



- GENERAL NOTES:**
- ALL DIMENSIONS ARE IN MILLIMETERS EXCEPT AS OTHERWISE NOTED.
 - HOLLOW STRUCTURAL SECTIONS ARE SHOWN WITH IMPERIAL DESIGNATION.
- DESIGN**
- AASHTO 1973 SPECIFICATIONS PLUS INTERIM TO 1976 EXCEPT LOADING.
 - LOADING IS IN ACCORDANCE WITH THE NATIONAL BUILDING CODE OF CANADA 1977, SECTION 4.1.10.1.
 - HORIZONTAL LOAD - 2.2 KN/m APPLIED AT TOP RAIL.
 - VERTICAL LOAD - 1.5 KN/m APPLIED AT TOP RAIL.
 - HORIZONTAL AND VERTICAL LOADS ARE APPLIED SEPARATELY.
- FABRICATION**
- ALL REQUIREMENTS OF BRIDGE BRANCH SPEC'S FOR THE SUPPLY OF BRIDGERAIL (SPEC. NO. B 312 M CURRENT AT TIME OF TENDERING) SHALL BE MET.
 - ALL STEEL SHALL CONFORM TO THE CURRENT A.S.T.M SPEC. A36 OR C.S.A. SPEC. G40.21 GRADE 44W EXCEPT STRUCTURAL TUBING SHALL CONFORM TO A.S.T.M. A500B AND ANCHOR BOLTS SHALL CONFORM TO A.S.T.M. A-307.
 - ALL WELDING SHALL CONFORM TO CURRENT AWS SPECIFICATION D1.1.
 - ALL MATERIALS SHALL BE HOT DIP GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH THE FOLLOWING A.S.T.M. SPECIFICATIONS:
- RAILING AND POSTS** A123.
BOLTS AND ANCHOR BOLT ASSEMBLIES A153.
 • ALL EXPOSED CUT TUBE ENDS SHALL BE GROUNDED SMOOTH.
- RAIL SECTIONS SHALL BE FABRICATED IN LENGTHS NOT EXCEEDING 9m BUT WHERE POSSIBLE CONTINUOUS OVER AT LEAST 3 POSTS.
 - AT LEAST 2 POSTS REQUIRED IN RAIL SECTION EITHER SIDE OF AN EXPANSION JOINT, EG. AT ENDS OF BRIDGE.
 - BRIDGE TO BE CONSIDERED LEVEL FOR HANDRAIL FABRICATION UNLESS THE ROADWAY GRADE EXCEEDS 1%.
 - BARS & POSTS TO BE VERTICAL FOR ROADWAY GRADES OVER 1%.
 - POST BASE PLATE TO BE PLACED ON BEVEL FOR ROADWAY GRADES OVER 2%.
- ERECTION:**
- ALL DIMENSIONS ARE MEASURED PARALLEL TO TOP OF CURB AND ALONG CENTRELINE OF ANCHOR BOLT ASSEMBLIES.
 - LINE AND ELEVATION OF RAIL TO BE SET BY INSTRUMENT.

APPROVED			Alberta TRANSPORTATION BRIDGE BRANCH		METRIC	
 R. J. R. CHIEF BRIDGE ENGINEER			1150mm VERTICAL BAR TYPE HANDRAIL			
NO.	DATE	DESCRIPTION	BY	DATE	STREAM	LOCATION
82-11-24		BASE & GROUT PAD & ANCHOR BOLTS	R.J.R.	JULY 7/78		
REVISIONS						
DESIGNED	DRAWN BY	DATE	CHECKED BY	DATE	SCALE	FILE NO.
R. QUINION	L.W. KOEHLHANN	72 06 25			1:5	
						SHEET
						DWG. NO.
						S-1401