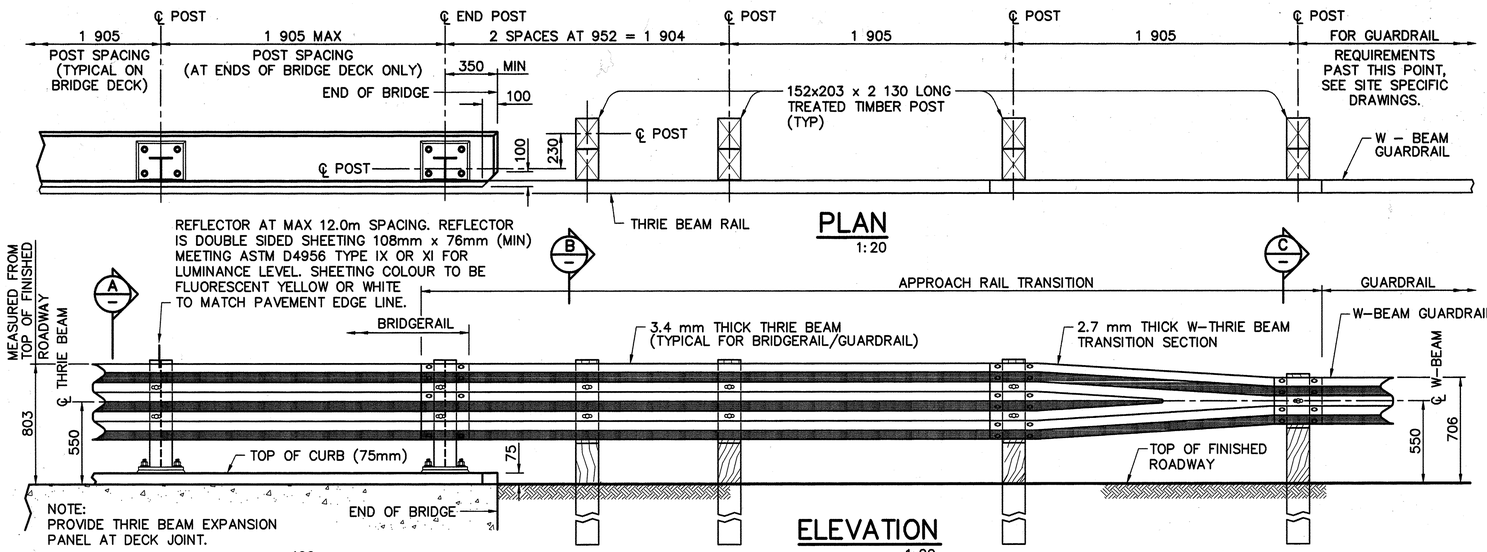
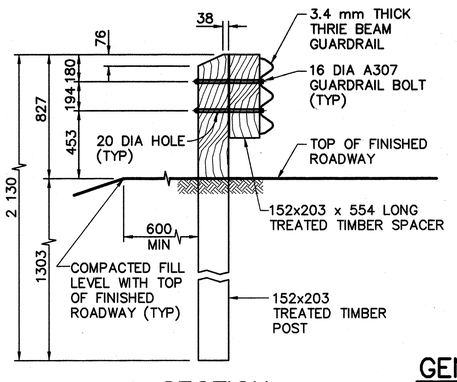
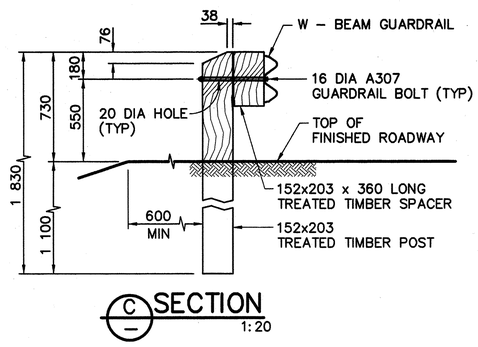
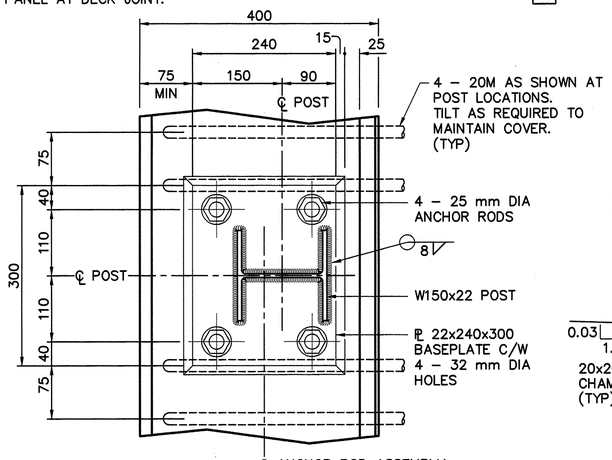


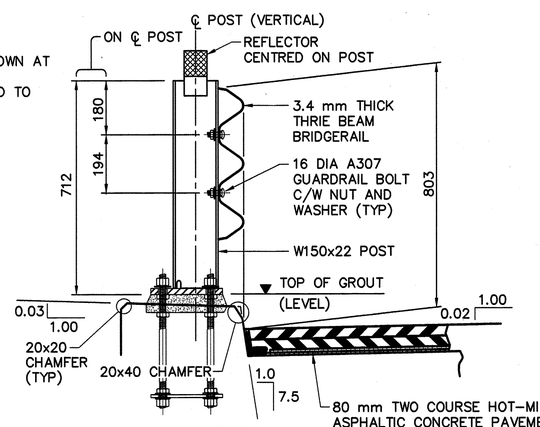


B SECTION
1:20

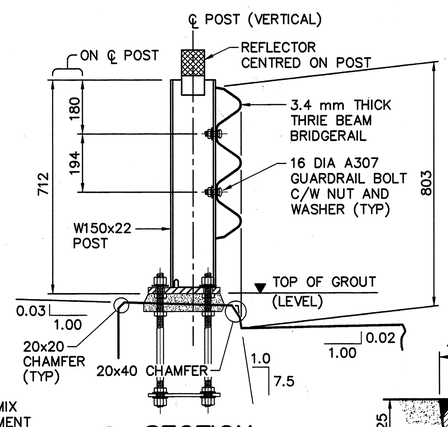


C SECTION
1:20

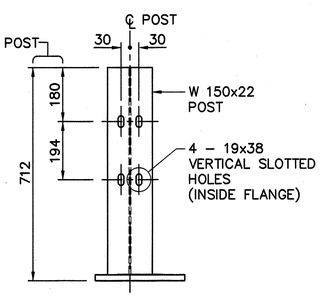




A SECTION
1:10
(ACP WEARING SURFACE)

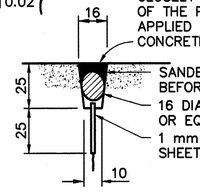


A SECTION
1:10
(CONCRETE TO GRADE)



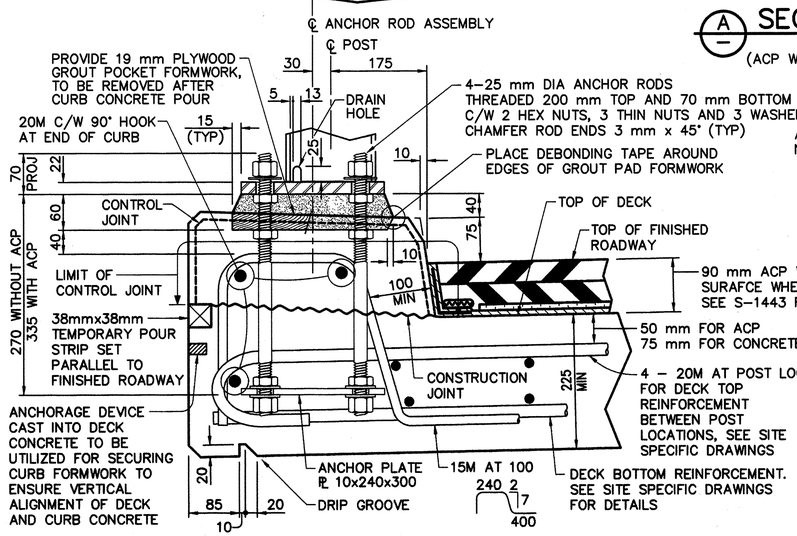
POST DETAIL
1:10

SIKAFLEX 15LM NON–SAG OR APPROVED EQUIVALENT. FOR EXTERNAL FASCIAS, SIKAFLEX 2C NS/SL SEALANT SHALL BE USED. THE COLOUR OF THE 2C NS/SL SEALANT SHALL CLOSELY MATCH THE COLOUR OF THE PIGMENTED SEALER APPLIED TO THE ADJACENT CONCRETE SURFACES.

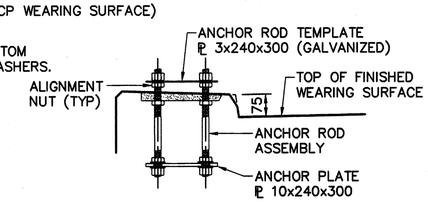


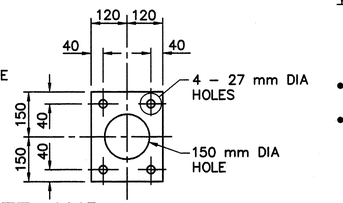
NOTES:
- APPLY JOINT SEALANT PRIOR TO PLACING ACP AND WATERPROOFING.
- AFTER THE ENTIRE DECK HAS BEEN CAST, THE CONCRETE CURB SHALL BE PLACED CONTINUOUSLY WITH FORMED CONTROL JOINTS AT 1905 mm SPACING. LAST CURB SECTION CAN BE LONGER THAN 1905 mm AT BRIDGE ENDS. AT CONTROL JOINTS, LONGITUDINAL REINFORCEMENT IN THE CURB SHALL BE DISCONTINUOUS AND HAVE 50 mm CONCRETE COVER FROM THE CENTERLINE OF THE JOINTS.
- CENTERED BETWEEN POSTS.

CONTROL JOINT DETAIL
NTS



ANCHOR ROD ASSEMBLY DETAIL
NOTE:
ANCHOR ROD ASSEMBLY SHALL BE MINIMUM 25 mm CLEAR FROM BOTTOM OF DECK.
1:5





ANCHOR PLATE AND ANCHOR ROD TEMPLATE DETAIL
NOTE:
ANCHOR ROD TEMPLATE C/W NUTS AND ALIGMENT NUTS TO BE INSTALLED DURING FABRICATION OF ANCHOR ROD ASSEMBLIES. ANCHOR ROD TEMPLATE AND ALIGNMENT NUTS TO BE REMOVED AFTER PLACING OF DECK CONCRETE AND PRIOR TO INSTALLATION OF W150x22 POST AND BASEPLATE.
1:10

GENERAL NOTES

1. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
2. RAILING CONFIGURATION IS BASED ON A RAILING CONFIGURATION THAT HAS BEEN CRASH TESTED AND MEETS THE REQUIREMENTS OF PERFORMANCE LEVEL 1 OF THE AASHTO GUIDE SPECIFICATIONS FOR BRIDGE RAILING, 1989. (EQUIVALENT TO NCHRP 350, TEST LEVEL 2).
3. THE DECK REINFORCEMENT SHOWN AT POST LOCATIONS ON THIS DRAWING IS FOR RESISTING THE BARRIER IMPACT LOAD EFFECTS FOR PL–1 LOADING WITH A 225 mm THICK CONCRETE DECK. DESIGN OF ADDITIONAL DECK REINFORCEMENT SHALL BE CARRIED OUT ON A SITE SPECIFIC BASIS TO RESIST APPLICABLE DEAD AND TRAFFIC LIVE LOADS.
4. RAILING SHALL BE USED WITH CURB CONFIGURATION SHOWN.
5. USE OF THIS DRAWING IS LIMITED TO DECK ON GIRDER BRIDGES.

CONSTRUCTION

1. BRIDGERAIL INCLUDING APPROACH RAIL TRANSITION SHALL CONFORM TO THE CURRENT REQUIREMENTS OF THE SPECIFICATIONS FOR BRIDGE CONSTRUCTION SECTION 12–BRIDGERAIL AND SECTION 14–GUARDRAIL.
2. ALL CONCRETE SHALL BE CLASS HPC ($f'c$ = 45 MPa).
3. ALL CORNERS SHALL HAVE A 20 mm CHAMFER OR FILLET UNLESS NOTED OTHERWISE.
4. ALL REINFORCING STEEL SHALL HAVE A MINIMUM YIELD STRENGTH OF 400 MPa AND SHALL BE EPOXY COATED.
5. ALL REINFORCING STEEL SHALL HAVE A MINIMUM 50 mm CLEAR COVER UNLESS NOTED OTHERWISE.
6. ALL PLATE STEEL AND STRUCTURAL SHAPES SHALL CONFORM TO CSA G40.21 GRADE 350W OR ASTM A36.
7. ALL ANCHOR RODS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A193 GRADE B7(Fy=725 MPa;Fu=860 MPa). ALL NUTS AND WASHERS SHALL CONFORM TO A325. GALVANIZING SHALL STRICTLY FOLLOW THE FOLLOWING PROCEDURE WITH THE PRESENCE OF THE CONSULTANT:
   - BRUSH BLAST ANCHOR RODS TO REMOVE MILL SCALE AND OIL AFTER THREADING ENDS.
   - FLASH PICKLING NOT TO EXCEED 5 MINUTES.
   - QUICK DRY PRIOR TO HOT–DIP GALVANIZING (DO NOT STORE IN FLUX OR ACID RINSE).
8. ALL W–BEAM AND THRIE BEAM GUARDRAIL (INCLUDING W–THRIE BEAM TRANSITION SECTION) SHALL HAVE A MINIMUM YIELD STRENGTH OF 345 MPa.
9. ALL WELDING SHALL CONFORM TO CURRENT AWS SPECIFICATION D1.5.
10. ALL STEEL MATERIALS SHALL BE HOT–DIP GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH CSA G164 UNLESS NOTED OTHERWISE.
11. THE BOTTOM SURFACE OF THE BASEPLATES SHALL BE COATED WITH 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.
12. TIMBER POSTS AND SPACERS SHALL BE COAST DOUGLAS FIR, PACIFIC COAST HEMLOCK OR LODGEPOLE PINE CONFORMING TO THE STRESS GRADE "SELECT STRUCTURAL POSTS AND TIMBERS" (NLGA PARAGRAPH 131 a).

ERECTION

1. BRIDGERAIL ANCHOR BOLTS SHALL BE TIGHTENED AN ADDITIONAL 1/2 TURN OF THE NUT PAST THE "SNUG TIGHT" CONDITION.
2. ALL DIMENSIONS ARE MEASURED PARALLEL TO TOP OF BRIDGE DECK AND ALONG THE CENTRELINE OF ANCHOR ROD ASSEMBLIES.
3. LINE AND ELEVATION OF RAIL SHALL HAVE A TOLERANCE OF 6 mm.
4. ALL NON–STANDARD GUARDRAIL LENGTHS SHALL BE SAW CUT TO SUIT AND ALL NON–STANDARD GUARDRAIL HOLES SHALL BE DRILLED. FLAME CUTTING OF GUARDRAIL SHALL NOT BE ALLOWED. APPLY TWO COATS OF ZINC RICH PAINT ON AREAS DAMAGED BY SAW CUTTING OR DRILLING.

JOB NO. 0705–216–00–00

AECOM

PERMIT TO PRACTICE
AECOM Canada Ltd.
Signature Bob Ramsay
Date Jan 18, 2010
PERMIT NUMBER: P10450
The Association of Professional Engineers, Geologists and Geophysicists of Alberta.

DESIGNER
PROFESSIONAL ENGINEER ALBERTA J. WAYNE STEWART
DATE Jan 18, 2010

CHECKER
PROFESSIONAL ENGINEER ALBERTA ROBERT JOHN RAMSAY
DATE Jan 18, 2010

REV	DATE	REVISIONS	BY
6			
5			
4			
3			
2			
1			

RECOMMENDED
DIRECTOR BRIDGE ENGINEERING
DATE MAR 4/10

APPROVED
EXECUTIVE DIRECTOR
TECHNICAL STANDARDS BRANCH
DATE MAR 4/10

Government of Alberta ■ Transportation

PL–1
THRIE BEAM BRIDGERAIL
ON 75 mm HIGH CURB

F957605

DATE	SHEET	DRAWING
2010–01–14	1 OF 1	S–1797–10