



Navigation Protection Program
Suite 610, 800 Burrard Street
Vancouver B.C. V6Z 2J8

Your file

Our file
2016-500308

May 16, 2017

BC Hydro
Suite 600 - Four Bentall Ctr, 1055 Dunsmuir St.
PO Box 49260
Vancouver, BC V7X 1V5

Attention: Karen von Muehldorfer

RE: Notice to the Minister\permission to proceed under the *Navigation Protection Act* for the Bridge, located at 56° 13' 37.07" N x 121° 01' 57.47" W, Peace River, Peace River Side Channel (Water Crossing #11 – Field I.D. Side Channel 4 Alternative) - The Theoretical Unsurveyed Portions of the bed of the Peace River fronting Section 25, Township 83, Range 20, West of the 6th Meridian, Peace River District, in the Province of British Columbia

The Minister of Transport has determined that your work is not likely to substantially interfere with navigation.

Therefore, your work is permitted under the NPA s.9(1) Construction, and you may proceed pursuant to the attached plans (3) in accordance with the following terms and conditions:

1. Upon termination or decommissioning of the above works, all structures and associated equipment shall be completely removed without delay, including all piles. Bridge components must be removed prior to reservoir flooding.
2. Bridge components shall be removed prior to the filling of the reservoir.
3. The NPA Approval and its Terms and Conditions shall be posted at the dam site office.
4. In the event that the operation of the above works is terminated prior to completion, it will be the proponent's responsibility to remove the works and associated equipment in its entirety from the waterway including any anchors and pilings. The banks and bed of the waterway disturbed by the works shall be contoured to match the local conditions as required.
5. If the side channels are ice free while the bridge is in place, install and maintain warning signs on the bank of the side channels at locations approximately 50m, downstream of the bridge site. The Signs shall state:

**RIVER BLOCKED
WARNING BRIDGE AHEAD**

The owner is responsible to ensure the temporary construction works are designed and maintained to withstand local weather conditions and the wash of vessels transiting the area.

Pursuant to Sec. 34 of the Navigation Protection Act, the owner shall provide unimpeded access to the Minister or their representatives for inspection purposes.

Pursuant to Sec. 5 of the Navigable Waters Works Regulations, no person shall permit any tools, equipment, vehicles, temporary structures or parts thereof used or maintained for the purpose of building or placing a work in a navigable water to remain in such water after the completion of the project.

Pursuant to Sec. 6 of the Navigable Waters Works Regulations, where a work or a portion of a work that is being constructed or maintained in a navigable water causes debris or other material to accumulate on the bed or the surface of such water, the owner of that work or portion of that work shall cause the debris or other material to be removed to the satisfaction of the minister.

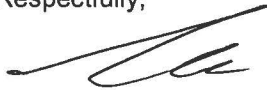
This permission relates only to the effect of your work on navigation under the NPA and does not grant any rights related to the ownership of the bed of the waterway.

It is the owner's responsibility to comply with any other applicable laws and regulations.

Please note that the NPA, amongst other obligations, requires the owner to immediately notify the Minister if his work causes or is likely to cause serious or imminent danger to navigation and take reasonable measures to remediate the danger to navigation (section 12 of the NPA).

Should you have any questions, please do not hesitate to contact our office in Vancouver by phone at (604) 775-8867 or by e-mail at NPPPAC-PPNPAC@tc.gc.ca.

Respectfully,




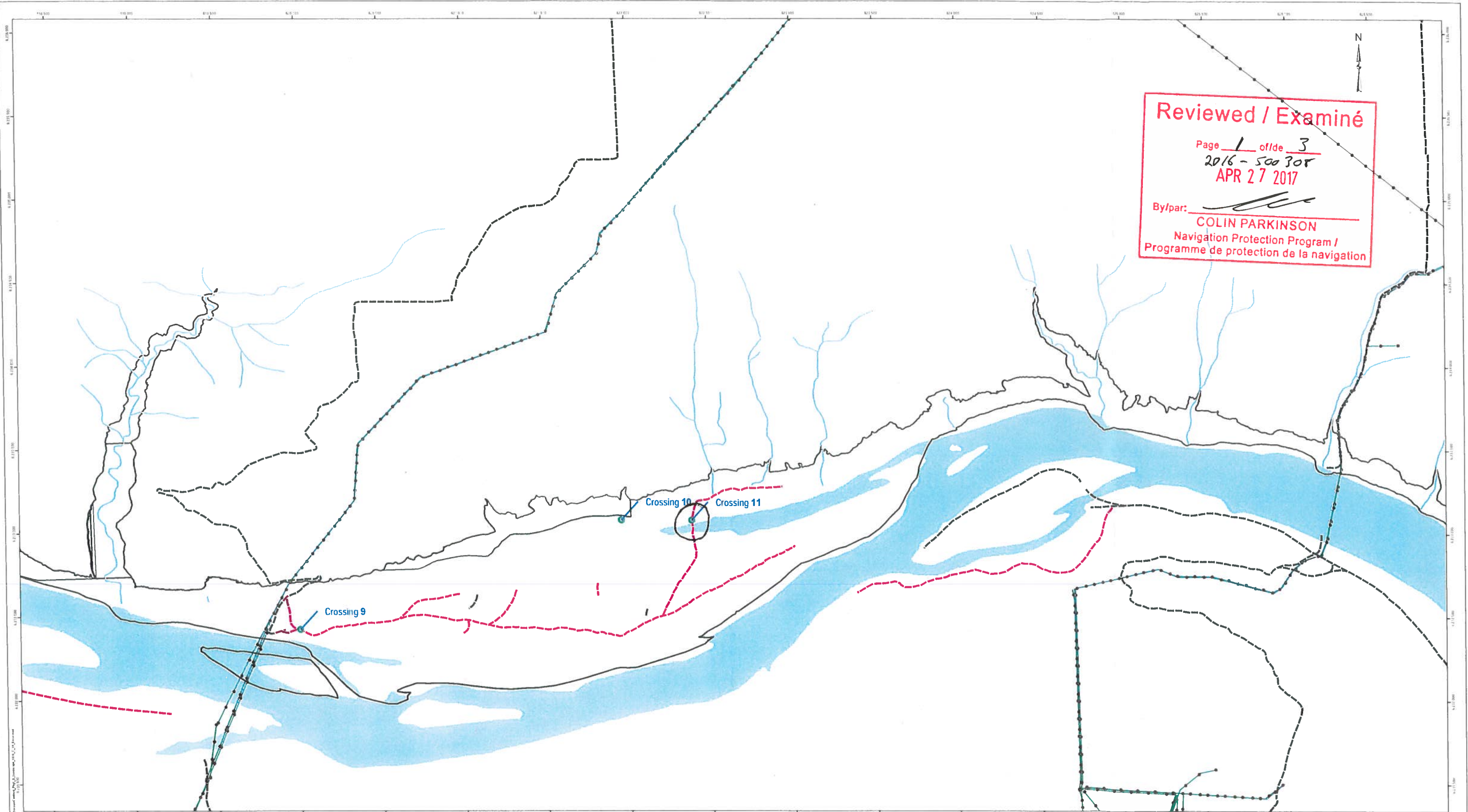
Colin Parkinson
Navigation Protection Program Officer
Programs Group
Transport Canada
Pacific Region







CP/co

cc: Via Email

DFO Brian Naito
FLNRO
CEAA
FN's

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 APR 27 2017
 By/par: 
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- Legend
-  Proposed Bridge Site
 -  Proposed Roads
 -  Existing Roads
 -  Pipeline
 -  Pipeline/OGC Pipelines Dec 30/13
 -  Cleaning Boundary

1:10,000

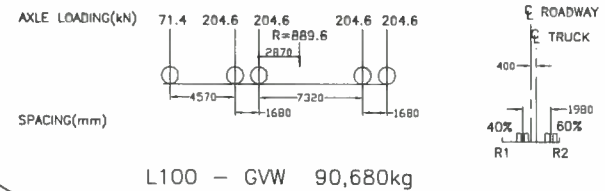
BC Hydro


Stream Crossing Overview Map
 Map 3 of 3

Date	June 8, 2016	DWG NO	1016-C14-07111	R1
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Constructors of the Site Clean Energy Project is subject to required regulatory approvals including environmental certification.

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EARTHWORKS

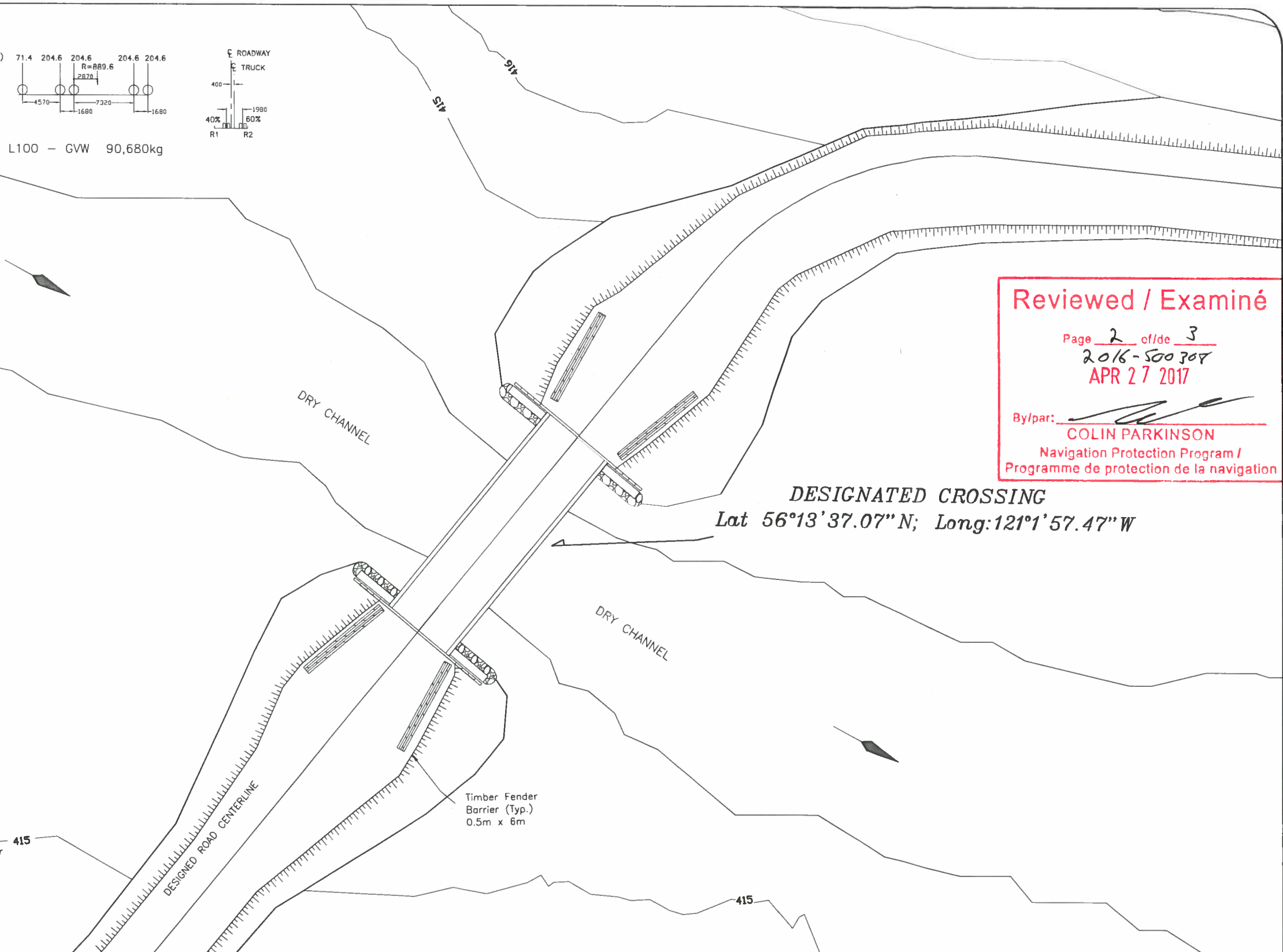
1. Town Cut: 0 CM
Fill: 400 CM
2. Bush Cut: 0
Fill: 370 CM
3. Endfill of approaches shall be placed in layers not exceeding 300mm in loose thickness. Each layer shall be compacted to a minimum 95% standard proctor over the entire surface for each layer.
4. Rip Rap Sizing:(if required)
 - D50 Nominal Size=200mm
 - Equivalent Mass=10kg
 - Vmax Allowable=2.5m/s
 Rock Gradation
 - 85%-greater than 1.0kg
 - 50%-greater than 10.0kg
 - 15%-greater than 30.0kg
 Volume: 25.0cu.m.

DESIGN NOTES

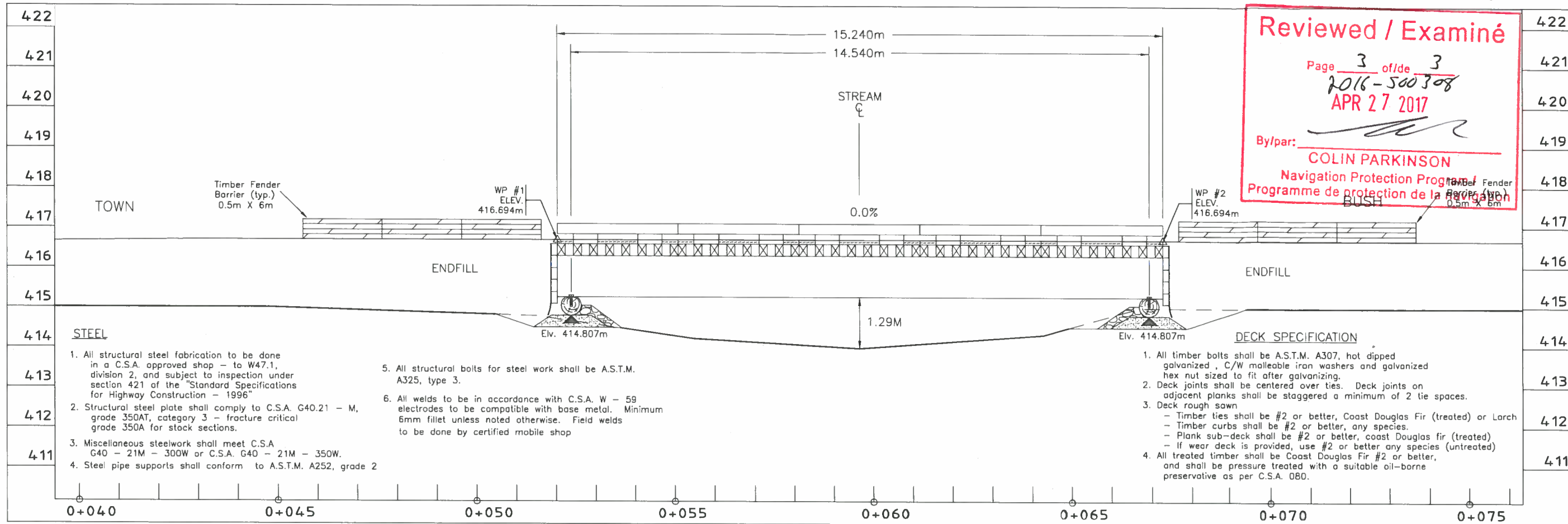
1. Notes:
 - Design in accordance with CAN/CSA-S6-00, modified to BCFS L100 loading.
 - Loading diagram L - 100 off highway G.V.W. = 90 680kg.
 - Temporary bridge crossing
 - The protection blanket must be extended around the abutments (if required). The blanket must be keyed into native soil to protect against erosion.
 - Sill logs must extend at abutments to prevent endfills from entering stream.

ALTERNATE FOOTING ARRANGEMENT

- If ground conditions are encountered where subgrade is not capable of 200 KPa bearing pressure, excavate 1.00 m deeper at the footing location and place large rock on top of geotextile followed by smaller rock to achieve the desired grade. Use granular material to build the 300mm leveling course.

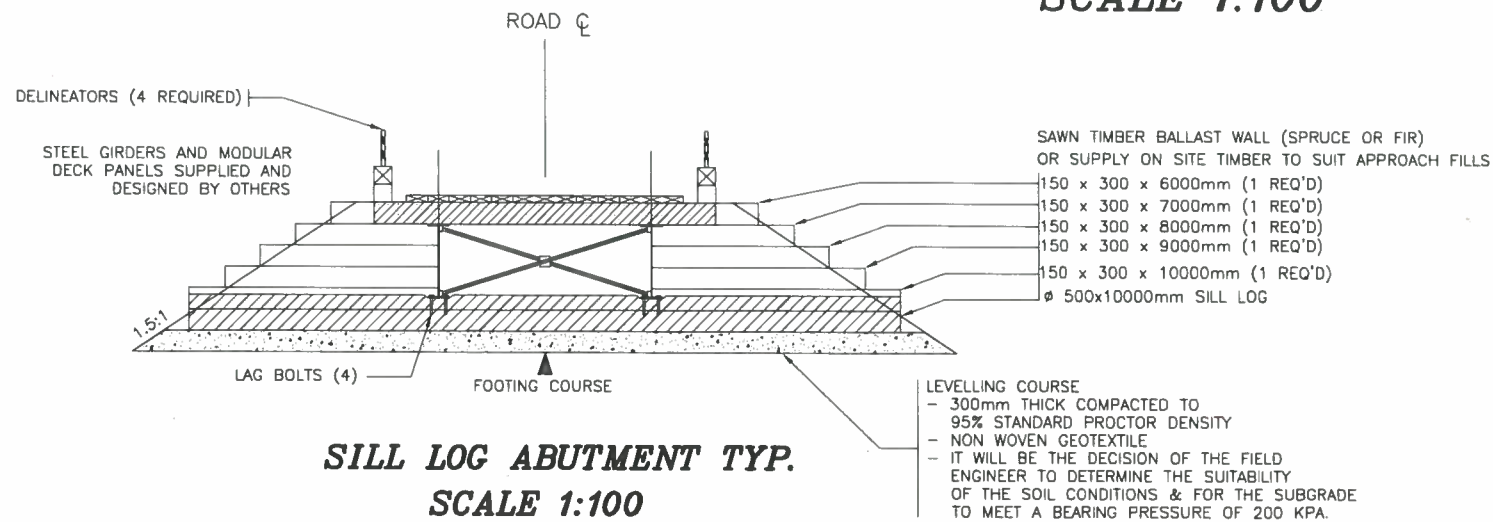


REVISIONS			 INDUSTRIAL FORESTRY SERVICE LTD. 1595 Fifth Avenue Prince George, B.C. V2L 3L9 PH: (250) 564-4115 FAX: (250) 563-9679	 FOR GENERATIONS	GENERAL ARRANGEMENT LOCATION: PEACE RIVER CROSSING 11 Fig 17 (2 of 2)		DESIGNED: X. LIU EIT	DATE: SEP. 30, 2015
NO.	DATE	DESCRIPTION			DRAWN: X. LIU EIT	DESC: PLAN VIEW FINISH CROSSING		
					CHECKED: B.PAROLIN P.ENG	FILE #: 5-150260_PEACE RIVER_CROSSING 7.DWG		
					JOB#: 150260	LOCATION: FORT ST. JOHN		
					MAP REFERENCE:	Scale 1 : 250		

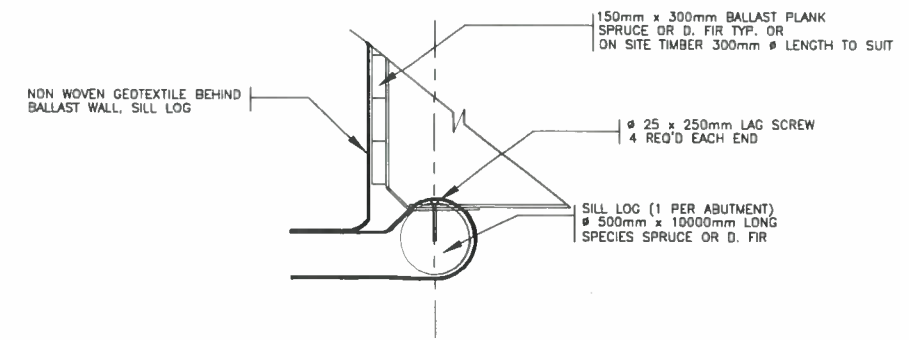


ROAD DESIGN CENTERLINE PROFILE

SCALE 1:100



SILL LOG ABUTMENT TYP.
SCALE 1:100



ABUTMENT CONNECTION DETAIL TYP.
SCALE 1:50

REVISIONS		
NO.	DATE	DESCRIPTION



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GENERAL ARRANGEMENT

LOCATION: PEACE RIVER CROSSING 11
 Fig 17 (1 of 2)

DESIGNED: X. LIU EIT	DATE: SEP. 30, 2015
DRAWN: X. LIU EIT	DESC: PROFILE & ABUTMENTS ARRANGEMENTS
CHECKED: B. PAROLIN P. ENG	FILE #: 5-150260_PEACE RIVER_CROSSING 7.DWG
JOB#: 150260	LOCATION: MACKENZIE
MAP REFERENCE:	Scale 1 : AS NOTED