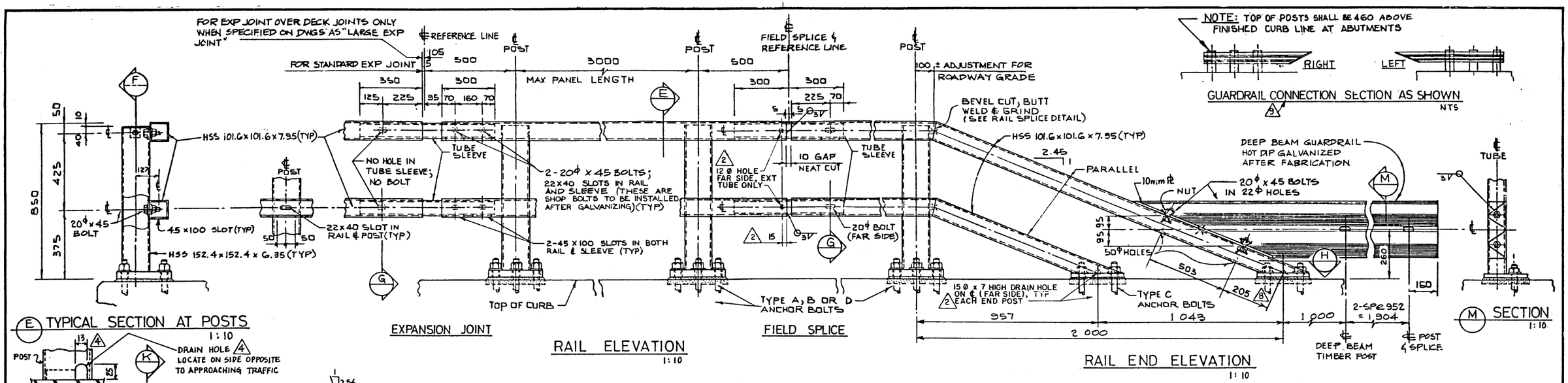
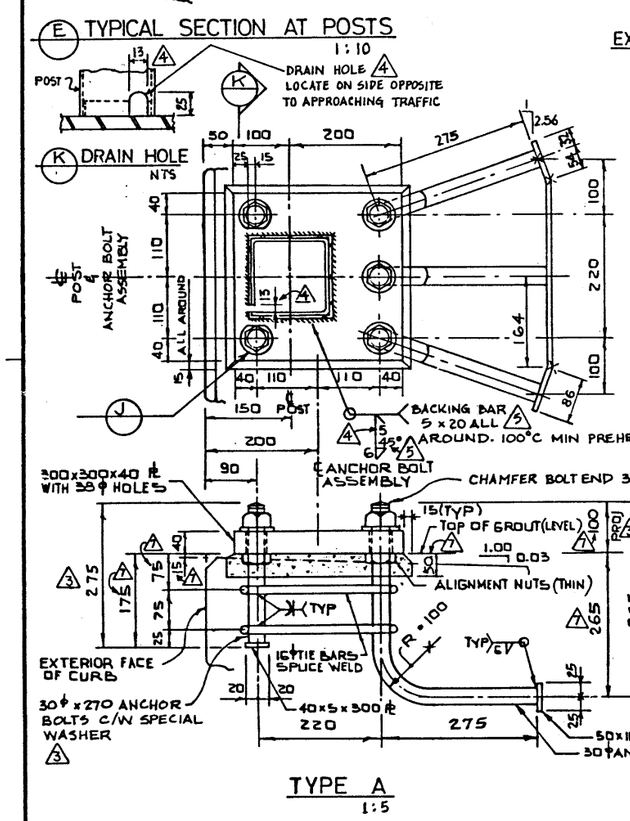
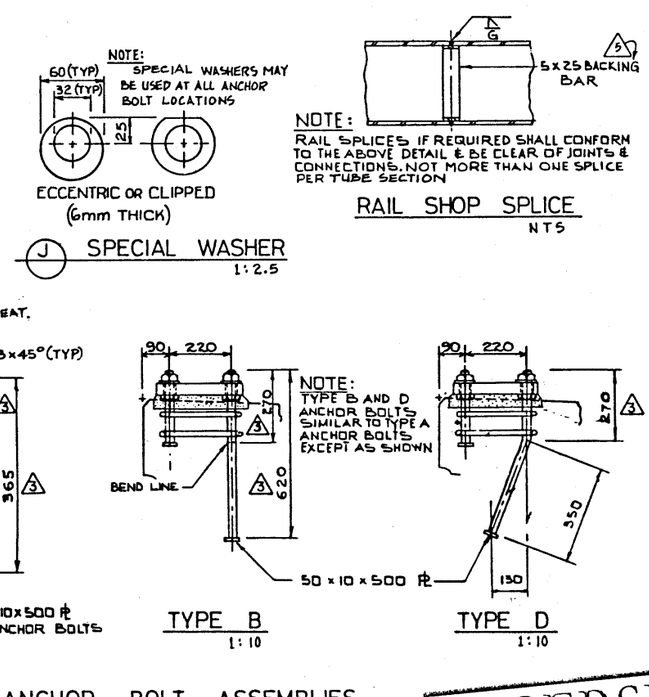
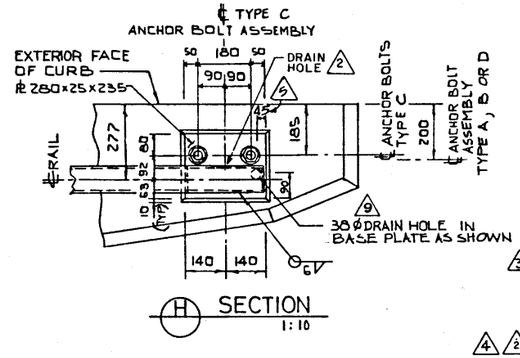
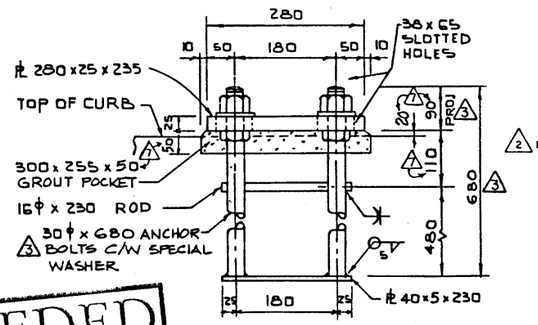










GENERAL NOTES

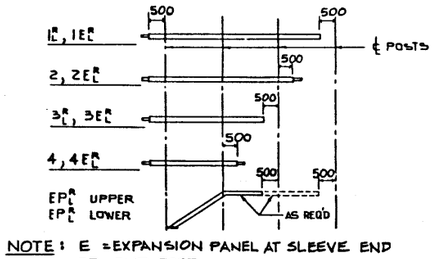
1. ALL DIMENSIONS ARE IN MILLIMETRES EXCEPT AS OTHERWISE NOTED.
2. RAILING AND POST DESIGN MEETS CSA CAN3-S6-M78 FOR ROADWAY RAILING ON SAFETY JURB.

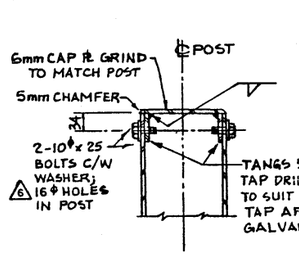
FABRICATION

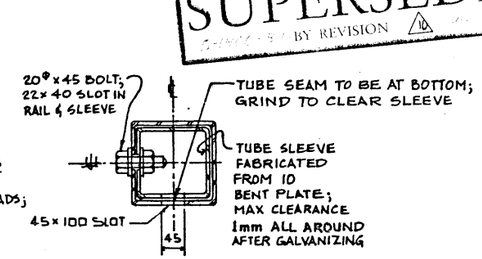
1. ALL REQUIREMENTS OF THE CURRENT BRIDGE BRANCH SPECIFICATION FOR THE SUPPLY OF BRIDGERAIL (SPEC B-312 M) SHALL BE MET.
2. ALL PLATE STEEL SHALL CONFORM TO ASTM SPECIFICATION A36 OR CSA G40.21 GRADE 300W, EXCEPT STRUCTURAL TUBING SHALL CONFORM TO ASTM A500B. ANCHOR BOLTS SHALL CONFORM TO ASTM A307.
3. ANCHOR BOLTS SHALL BE 30mmϕ EACH BOLT SHALL BE C/W HEX NUT, THICK NUT AND 6mm THICK REGULAR OR SPECIAL WASHER AS NOTED, AND SHALL BE THREADED FOR 155 mm LENGTH. IF IMPERIAL SIZE ANCHOR BOLTS ARE PROVIDED, 1 1/8"ϕ SHALL BE USED IN LIEU OF 30mmϕ.
4. ALL BOLTED CONNECTIONS, EXCEPT AS NOTED, SHALL BE MADE WITH 20mmϕ HIGH TENSILE STRENGTH BOLTS, NUTS AND 2 HARDENED WASHERS CONFORMING TO ASTM SPECIFICATION A325. (3/4"ϕ BOLTS ARE ACCEPTABLE REPLACEMENTS FOR 20mmϕ).
5. ALL WELDING SHALL CONFORM TO CURRENT AWS SPECIFICATION D1.5.
6. BRIDGE SHALL BE CONSIDERED LEVEL FOR BRIDGERAIL FABRICATION UNLESS THE ROADWAY GRADE EXCEEDS 1%. ADJUSTMENT IF REQUIRED SHALL BE MADE BY VARYING THE 100 DIMENSION SHOWN ON "RAIL END ELEVATION".
7. POST BASE PLATE SHALL BE PLACED ON BEVEL IF ROADWAY GRADE EXCEEDS 2%.
8. TUBE SECTIONS SHALL BE FABRICATED IN THE CONFIGURATIONS SHOWN IN "TUBE SECTION TYPES".
9. THE FOLLOWING MATERIALS SHALL BE HOT-DIP GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH THE FOLLOWING SPECIFICATIONS: RAILING, POSTS AND GUARDRAIL-ASTM A123; ANCHOR BOLT ASSEMBLIES AND ALL CONNECTING HARDWARE-ASTM A153.
10. THE BOTTOM SURFACE OF THE BASE PLATES SHALL BE COATED BY AN APPROVED COATING SYSTEM, SUITABLE FOR APPLICATION ON GALVANIZED STEEL, TO PREVENT CONTACT BETWEEN THE ZINC AND THE GROUT. THE COLOUR SHALL BE MEDIUM GREY.

ERECTION

1. TOP RAIL BOLTS MAY BE TIGHTENED FROM THE HEAD INSIDE THE POST. BOTTOM RAIL BOLTS MAY BE TIGHTENED THROUGH THE SLOT UNDER THE RAIL, USING A 15° ANGLED OR OFFSET BOX END WRENCH SUITABLY BENT AND EXTENDED TO ACHIEVE THE REQUIRED 1/2 TURN OF THE NUT FROM SNUG TIGHT.
2. ALL POSTS SHALL BE VERTICAL.
3. ALL DIMENSIONS ARE MEASURED PARALLEL TO TOP OF CURB AND ALONG CENTRELINE OF ANCHOR BOLT ASSEMBLIES.
4. LINE AND ELEVATION OF RAIL SHALL BE SET BY INSTRUMENT.







ANCHOR BOLT ASSEMBLIES

SUPERSEDED BY REVISION 10

REV	DATE	DESCRIPTION	BY
9	94-10-31	TERMINAL CHANGED TO CONNECTION AND DRAIN HOLE	LEA
8	93-12-10	RAIL END BOLT DIMENSION	KST
7	93-09-27	GROUT PAD THICKNESS INCREASED	RJR
6	93-01-06	SIZE OF CAP BOLT HOLE IN POST INCREASED	RJR
5	92-01-17	WELD DETAIL; DRAIN HOLE; MATERIAL NOTE	DHQ
4	90-12-28	POST DETAILS & FABRICATION NOTES	JRC
3	89-06-16	INCREASED ANCHOR BOLT PROJECTION	JCY
2	89-01-10	DRAIN HOLES & FABRICATION NOTES	DHQ
1	87-04-29	REDRAWN FROM S-1400 REV 6	DHQ

REVISIONS

DESIGNED	DRAWN	DATE	CHECKED	DATE	— STREAM	LOCATION	HIGHWAY	FILE	SHEET	DRAWING
REQ	VGB	87-04-29							OF	S-1400-87

SUPERSEDED 9

APPROVED
EXECUTIVE DIRECTOR BRIDGE ENGINEERING
DATE May 8, 1987

Alberta TRANSPORTATION AND UTILITIES
BRIDGE ENGINEERING BRANCH

850 mm TUBE TYPE BRIDGERAIL

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