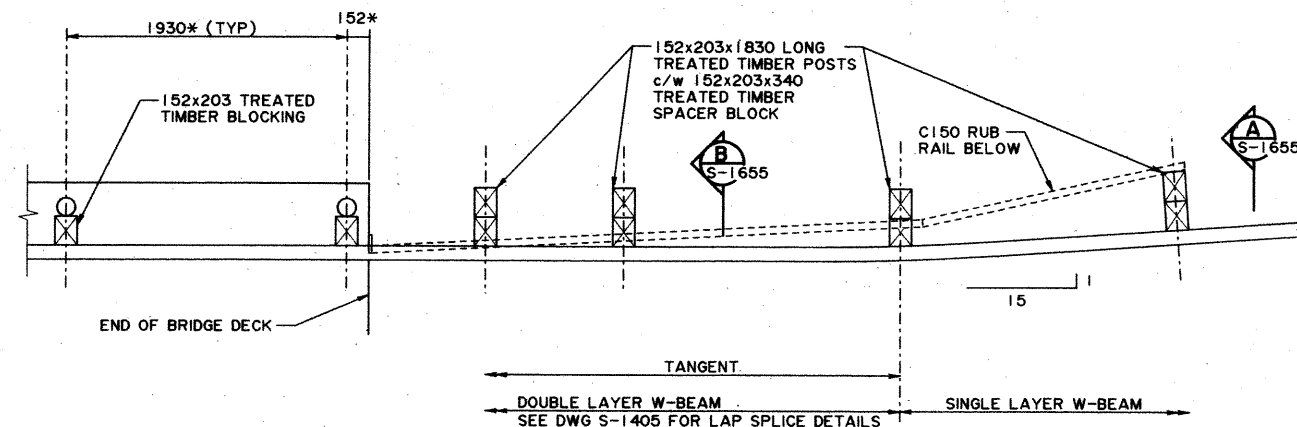


ELEVATION - BRIDGERAIL & APPROACH GUARDRAIL

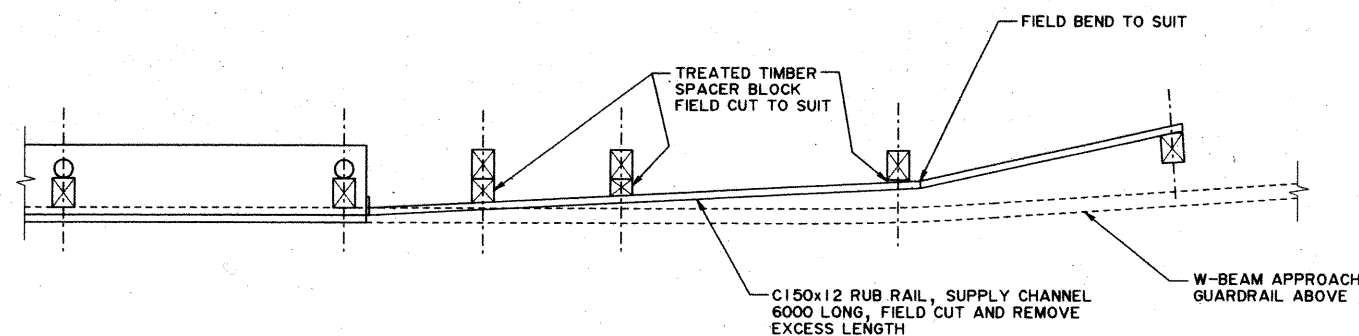
1:25

* EXISTING POST SPACING MAY VARY. FIELD CHECK POST LOCATIONS AND CONFIRM SPACING



PLAN - W-BEAM GUARDRAIL

1:25



PLAN - CHANNEL RUB RAIL

1:25

GENERAL NOTES

- ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
- LENGTHS OF APPROACH GUARDRAILS SHOWN ARE MINIMUM REQUIRED. LENGTHS TO BE INCREASED AS REQUIRED BY SITE SPECIFIC TRAFFIC AND ROADSIDE CONDITIONS.
- RAILING SHALL BE USED FOR CLEAR ROADWAYS LESS THAN 9.0 m ONLY.
- BRIDGERAIL AND APPROACH GUARDRAIL TRANSITION SHALL CONFORM TO THE REQUIREMENTS OF THE SPECIFICATIONS FOR BRIDGE CONSTRUCTION "SECTION 12 - BRIDGERAIL" AND "SECTION 14 - GUARDRAIL".
- ALL PLATE STEEL AND STRUCTURAL SHAPES SHALL CONFORM TO CSA G40.21 GRADE 300W OR ASTM A36.
- ALL BOLTS SHALL CONFORM TO ASTM A307.
- ALL W-BEAM GUARDRAIL SHALL HAVE A MINIMUM YIELD STRENGTH OF 345 MPa.
- TIMBER POSTS AND SPACERS SHALL BE COAST DOUGLAS FIR OR PACIFIC COAST HEMLOCK CONFORMING TO STRESS GRADE "SELECT STRUCTURAL POSTS AND TIMBERS" (NLGA PARAGRAPH 131a).
- ALL WELDING SHALL CONFORM TO CURRENT AWS SPECIFICATION D1.5.
- ALL NEW STEEL MATERIAL SHALL BE HOT-DIP GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH CSA G164 UNLESS NOTED OTHERWISE.

INSTALLATION

- BRIDGERAIL ANCHOR BOLTS SHALL BE TIGHTENED AN ADDITIONAL 1/2 TURN OF THE NUT PAST THE "SNUG TIGHT" CONDITION.
- ALL POSTS SHALL BE PERPENDICULAR TO GRADE.
- ALL NON-STANDARD LENGTH GUARDRAILS SHALL BE SAW CUT TO SUIT AND BOLT HOLES DRILLED AS REQUIRED. FLAME CUTTING OF GUARDRAIL SHALL NOT BE ALLOWED. APPLY TWO COATS OF ZINC RICH PAINT ON AREAS WHERE GALVANIZING IS DAMAGED BY SAW CUTTING OR DRILLING.
- ALL RAIL SECTIONS SHALL BE LAPPED IN THE DIRECTION OF TRAFFIC.
- TREATED TIMBER EXPOSED BY SAWING OR DRILLING SHALL BE PAINTED WITH THREE COATS OF AN APPROVED PENETRATING PRESERVATIVE.
- PAINTED OR GALVANIZED SURFACE ON EXISTING STEEL POSTS DAMAGED BY WELDING SHALL BE TOUCHED UP WITH TWO COATS OF ZINC RICH PAINT.

• WORK THESE DRAWINGS TOGETHER: S-1654-01 AND S-1655-01

RECOMMENDED DIRECTOR BRIDGE ENGINEERING		APPROVED EXECUTIVE DIRECTOR TECHNICAL STANDARDS BRANCH	
DESIGNER	CHECKER	DATE	26 Apr 02
S-1654-01		S-1655-01	

Alberta TRANSPORTATION

LOW HEIGHT RETROFIT BRIDGERAIL AND APPROACH GUARDRAIL ON LOCAL ROADS - SHEET 1

DEPARTMENT BAR CODE: 2001-04-12
DATE: 2001-04-12
SHEET: 1 of 2
DRAWING: S-1654-01