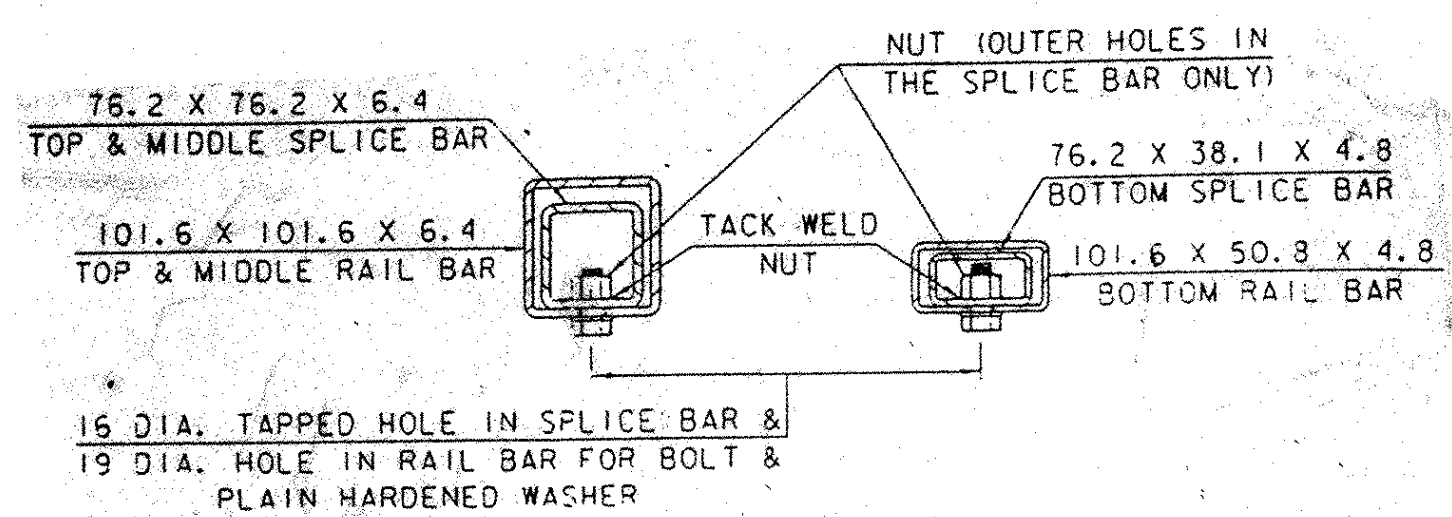
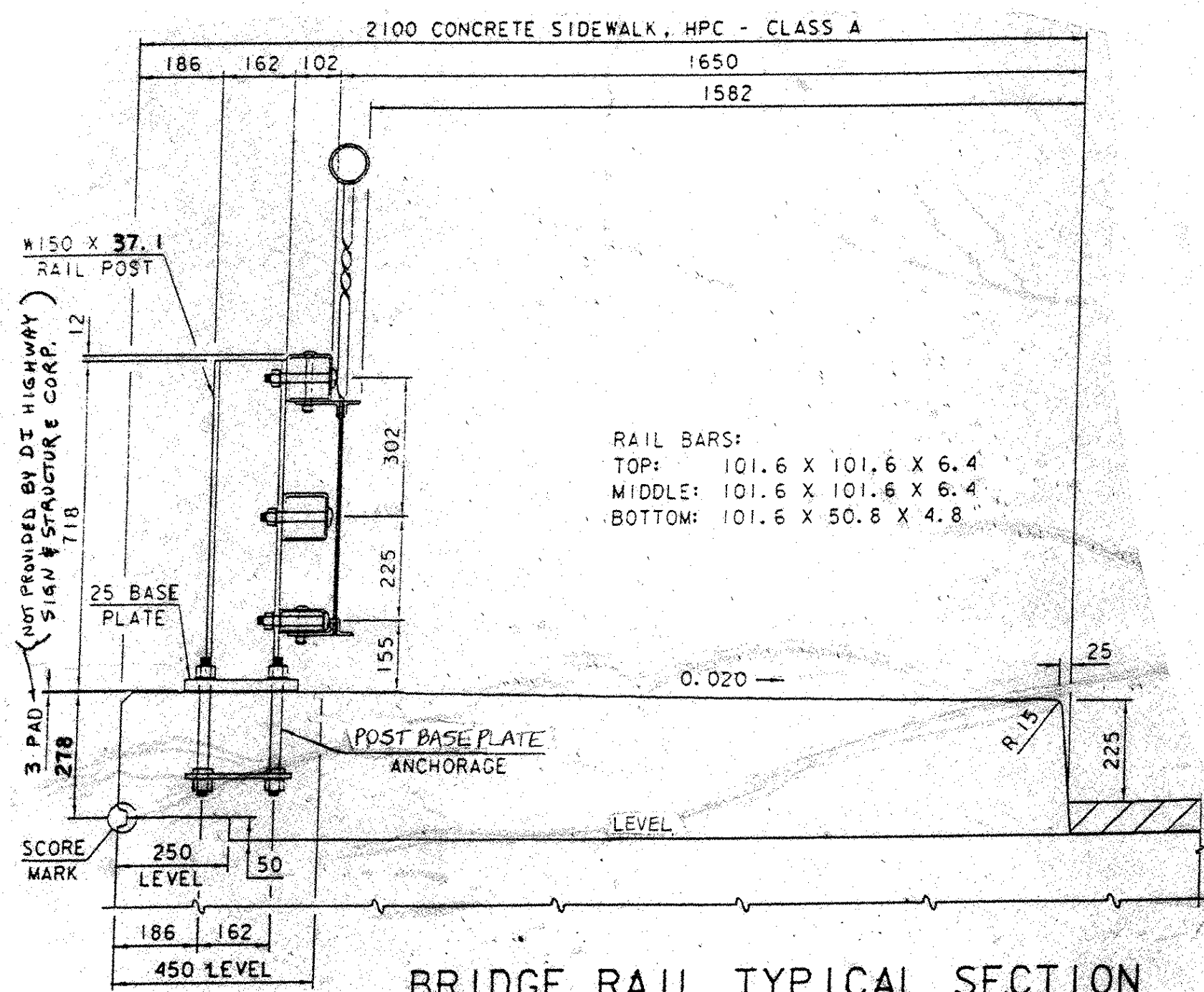


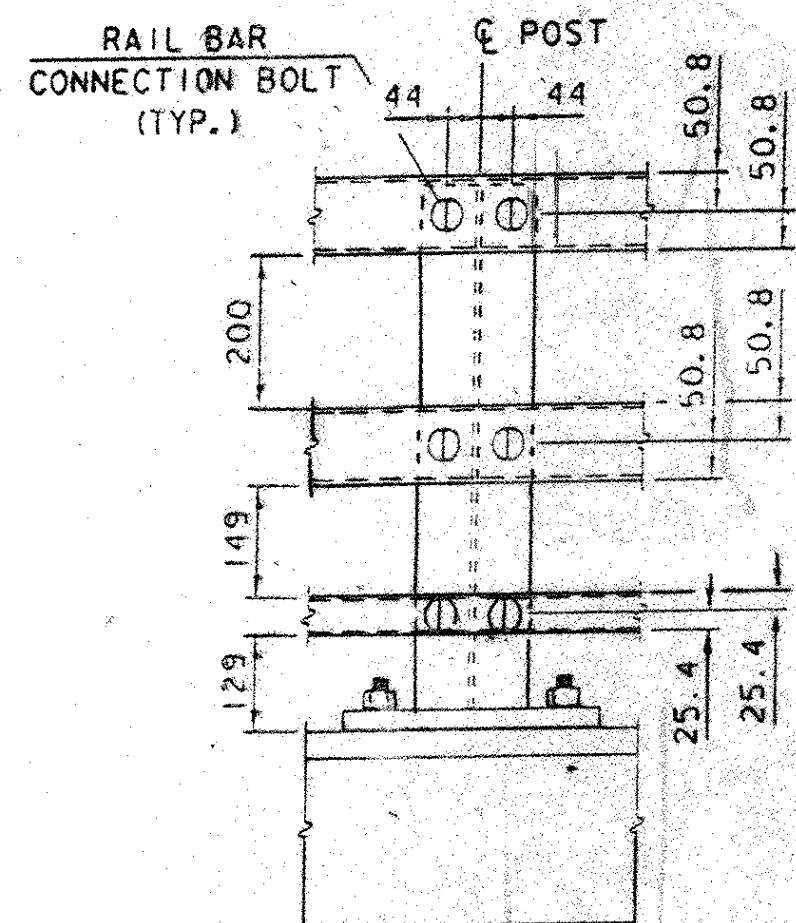
BRIDGE RAIL ELEVATION



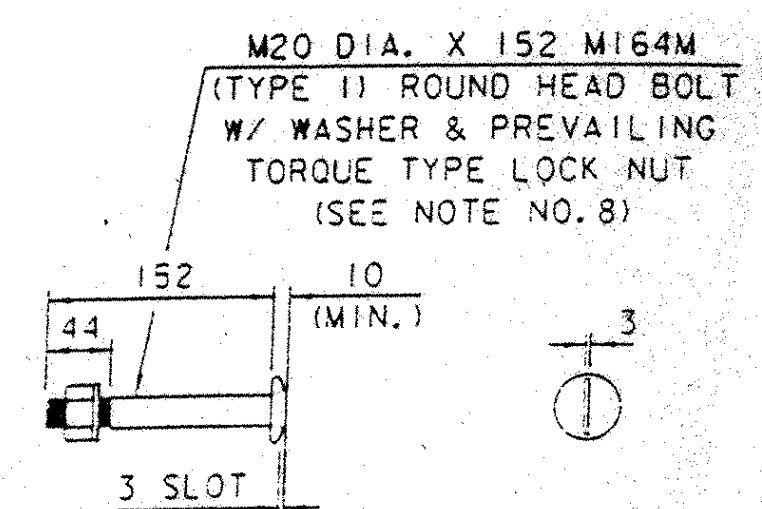
RAIL SPLICE BAR DETAILS



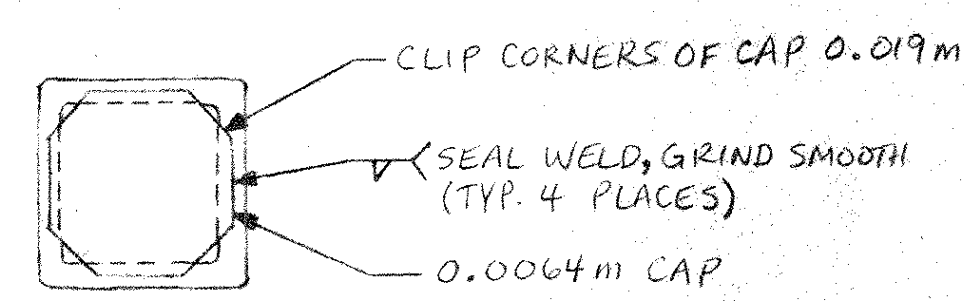
BRIDGE RAIL TYPICAL SECTION



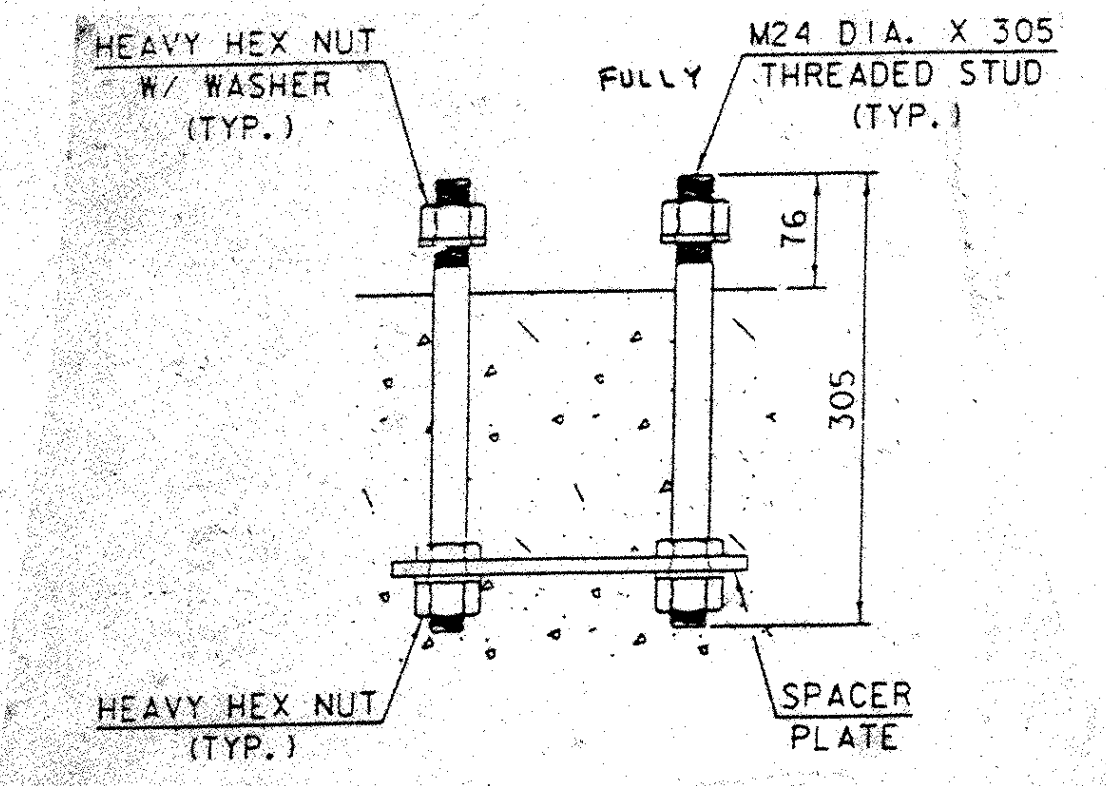
POST ELEVATION



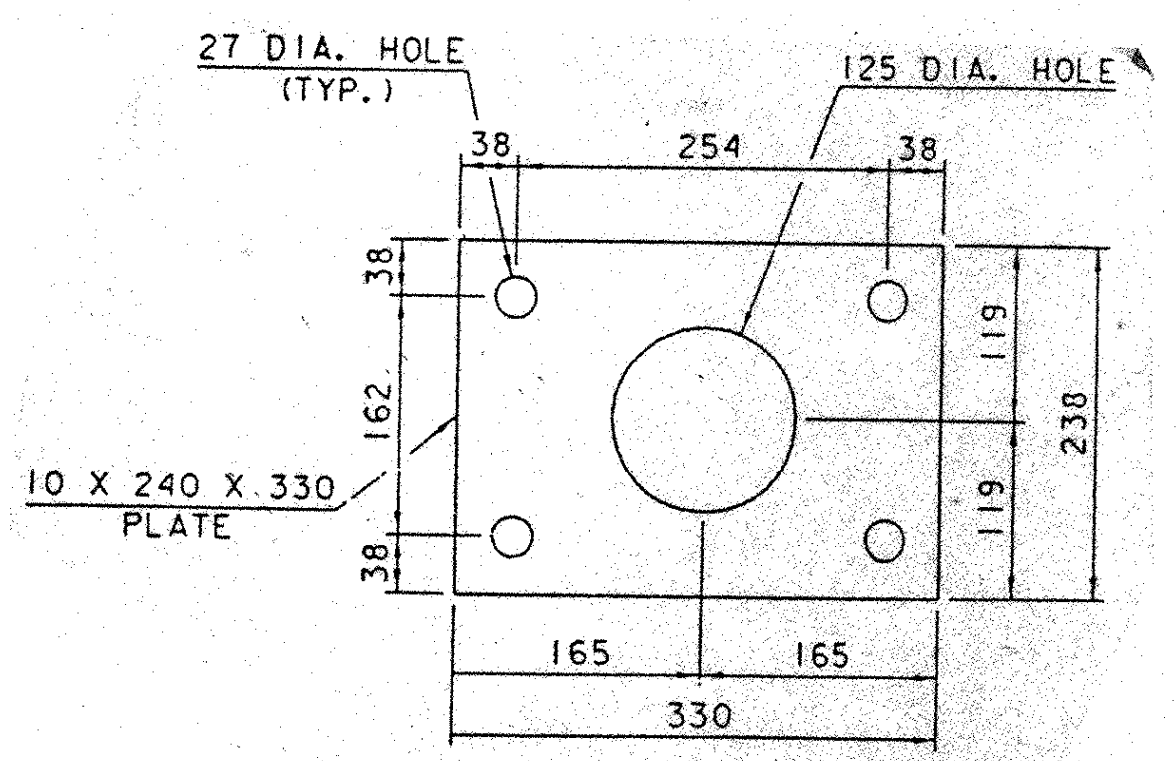
RAIL BAR CONNECTION BOLT



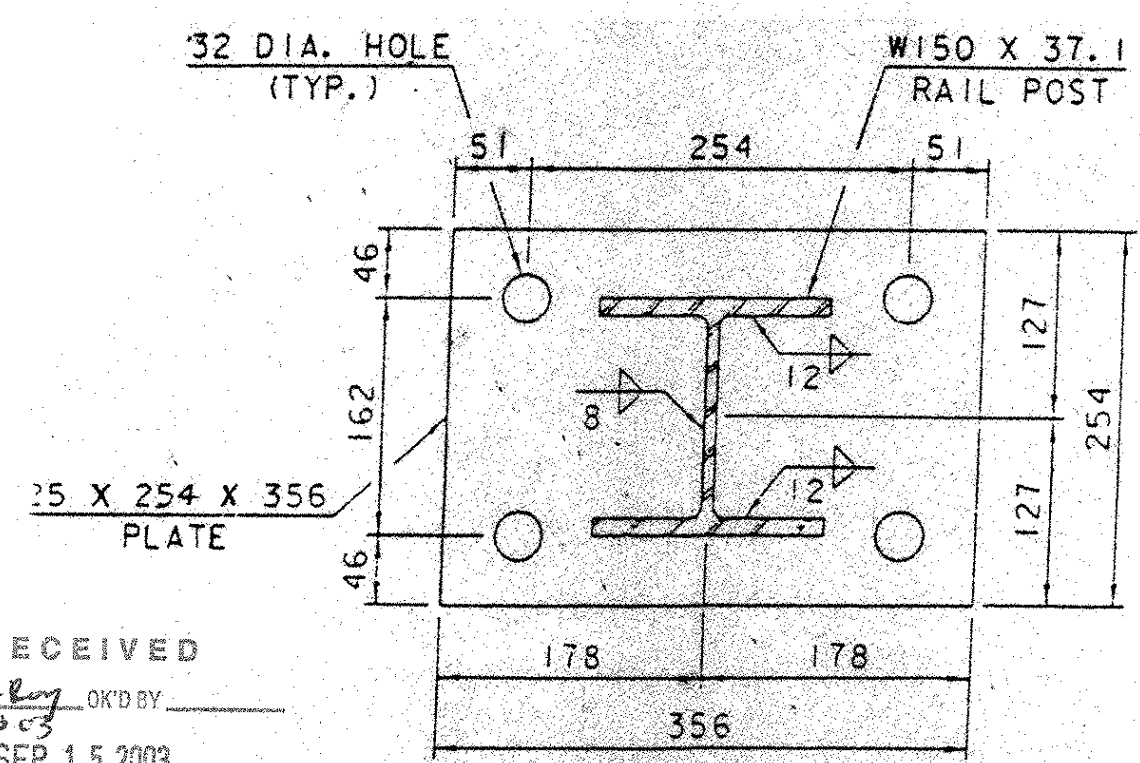
TOP & MIDDLE RAIL SHOWN
BOTTOM RAIL SIMILAR



POST BASE PLATE ANCHORAGE



SPACER PLATE



POST BASE PLATE

RECEIVED
CHKD BY *S. King* OKD BY _____
9-15-03
SEP 15 2003
RESUBMIT _____ APPROVED _____
BY *Rlw* DATE 9-17-03

NOTES

- ALL WORK AND MATERIALS SHALL CONFORM TO THE PROVISIONS OF SECTION 525 RAILINGS OF THE STANDARD SPECIFICATIONS FOR CONSTRUCTION.
- TUBING AND POSTS SHALL MEET THE REQUIREMENTS OF SECTION 732 - RAILING MATERIALS OF THE STANDARD SPECIFICATIONS FOR CONSTRUCTION.
- ALL EXPOSED CUT OR SHEARED EDGES SHALL BE ROUNDED TO A 1.6 mm RADIUS AND BE FREE OF BURRS.
- RAIL POSTS SHALL BE SET NORMAL TO GRADE.
- SECTIONS OF RAIL BAR SHALL BE ATTACHED TO A MINIMUM OF TWO (2) RAIL POSTS AND PREFERABLY TO AT LEAST FOUR (4) POSTS.
- ALL RAILING PARTS SHALL BE GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH SUBSECTION 506.15 AND PAINTED BLACK, COLOR CHIP #27038 IN ACCORDANCE WITH SUPPLEMENTAL SPECIFICATION 513. (PAINTING WILL NOT BE DONE BY DI HIGHWAY SIGN & STRUCTURE CORP.)
- RAIL POST ANCHORING NUTS SHALL BE TIGHTENED TO A SNUG FIT AND GIVEN AN ADDITIONAL 1/8 TURN.
- RAIL BARS SHALL BE ATTACHED USING M20 FULL DIAMETER BODY AASHTO M164M (TYPE 1) ROUND HEAD BOLTS INSERTED THROUGH THE FACE OF THE BAR. HOLES IN POSTS SHALL BE 2 mm LARGER THAN THE BOLT SIZE.
- ANY BENDING OF RAIL SHALL BE BY SHOP PROCEDURE ONLY.
- THE FABRICATOR SHALL SUBMIT SHOP DRAWINGS INCLUDING WELDING PROCEDURES TO THE STRUCTURES SECTION FOR APPROVAL IN ACCORDANCE WITH THE PROVISION OF 506.04, DRAWINGS AND PROCEDURES. ALL WELDING SHALL CONFORM WITH SECTION 506.10.
- THE DROP-WEIGHT TEAR TEST IN SECTION 732 SHALL NOT APPLY TO THE STRUCTURAL TUBING ON THESE DETAILS.
- HOLES IN RAILS FOR RAIL BAR ATTACHMENT MAY BE FIELD DRILLED. THE HOLES SHALL BE COATED WITH AN APPROVED ZINC-RICH BLACK PAINT - COLD GALV. PAINT FOLLOWED BY A TOP COAT OF BLACK PAINT. BLACK PAINT MUST BE THE SAME AS THE PAINT USED TO PAINT THE RAIL PRIOR TO INSTALLATION

MATERIALS

- RAIL BARS..... ASTM A500, GRADE B OR ASTM A501
RAIL POSTS..... ASTM A709/A709M, GRADE 345
ALL OTHER SHAPES & PLATES..... ASTM A709/A709M, GRADE 250
ANCHOR STUDS..... ASTM F568M, CLASS 8.8
ALL OTHER BOLTS (UNLESS NOTED)..... AASHTO M164M, TYPE 1
NOTE: THIS IS A HEX BOLT CLASS 8.8
- NUTS FOR AASHTO M164M BOLTS SHALL COMPLY WITH AASHTO M291M. NUTS FOR ANCHOR BOLTS SHALL COMPLY WITH AASHTO M291M.
- WASHERS SHALL COMPLY WITH AASHTO M293M (ASTM F436M) SPECIFICATION.
- 3 mm PAD SHALL COMPLY WITH STANDARD SPECIFICATION SUBSECTION 731.01 OR 731.02. (NOT PROVIDED BY DI HIGHWAY SIGN & STRUCTURE CORP.)

REQUIRED PER MARKUP & PHONE CONV. WITH GASTON ROY ON 9/16/03.	DRAWN BY THW	DATE 7/23/03	CHECKED BY DCK	SHEET No. 2 OF 2
	BRIDGE RAILING DETAILS STATE OF VERMONT AGENCY OF TRANSPORTATION U.S. ROUTE 5 (BRIDGE #7) OVER WHEATSTONE BROOK IN THE TOWN OF BRATTLEBORO IN THE COUNTY OF WINDHAM			
	CONT. NO. BRO2000(17)		PROJ. NO. BRATTLEBORO	
	GENERAL CONTRACTOR: RENAUD BRO. 077			
	ERECTOR: RIVERSIDE FAB., INC.			JOB No. 6350-220