



- GENERAL NOTES**
- ALL DIMENSIONS ARE IN MILLIMETRES EXCEPT AS OTHERWISE NOTED.
 - RAILING AND POST DESIGN MEETS CSA CAN3-S6-M78 FOR ROADWAY RAILING ON SAFETY CURB.
- FABRICATION**
- ALL REQUIREMENTS OF THE CURRENT BRIDGE BRANCH SPECIFICATION FOR THE SUPPLY OF BRIDGERAIL (SPEC B-312 M) SHALL BE MET.
 - ALL PLATE STEEL SHALL CONFORM TO ASTM SPECIFICATION A16 OF CSA G40.21 GRADE 300W, EXCEPT STRUCTURAL TUBING SHALL CONFORM TO ASTM A500. ANCHOR BOLTS SHALL CONFORM TO ASTM A307.
 - ANCHOR BOLTS SHALL BE 30mm EACH BOLT. EACH BOLT SHALL BE 155mm HIGH TENSILE STRENGTH REGULAR OR SPECIAL WASHER AS NOTED, AND SHALL BE THREADED FOR 155mm LENGTH IF IMPERIAL SIZE ANCHOR BOLTS ARE PROVIDED, 1 1/8" SHALL BE USED IN LIES OF 30mm.
 - ALL BOLTED CONNECTIONS, EXCEPT AS NOTED, SHALL BE MADE WITH 20mm HIGH TENSILE STRENGTH BOLTS, NUTS AND 2 HARDENED WASHERS CONFORMING TO ASTM SPECIFICATION A325. (3/4" BOLTS ARE ACCEPTABLE REPLACEMENTS FOR 20mm).
 - ALL WELDING SHALL CONFORM TO CURRENT AWS SPECIFICATION D1.5.
 - 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".
 - POST BASE PLATE SHALL BE PLACED ON BEVEL IF ROADWAY GRADE EXCEEDS 2%.
 - TUBE SECTIONS SHALL BE FABRICATED IN THE CONFIGURATIONS SHOWN IN "TUBE SECTION TYPES".
 - 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.
 - 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**
- 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.
 - ALL POSTS SHALL BE VERTICAL.
 - ALL DIMENSIONS ARE MEASURED PARALLEL TO TOP OF CURB AND ALONG CENTRELINE OF ANCHOR BOLT ASSEMBLIES.
 - LINE AND ELEVATION OF RAIL SHALL BE SET BY INSTRUMENT.

SUPERSEDED 5 6 7

APPROVED

Alberta TRANSPORTATION AND UTILITIES
BRIDGE ENGINEERING BRANCH

EXECUTIVE DIRECTOR
BRIDGE ENGINEERING

850 mm TUBE TYPE
BRIDGERAIL

DATE: May 2, 1987

REV	DATE	DESCRIPTION	BY
93-12-10		RAIL END BOLT DIMENSION	KST
93-09-27		GROUT PAD THICKNESS INCREASED	RJR
93-01-06		SIZE OF CAP BOLT HOLE IN POST INCREASED	RJR
92-01-17		WELD DETAIL; DRAIN HOLE; MATERIAL NOTE	DHQ
90-12-28		POST DETAILS & FABRICATION NOTES	JRC
89-06-16		INCREASED ANCHOR BOLT PROJECTION	JCY
89-01-10		DRAIN HOLES & FABRICATION NOTES	DHQ
87-04-29		REDRAWN FROM S-1400 REV	DHQ

REVISIONS			
DESIGNED	DRAWN	DATE	CHECKED
RGQ	VG B	87-04-29	

STREAM	LOCATION	HIGHWAY	FILE	SHEET	DRAWING
				of	S-1400-87