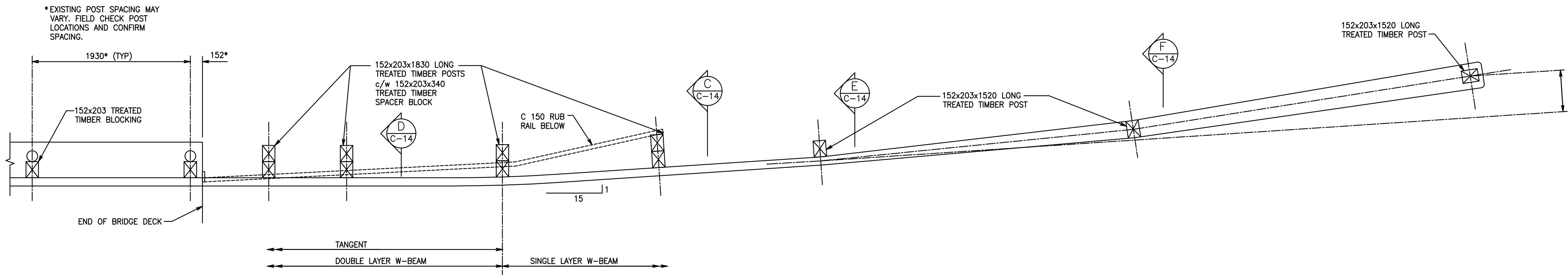
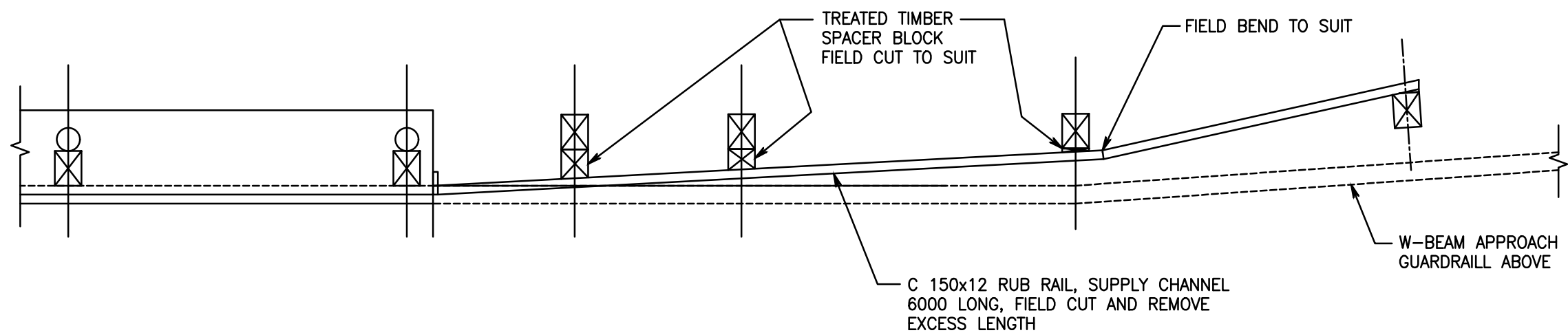


ELEVATION – BRIDGERAIL & APPROACH GUARDRAIL
NTS



PLAN – W-BEAM GUARDRAIL
NTS



PLAN – CHANNEL RUB RAIL
NTS

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 TIMBER" (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 AND ADDITIONAL ½ 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 BLOT 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.

PERMIT TO PRACTICE

PERMIT TO PRACTICE
Amec Foster Wheeler Environment & Infrastructure
a Division of Amec Foster Wheeler Americas Limited
Signed By: **KEITH HELBERG**
Date: **2017-02-21**
PERMIT NUMBER: P-04546
The Association of Professional
Engineers and Geoscientists of Alberta

Consultant's Name
Nom de l'expert-conseil



Eng. Stamp
Sceau de l'ingénieur



SCALES SHOWN ARE CORRECT
FOR 24" x 34" SHEET SIZE

5		
4		
3		
2		
1	ISSUED FOR TENDER	17/02/21
0	ISSUED FOR REVIEW 99%	17/01/25
Revision/	Description/Description	Date/Date
Revision/		

Client/client

Parks Canada
Agency
L'Agence Parcs
Canada
Western and
Northern Region
Ouest et Nord
du Canada

Canada

Project title/Titre du projet

**ELK ISLAND NATIONAL PARK
ROAD RENEWAL PROJECT**

**WEST GATE ACCESS
PARK CANADA**

Approved by/Approuve par

Designed by/Concept par
J.Z.

Drawn by/Dessine par
T.Q.L.

PWGSC Project Manager/Administrateur de Projets TP5GC
R.H.

PWGSC, Architectural and Engineering Resources Manager/
Ressources Architectural et de Directeur d'ingénierie, TP5GC

Client/client

PARKS CANADA

Drawing title/Titre du dessin

**BRIDGERAIL & GUARDRAIL
PLAN AND ELEVATION**

Project No./No. du
projet
R.075711.001

Sheet/ Feuille
C-13

Revision no./
La Révision
no.
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