SITE C CLEAN ENERGY PROJECT

Component Application Package –
Halfway River Temporary Bridges

For Canadian Navigable Waters Act

May 15, 2020

Submitted to:
Transport Canada
Navigation Protection Program
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1 INTRODUCTION

The Canadian Navigable Waters Act (CNWA) came into force on August 28, 2019. The CNWA includes a schedule of navigable waters requiring regulatory approval for works that risk a substantial interference with navigation. Works required for construction and operation of the Site C Clean Energy Project (the Project) that occur on, over, under or through navigable waterways as defined by the CNWA must be permitted.

The Halfway River is a Peace River tributary near Taylor, BC and is not named in the CNWA schedule of navigable waters. This Notice of Work application for temporary bridges is being submitted as a Notice of Work. This application package provides supporting information on six (6) proposed crossings of the lower Halfway River.

2 HALFWAY RIVER TEMPORARY ACCESS BRIDGES – RESERVOIR CLEARING

Site C Reservoir clearing in forest areas of the lower Halfway River catchment requires machine access to both banks of the river. The available road networks do not provide access to areas that require clearing ahead of reservoir filling, hence new roads and access routes are proposed. Within this new road network, there would be six (6) mainstem bridge crossings needed, each being accessed using constructed causeway approaches. A map showing the crossing locations is in Attachment A. The crossings span portions of the Peace River that are Crown Land and are within the Occupation Licence to Cut (OLTC) area held by BC Hydro. The dimensions and location of each crossing are provided in Table 1.

Table 1: Location, dimensions and land description for each

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<th>Halfway River Mainstem Crossing ID</th>
<th>Arrangement Option</th>
<th>Causeway Length (m)</th>
<th>Bridge Length (m)</th>
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<th>Longitude</th>
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2.1 CROSSING DESIGN

The general arrangement, dimensions and specifications for each bridge is provided in the drawing package in Attachment B. Each bridge has been designed by an engineering professional. Each crossing would have the capacity to pass the daily average flow estimated for the seasonal (Sept - April), 1 in 10 year return period (124 m³/s).

The causeways and bridge approaches would be constructed from local river bed materials and supplemented with imported riprap rock. Riprap specifications have been developed using the estimated flows level and associated scour potential. The riprap specification for each crossing is provided in the drawings in Attachment B.
2.2 CONSTRUCTION SEQUENCE AND SCHEDULE
The contractor is expected to begin constructing the crossings beginning at the downstream end (Site ID 19.3A) beginning in early September, and then move upstream after each crossing is build. The September/October construction period will be needed to complete all six crossings in advance of the winter clearing period.

Decommission of the crossings will involve bridge deck removal such that the navigation access will be reinstated by May 1st 2021.

3 PUBLIC BOATER ACCESS
Construction of temporary bridges and causeways in the Halfway River channel is expected to block boater access to lower portions of the Halfway River between September 1st 2020 and April 30th, 2021. These blockages would span the river sections between 4.7 river-kilometers upstream of the existing highway bridge (Crossing ID 19.3-A as per Attachment A), and 7 km upstream of the highway bridge (Crossing ID 19.7-A, Attachment A). A map showing the river blockage extent has been included in Attachment A. The bridges would be removed in April and boating access would be reinstated on or before May 1st, 2021. The Halfway River boat launch would remain open during this period.

Communication to boaters ahead of river closures would be done in accordance with the Boater Communication Protocol in the Site C Construction Safety Management Plan.

4 CONSULTATION WITH INDIGENOUS GROUPS
The alignment of river crossings for reservoir clearing in the Halfway River area (OLTC#19) was presented as part of the forestry management plan and short term water use package at the Site C Permitting Forum #12, held May 2nd 2019 in Fort St. John. At the time of the permitting forum, the crossings were presented as snow/ice structures for winter construction and operation, hence this application represents a change to the schedule as well as crossing materials and general arrangement.
Attachment A
Overview of Highway 29 crossing over the Halfway River.
Construction of the Site C Clean Energy Project is subject to required regulatory and permitting approvals.
Attachment B
Halfway River Temporary Bridge Design Drawings, Plan and Profile Views