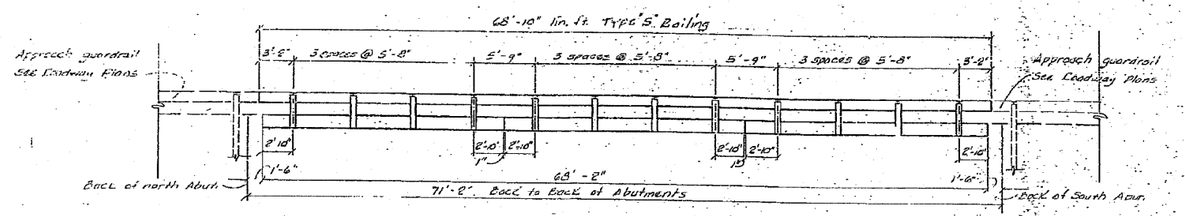
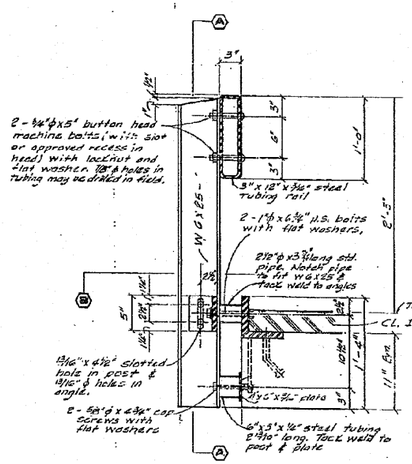
ESCA CONSULTANTS, INC.
CIVIL • STRUCTURAL • ENVIRONMENTAL ENGINEERS

Rte.	Section	County	Total Sheets	Sheet No.
FAS 2936	16-A-B	Pulaski	79	71
Sta. 151+20				
FHWA Reg.	Illinois	Proj.		

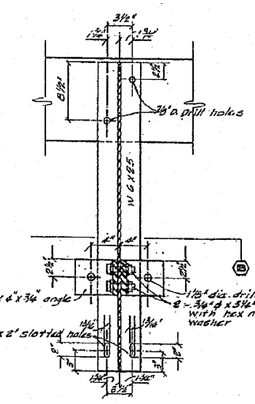
Bridge Sheet No. 4 of 7 Sheets



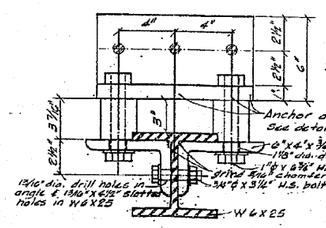
ELEVATION - WEST RAILING
Note: East railing similar.



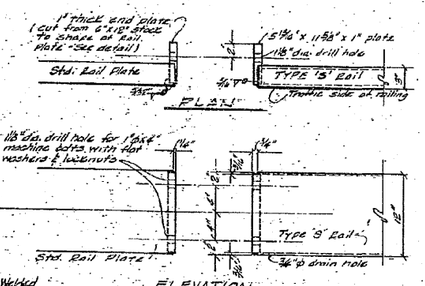
SECTION @ RAIL POST



SECTION A-A

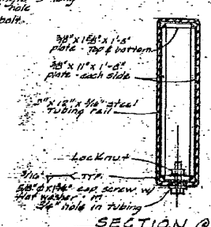


SECTION B-B

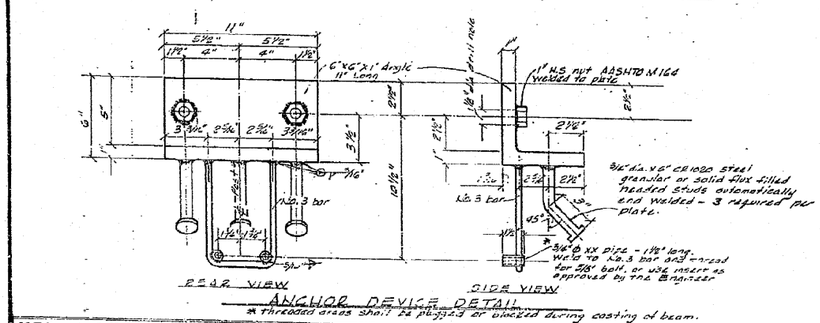


RAILING NOTES

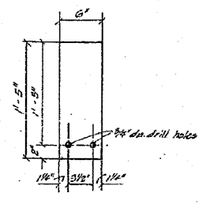
1. Hollow structural steel tubing shall conform to the requirements of ASTM designation A-500 grade B, or A-501 Structural Steel Tubing. All other steel shapes and plates shall conform to the requirements of AASHTO designation M-183, except posts shall conform to AASHTO M-188.
2. Bolts, nuts, and cap screws 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.
3. All bolts, nuts, cap screws, washers and lock washers shall be galvanized in accordance with AASHTO M-232.
4. 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 railing shall not be painted.
5. 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 "S".
6. All field drilled holes shall be coated with an approved zinc rich paint before erection.
7. The 3/4"φ high strength bolts used to connect the 6"x6"x3/8" angles to the posts shall be tightened in accordance with Article 505.04(g)(3) of the Standard Specifications. The 1"φ high strength bolts connecting the angles to the concrete shall be tightened to a snugfit and given an additional 1/3 turn.
8. For multi-span bridges, sufficient 1/8"x6"x1'-5" gal. steel shims shall be provided to plan grade between adj. spans. Cost incidental to STEEL RAILING, TYPE "S".



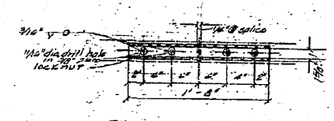
SECTION @ RAIL SPLICE



ANCHOR DEVICE DETAIL
* threaded areas shall be plugged or blocked during casting of beam.



1/8" SHIM PLATE



PLAN - BOTTOM SPLICE PLATE

MOSS, JOHNSON, SANDOVAL & ASSOC. LTD.

RAILING DETAILS - TYPE "S"

PROJECT
FAS Rte. 2936 (U.S. 51) over Bear Creek
SECTION 16 A-B
Pulaski County, Illinois
Station 151+20

08-08-004 | November, 1910

FILE NAME = 0978071-sht-rail4.dgn	USER NAME = HAS	DESIGNED - DAJ	REVISED -
		DRAWN - RJT/HAS	REVISED -
	PLOT SCALE = 2.6833 ' / IN.	CHECKED - MTD	REVISED -
	PLOT DATE = 5/17/2010 1:05:42 PM	DATE - 05/10	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURE PLANS

SCALE: | SHEET NO. 4 OF 7 SHEETS | STA. | TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2936	16BR-1	PULASKI	68	59

CONTRACT NO. 78071

FED. ROAD DIST. NO. | ILLINOIS FED. AID PROJECT AID