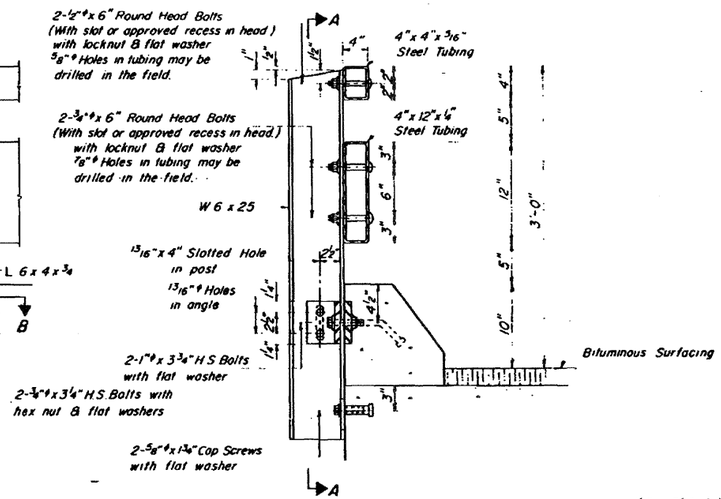
					SHEET NO. 5
FA. 18	104-BR	JO DAVIESS	19	11	SHEETS 7



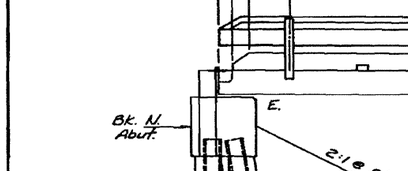
ELEVATION



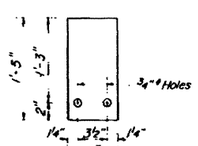
SECTION A-A



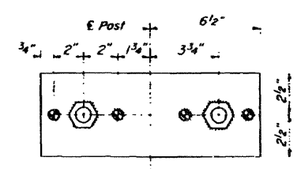
SECTION AT RAIL POST



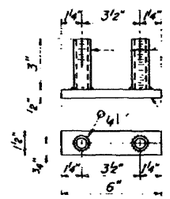
SECTION B-B



¼" SHIM PLATE

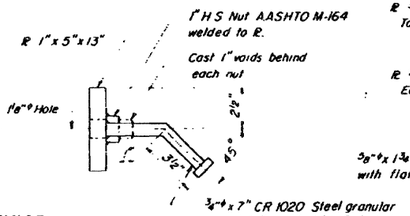


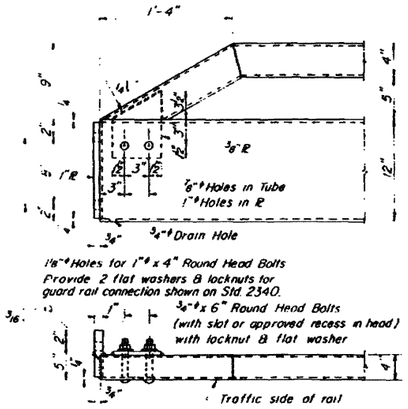
TOP ANCHOR DEVICE



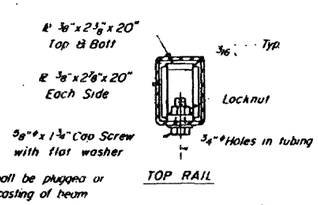
* Threaded areas shall be plugged or blocked off during casting of beam

BOTTOM ANCHOR DEVICE

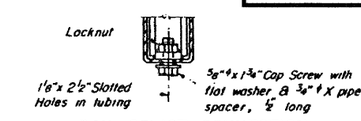




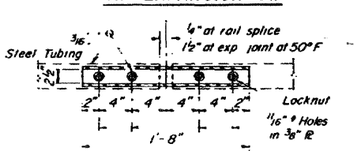
END OF RAIL DETAILS



SECTIONS AT RAIL SPLICE



RAIL SPLICE CONNECTION AT EXPANSION JT.



PLAN - BOTT. SPLICE ℝ TYPICAL

NOTES

Hollow structural steel tubing shall conform to the requirements of ASTM designation A-500 Grade B Structural Steel Tubing

All other steel shapes and plates shall conform to the requirements of AASHTO M 183 except posts and angles shall conform to AASHTO M 223, Grade 50.

Bolts, cap screws, and nuts shall conform to the requirement 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 in accordance with AASHTO M-232

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

Railing shall be in accordance with Section 508 of the Standard Specifications, except as noted, and shall be paid for at the contract unit price per lineal foot for STEEL RAILING, TYPE T 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 714.08 Type B or place ½" fabric bearing pad between the post and concrete

The ¾"ϕ high strength bolts used to connect the 6 x 4 x ¾ angles to the post shall be tightened in accordance with Article 507.04(g)(3) 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 ⅓ turn. The ⅞"ϕ cap screws in bottom of posts shall be tightened to a snug fit only.

For multi-span bridges, sufficient ¼" x 6" x 1'-5" galvanized steel shims shall be provided to align rail between adjacent spans. Cost incidental to Steel Railing

FOR INFORMATION ONLY

BILL OF MATERIAL

Item	Unit	Quant.
Steel Railing Type T-1	L.F.	615

DESIGNED	V. S. N.
CHECKED	D. H. C.
DRAWN	R. A. W.
CHECKED	K. L. F.

R-24A 8-30-80 (11'-0" Maximum Post Spacing)

RAILING
F.A. 18 OVER TRIBUTARY TO APPLE RIVER
SECTION 104-BR
JO DAVIESS COUNTY
STATION 125+71.00

H. M. & E. NO. 1931/0029