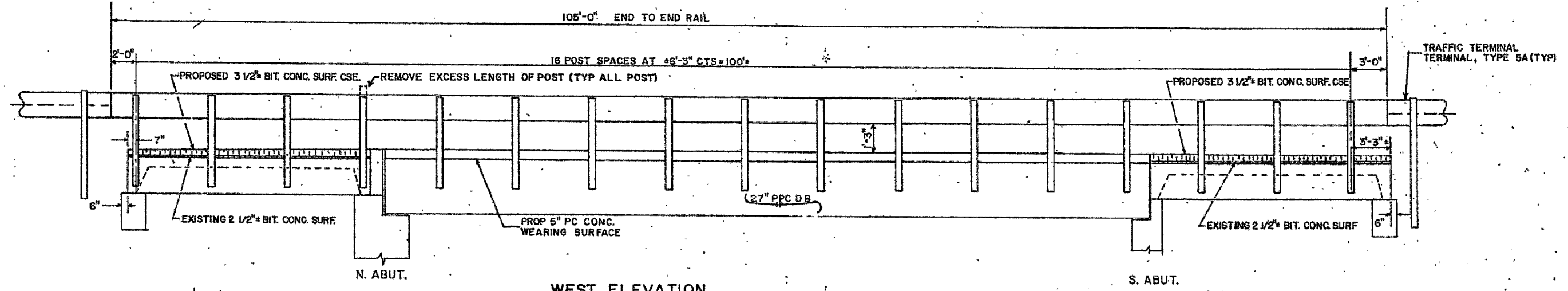


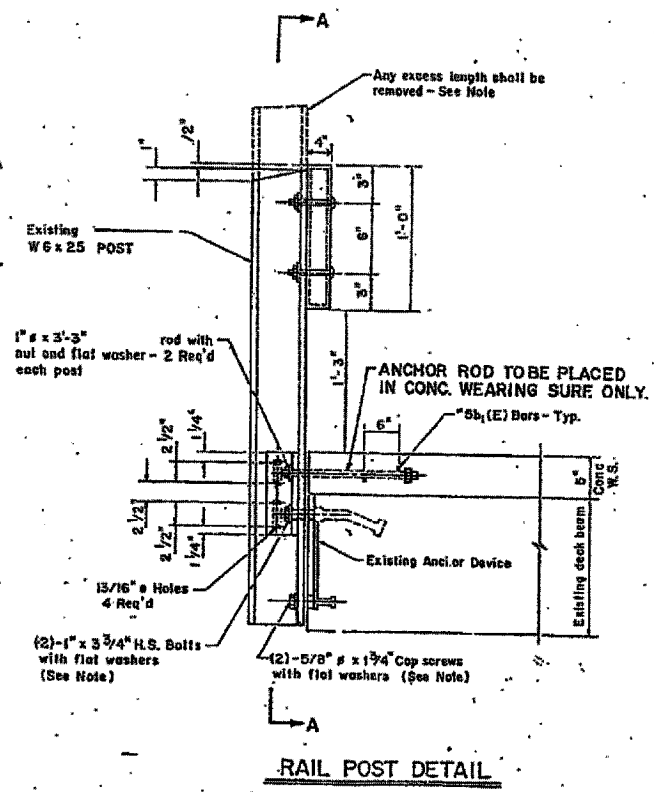
ROUTE NO.	COUNTY	TOTAL SHEETS	SHEET NO.
FA 646	CARROLL	9	7
FED. ROAD DIST. NO. 7	ILLINOIS PROJECT		
* SECTION 5 BR-1-M			



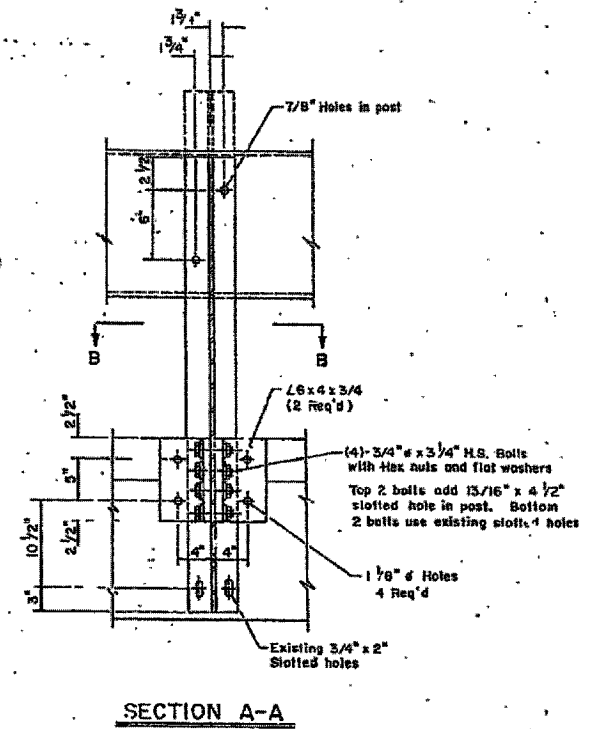
WEST ELEVATION
(FACING EAST) EAST ELEV. SIMILAR

NOTES:

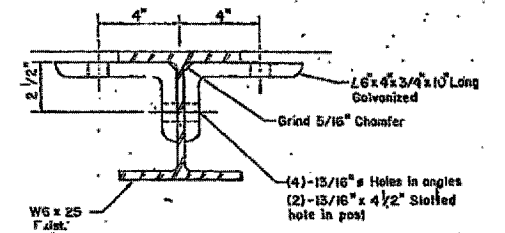
- THE CONTRACTOR SHALL REMOVE AND PROPERLY DISPOSE OF THE EXISTING RAIL ELEMENTS.
- ALL OTHER STEEL SHAPES AND PLATES SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M-270 GRADE 36 EXCEPT ANGLES SHALL CONFORM TO AASHTO M-270, GRADE 50.
- BOLTS, CAP SCREWS, AND NUTS SHALL CONFORM TO THE REQUIREMENT OF ASTM DESIGNATION A-307 EXCEPT FOR HIGH STRENGTH BOLTS, NUTS AND WASHERS NOTED WHICH SHALL CONFORM TO AASHTO M-184.
- ALL BOLTS, NUTS, CAP SCREWS, WASHERS AND LOCK WASHERS SHALL BE GALVANIZED IN ACCORDANCE WITH AASHTO M-232.
- ALL ANGLES SHALL BE GALVANIZED AFTER SHOP FABRICATION IN ACCORDANCE WITH AASHTO M-111 AND ASTM A-385. GALVANIZED RAIL SHALL NOT BE PAINTED.
- ALL FIELD DRILLED HOLES AND SLOTS INCLUDING ANY BARE METAL AREAS OR POSTS FROM CUTTING SHALL BE PAINTED BEFORE ERECTION WITH ZINC RICH PAINT.
- THE LOWER PORTION OF THE POST FLANGE IN CONTACT WITH CONCRETE SHALL RECEIVE A 1/8" FABRIC BEARING PAD BETWEEN THE POST AND CONCRETE.
- THE 3/4" Ø HIGH STRENGTH BOLTS USED TO CONNECT THE 6 X 4 X 3/4 ANGLES TO THE POST SHALL BE TIGHTENED IN ACCORDANCE WITH ARTICLE 505.04(1)(3) OF THE STANDARD SPECIFICATION. THE 1" Ø 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" Ø CAP SCREWS IN BOTTOM OF POSTS SHALL BE TIGHTENED TO A SNUG FIT ONLY.
- STEEL RAILING, TYPE S-1 (SPECIAL) INCLUDES FURNISHING AND ERECTING OF ALL GALVANIZED RAIL, ANGLES, BOLTS, NUTS, WASHERS, SHIM PLATES, RODS, REMOVAL OF EXISTING STEEL RAILING AND RETROFITTING EXISTING RAIL POST.
- CONTRACTOR SHALL PROVIDE SUFFICIENT SHIMS, H.S. BOLTS, NUTS AND FLAT WASHERS TO REALIGN EXISTING RAILING. BOLT LENGTH AND CAP SCREW LENGTH TO BE DETERMINED IN THE FIELD WHEN SHIMS ARE USED. COST TO BE INCLUDED IN THE UNIT PRICE PER FOOT FOR STEEL RAILING TYPE S-1(SPECIAL).



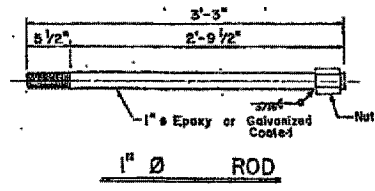
RAIL POST DETAIL



SECTION A-A



SECTION B-B



1" Ø ROD

BRIDGE RAILING REPAIR PLAN

BILL OF MATERIALS

ITEM
STEEL RAILING TYPE S-1 (SPECIAL)

SN 008-0014

INFORMATION ONLY

REVISED 3-22-96