

GENERAL NOTES

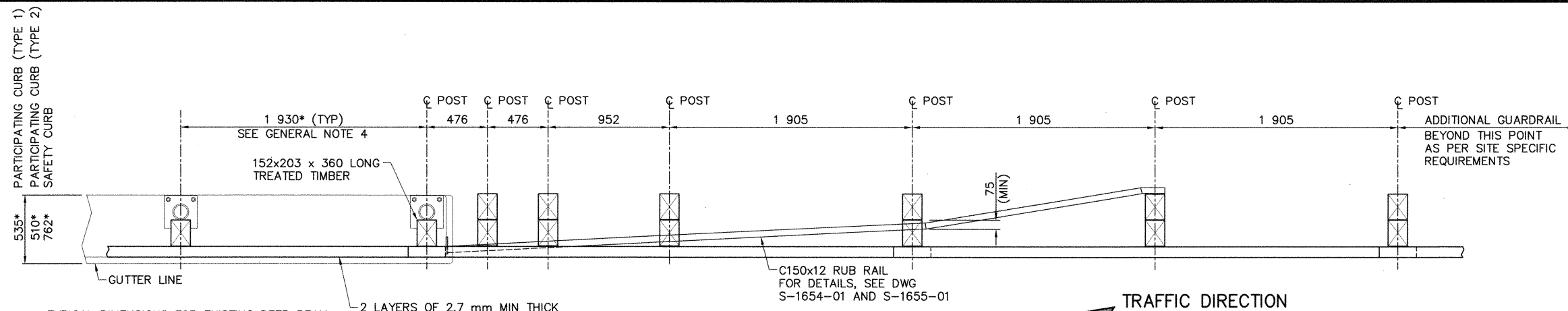
1. THIS BRIDGERAIL AND APPROACH RAIL TRANSITION UPGRADE DRAWING APPLIES TO SINGLE AND DOUBLE LAYER DEEP BEAM (W-BEAM) BRIDGERAILS ON PARTICIPATING CURBS (TYPE 1) OR SAFETY CURBS, SUCH AS SHOWN ON DRAWING S-675-69. THIS DRAWING ALSO APPLIES TO DOUBLE LAYER DEEP BEAM (W-BEAM) BRIDGERAILS ON PARTICIPATING CURBS (TYPE 2), SUCH AS SHOWN ON DRAWING S-1402.
2. ADD SECOND LAYER OF 2.7 mm THICK W-BEAM GUARDRAIL TO BRIDGERAIL IF ONLY ONE LAYER OF DEEP BEAM (W-BEAM) GUARDRAIL EXISTS.
3. ORIENTATION OF NEW 152x203 TREATED TIMBER SPACER ON EXISTING BRIDGERAIL POST SHALL BE SET ON THE BASIS OF ALIGNING THE TRAFFIC FACE OF W-BEAM GUARDRAIL AS CLOSE AS POSSIBLE TO THE GUTTER LINE.
4. EXISTING BRIDGERAIL POST SPACING MAY VARY. POST SPACING SHALL BE VERIFIED IN THE FIELD.
5. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS NOTED OTHERWISE.

FABRICATION

1. APPROACH RAIL TRANSITION SHALL CONFORM TO THE CURRENT REQUIREMENTS OF THE SPECIFICATION FOR BRIDGE CONSTRUCTION SECTION 14 - GUARDRAIL.
2. ALL PLATE STEEL AND STRUCTURAL SHAPES SHALL CONFORM TO CSA G40.21 GRADE 300W OR ASTM A36.
3. ALL BOLTS SHALL CONFORM TO ASTM A307 UNLESS NOTED OTHERWISE.
4. ALL W-BEAM GUARDRAIL SHALL HAVE A MINIMUM YIELD STRENGTH OF 345 MPa.
5. 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).
6. ALL WELDING SHALL CONFORM TO CURRENT AWS SPECIFICATION D1.5.
7. ALL NEW STEEL MATERIAL SHALL BE HOT-DIP GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH CSA G164 UNLESS NOTED OTHERWISE.

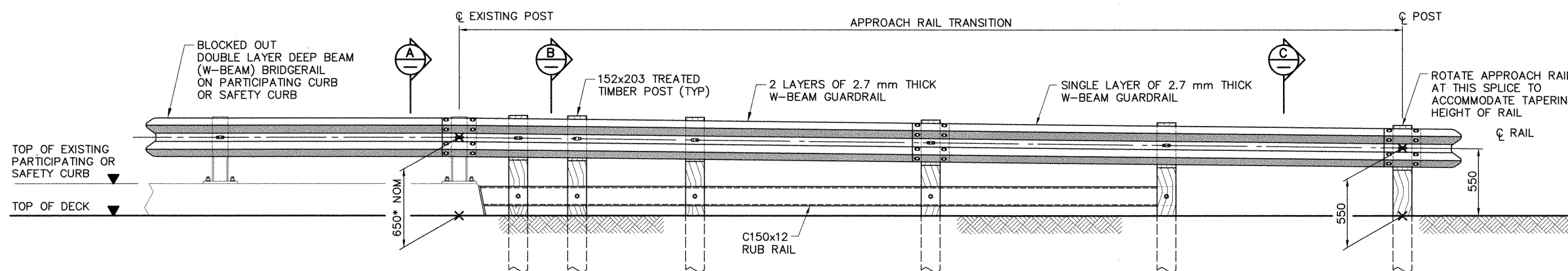
ERECTION

1. LINE AND ELEVATION OF BARRIER SHALL BE SET BY INSTRUMENT.
2. ALL APPROACH RAIL POSTS SHALL BE VERTICAL.
3. ALL RAIL SECTIONS SHALL BE LAPPED IN THE DIRECTION OF TRAFFIC.
4. ALL GALVANIZED MATERIAL CUT OR DAMAGED IN THE FIELD SHALL BE TOUCHED UP WITH TWO COATS OF ZINC RICH PAINT.

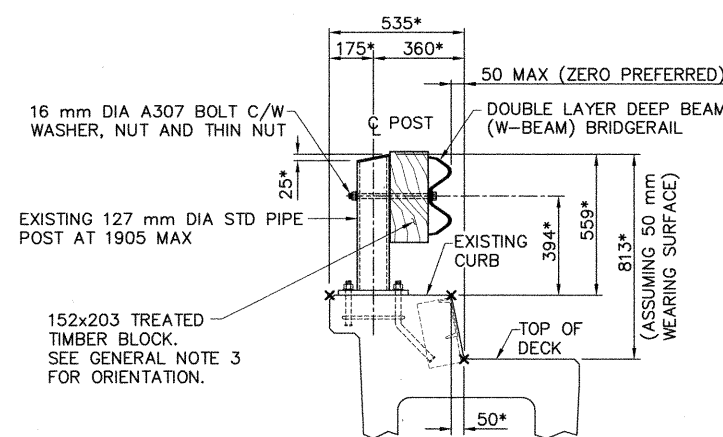


* TYPICAL DIMENSIONS FOR EXISTING DEEP BEAM (W-BEAM) BRIDGERAIL ON PARTICIPATING CURB OR SAFETY CURB. DIMENSIONS TO BE CONFIRMED ON A SITE SPECIFIC BASIS.

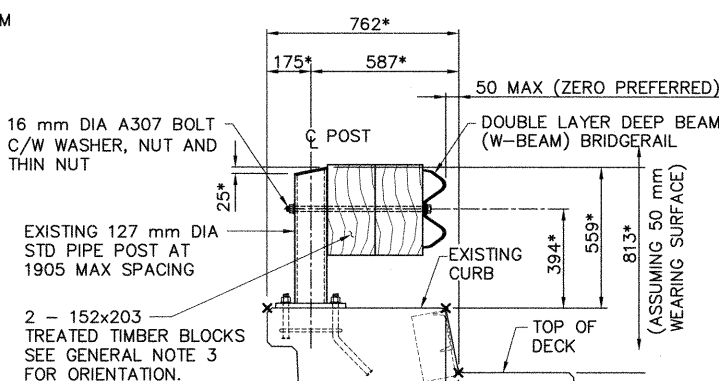
APPROACH RAIL TRANSITION PLAN
(TYPICAL ALL FOUR CORNERS OF BRIDGE)



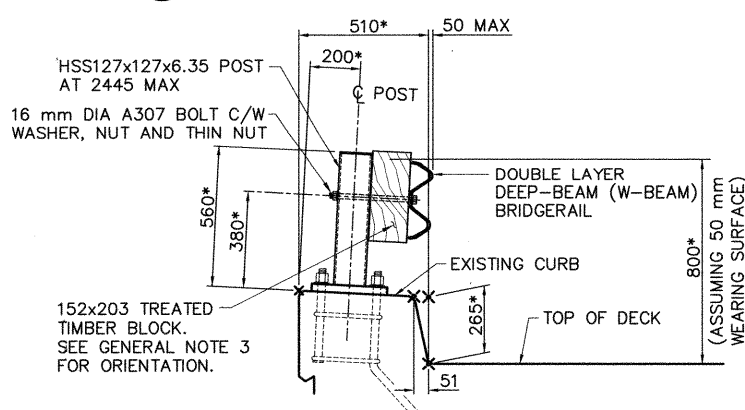
APPROACH RAIL TRANSITION ELEVATION



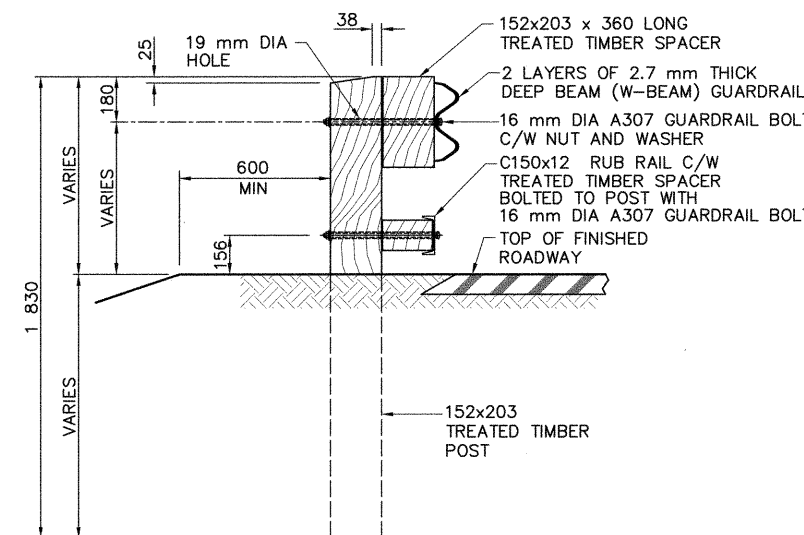
(A) PARTICIPATING CURB - TYPE 1



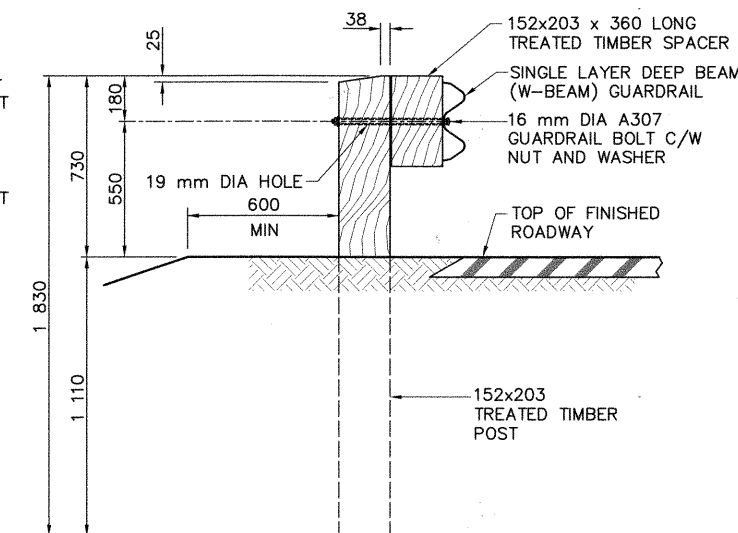
(A) SAFETY CURB



(A) PARTICIPATING CURB - TYPE 2



(B) SECTION



(C) SECTION

UMA AECOM		PERMIT TO PRACTICE UMA ENGINEERING LTD. Signature: <i>Bob Ramsey</i> Date: <i>Aug 19, 2007</i> PERMIT NUMBER: P329 The Association of Professional Engineers, Geologists and Geophysicists of Alberta		DESIGNER PROFESSIONAL ENGINEER ALBERTA A. WAYNE STEWART DATE: <i>14-AUG-2007</i>	CHECKER PROFESSIONAL ENGINEER ALBERTA ROBERT JOHN RYAN DATE: <i>Aug 19, 2007</i>	RECOMMENDED DIRECTOR BRIDGE ENGINEERING <i>Tom Zuo</i> APPROVED EXECUTIVE DIRECTOR TECHNICAL STANDARDS BRANCH <i>hsh.fab.</i> DATE: <i>AUG. 22/07</i>	Alberta INFRASTRUCTURE AND TRANSPORTATION DEEP BEAM (W-BEAM) BRIDGERAIL AND APPROACH RAIL TRANSITION UPGRADE DETAILS AI BAR CODE: _____ DATE: <i>2007-04-02</i> SHEET: <i>1 OF 1</i> DRAWING: <i>S-1720-07</i>
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