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NEXTBRIDGE INFRASTRUCTURE LP

Detailed Project Plan for Pukaskwa River Provincial Park for the Ontario East-West Tie Transmission Line Project

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- Figure 1 – Pukaskwa River Provincial Park – Wildlife Map (1)
- Figure 2 – Pukaskwa River Provincial Park – Birds Map (1)
- Figure 3 – Pukaskwa River Provincial Park – Clearing Map (1)

1 INTRODUCTION

The purpose of this Detailed Project Plan (DPP) is to provide the Ministry of Environment, Conservation and Parks (MECP) with details on the activities to be undertaken within Pukaskwa River Provincial Park during NextBridge Infrastructure LP's (NextBridge) Ontario East-West Tie Line Transmission Project ('OEWTL' or 'the Project'). Pukaskwa River Provincial Park is located within Workfront 9.

Specifically, the purpose of these DPPs is to identify site-specific interaction(s) with known environmental values in protected areas and to describe proposed construction scope, methods, timing, limitations and mitigation measures to avoid, protect and/or restore these habitat(s).

1.1 Regulatory Context

A competitive bidding process was held by the Ontario Energy Board (OEB) and selected NextBridge to design and build the Project in August 2013. The Independent Electricity System Operator (IESO) identified an in-service date of 2018 for the Project, and in 2014 revised the required in-service date to 2020. Due to additional Project hearings held the OEB in the summer of 2018, the ISD was extended to the fall of 2021.

The Project has been identified as a priority project by the Province of Ontario, and a needed Project by the IESO to meet future electricity demand in northwestern Ontario. The Project's Amended Environmental Assessment (EA) application (Golder, 2018a) was approved in March 2019; the EA approval includes a set of Project EA Conditions and Commitments.

Ontario's protected areas are regulated under the *Provincial Parks and Conservation Reserves Act, 2006* (PPCRA), which sets out the legislative framework for the formal protection of Provincial Parks (PP) and Conservation Reserves (CR) and direction for the MECP to manage these areas. Sections 20 and 21 of the PPCRA outline the Conditions of Approval for Resource Access Roads and Utility Corridors that must be considered and addressed by NextBridge during construction planning, execution, decommissioning and operations, in order to support permit approvals by MECP. Conditions of Approval are described in detail in Section 2 (below) and addressed throughout this DPP.

Under EA Commitment 1029 NextBridge will provide a DPP for each provincial park and conservation reserve where construction will occur, which should include, but not be limited to, the following information:

1. The pre-construction field reconnaissance approach (Section 6.1);
2. Construction schedule and design information (Section 5);
3. Approaches to protecting environmental values (Section 6);
4. Training and employment opportunities for Indigenous communities; and,
5. Traditional Ecological Knowledge (TEK)/Traditional Land and Resource Use (TLRU) protocol.

This DPP provides details on items 1-3 above; additional information surrounding the application of environmental Best Management Practices (BMP) and contingency plans for the Project can be found in the Project Construction Environmental Protection Plan (CEPP) (NextBridge, 2019). Details on items 4 and 5 re: indigenous training, employment, TEK and TLRU are outlined in the Project Overarching DPP (NextBridge, 2019a), and have not been included here based on regulator feedback to avoid redundancy between Project submittals.

1.2 Land Use and Work Permits

A Land Use Permit (LUP), issued by the MECP under the PPCRA is required to allow the Project's transmission line easement (ROW) to exist within a protected area. A Work Permit (WP), issued by the MECP under the PPCRA, is required to clear vegetation, develop or upgrade any temporary roads or watercourse crossings within a protected area. This DPP provides detail to support NextBridge's permit applications for Project activities in Pukaskwa River PP; these applications will be submitted separately, but will refer to this document for construction and schedule details.

In order for land use or work permits to be issued for protected areas crossed by the Project, amendments to individual PP and CR Management Plans are required under the PPCRA, to allow the development of Project infrastructure within the respective protected area boundaries. This process was triggered by the approval of the Project's Environmental Assessment (EA) in March 2019, and is currently in progress. Additional detail on permitting for work within park boundaries is outlined in Section 9.

2 PPCRA SECTION 21 CONDITIONS OF APPROVAL

Sections 20 and 21 of the PPCRA (2006) outline the conditions under which new utility corridors may be developed in protected areas. Section 21 outlines the conditions of approval, specifically: that there are no reasonable alternatives, that lowest cost is not the sole or overriding justification, that environmental impacts have been considered and that all reasonable measures will be undertaken to minimize effects (see excerpt below). An amendment or an administrative update to each PP management plan, interim management statement, or SCI for each CR is required for MECP to issue permits (see Section 1.2) in areas where the Project crosses protected areas.

Sections 20 and 21 of the PPCRA are summarized as follows:

Section 20 (2) Utility corridors:

(2) Subject to the policies of the Ministry and the approval of the Minister, with or without conditions, utility corridors, including but not limited to utility corridors for electrical transmission lines, are permitted in provincial parks and conservation reserves. 2006, c. 12, s. 20 (2).

Conditions for approval, resource access road, etc.

(3) In addition to the conditions in section 21, in approving a resource access road or trail or a utility corridor, the Minister must be satisfied that when the road, trail or utility corridor is no longer required for the purpose for which it was approved or will not be used for a period of five years or more,

(a) the road, trail or utility corridor will be closed and effective measures will be taken to prevent its use; and

(b) rehabilitation and removal of infrastructure will be undertaken at the direction of the Minister. 2006, c. 12, s. 20 (3).

Section 21 – Conditions of Approval

In approving the development of a facility for the generation of electricity under subsection 19 (2), (3) or (4) or approving a resource access road or trail or a utility corridor under section 20, the Minister must be satisfied that the following conditions are met:

1. There are no reasonable alternatives.

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2. Lowest cost is not the sole or overriding justification.
3. Environmental impacts have been considered and all reasonable measures will be undertaken to minimize harmful environmental impact and to protect ecological integrity. 2009, c. 12, Sched. L, s. 21.

2.1 PPCRA Section 21 Alternatives Assessment

Project infrastructure crosses through portions of nine (9) protected areas, as outlined in Table 1. Alternative routing to avoid protected areas to the greatest extent possible was undertaken during the engineering and design and environmental assessment (EA) phase(s), as outlined in the Project’s Amended EA Report (Golder, 2018a). The initial alternatives assessment included consultation and engagement with Indigenous communities, regulatory agencies, property owners, interest holders, Crown interests and the general public. A number of alternative routes, including one that avoided PP and CR, were evaluated against the PPCRA Section 21 Conditions of Approval for their potential impact on social (i.e.: proximity to communities or other receptors) and environmental values, with the understanding of Section 21 (2) that lowest cost cannot be the sole or overriding justification for the final routing.

To address MNR concern(s) that the final route crossed sensitive environmental features in PP and CR, additional route alternatives assessments were completed, as outlined in Section 3.3.1.6 and Appendix 3-1-B and 3-II of the Amended EA report (Golder, 2018a). Six (6) alternative routes, with new start and end points that avoided PP and CR were compared against a set of indicators, with the focus of determining the best compromise or balance of environmental and/or social impacts (i.e.: aligning the ROW with existing linear infrastructure, avoiding greenfield construction, avoiding communities) and construction feasibility. The comparative evaluation of routes was completed using the method described in Appendix 3-I and discussed in Section 3.3.2 of Appendix 3-II of the Amended EA report (Golder, 2018a). This assessment concluded that the final approved route remains the best balance of assessment criteria.

The final/approved route was selected not solely or primarily due to lower cost, but because it was determined that there are no reasonable alternatives that concentrate linear infrastructure, minimize new access development, and limit greenfield disturbance(s). The final/approved route therefore has the smallest permanent Project footprint and minimizes potential environmental and social impacts to the greatest extent possible.

Results of the alternatives assessment for Pukaskwa River PP where crossed by the Project is summarized in Section 2.1.1, to demonstrate compliance with the PPCRA Section 21 Conditions of Approval.

Table 1: Protected Areas Crossed by the OEWTL Project.

Workfront	Protected Area Name	Number of Towers	Approx. Project Footprint within Protected Area (ha)
1	Ouimet Canyon PP	0	0
2	Black Sturgeon River PP	2	7.8
3	Ruby Lake PP	1	2.1
3	Kama Cliffs CR	11	32
3, 4	Gravel River CR	22	56.5
4	Gravel River PP	2	5.4
8	Kwinkwaga Ground Moraine CR	0	7.0
9	Pukaskwa River PP	2	4.0
10	Nimoosh PP	2	11.1

2.1.1 PPCRA Section 21 Compliance for Pukaskwa River PP

Two (2) alternative route segments along with the selected route were assessed to avoid the Pukaskwa River PP and the final/approved route was selected in compliance with PPCRA Section 21 Conditions of Approval, including consideration of costs and potential environmental impacts. The Project route follows an existing road and crosses the Pukaskwa River at a narrow section of the park for approximately 550 m before it parallels the existing HONI ROW line located approximately 5 km to the south of Pukaskwa River PP. This route concentrates linear development into a single location in the park, utilizes existing access, and minimizes the number of structures required in the park and thereby limiting permanent disturbance in Pukaskwa River PP.

Most of the area along this segment of the Project route, between the Township of White River and the Municipality of Wawa, is forested and lacks existing, previously disturbed corridors. For this reason, the alternative route segments considered following existing logging roads, harvested areas and Highway 17. Alternatives were compared to the north-south section of the Alternative Route Segment around Pukaskwa National Park (Greenfield/230kV Transmission Line), identified during the ToR phase, which avoided Pukaskwa River PP; however did not follow existing, previously disturbed ROW and was located in an area with challenging topography.

The first alternative that avoided Pukaskwa River PP followed Highway 17 in a south-easterly direction from the Township of White River terminating at the Wawa TA. This route was eliminated as it was determined to not be a viable solution, technically feasible, practical, financially realistic, or economically viable and had potential to affect more natural and socio-economic features and was not considered consistent with provincial government direction and policy.

The second alternative that avoided Pukaskwa PP traveled in a south-easterly direction, generally followed the existing logging roads for a section of the route, provided more favorable terrain and working space, and avoided Pukaskwa River Provincial Park and White Lake Provincial Park, as well as required less greenfield disturbance; however lower portion shared alignment with the Alternative Route Segment around Pukaskwa National Park (Greenfield/230 kV Transmission Line) which has challenging topography and is located in greenfield areas. This route was more technically feasible, practical, financially realistic, and economically viable and has the potential to affect less natural features than the Alternative Route Segment around Pukaskwa National Park (Greenfield/230 kV Transmission Line).

The final approved route was considered the best alternative in accordance with PPCRA Section 21 because it has the smallest potential environmental impact because it follows existing logging roads and harvested areas, which requires the least amount of greenfield disturbance. Moreover, the approved route also concentrates linear development, reduces the requirement for new access development, reduces the overall Project footprint and associated potential environmental impacts within the park. Lowest cost was not the sole or overriding justification for selection of the final/approved route through the park. The engineering and design is considered the best alternative in accordance with PPCRA Section 21 because it minimizes environmental effects to the park.

2.2 General Requirements and Mitigation for Working within Protected Areas

The following measures, as outlined in the Project CEPP or Amended EA Report (Golder, 2018a) will be implemented for work in protected areas:

- Signage will be posted at unauthorized entry points to the conservation reserve created by construction access, warning the public of work activity and directing users to the nearest authorized access point.

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- No blasting near operating campgrounds, Ontario Trail Network trails or canoe routes on weekends and holidays beginning May Long weekend and ending Labour Day weekend, inclusive.
- Warning signs will be placed 150 m upstream and 100 m downstream of water crossings on scheduled waterways during construction.

In addition, the following mitigation measures shall be implemented for canoe routes and portages:

- Vegetation clearing within a minimum of 90 m around Category A canoe routes (i.e., Pukaskwa River canoe route, White River canoe route and Dog River canoe route) and their associated portage will be limited to where necessary for safety and compatible vegetation (e.g., below 2 m in height) will be retained where practicable;
- Vegetation clearing within a minimum of 30 m around Category B canoe route (i.e., White River canoe route, Michipicoten River canoe route and Magpie River canoe route) and their associated portage will be limited to where necessary for safety and compatible vegetation (e.g., below 2 m in height) will be retained where practicable;
- Vegetation clearing around a canoe route will be limited to where necessary for safety and compatible vegetation (e.g., below 2 m in height) will be retained where practicable to meet regulatory requirements and minimize visual evidence of disturbance from activities;
- Retain compatible vegetation (e.g., below 2 m in height) around a portage, where practicable to meet regulatory requirements;
- Maintain visibility of portage on either side of the ROW (e.g., no stockpiled vegetation or soils at the portage access points) and access roads for recreational user accessibility;
- During construction, keep portages cleared of vegetation debris and maintain the existing grade of the portage in a manner that it is safe for the recreational users; and,
- No disturbance of portages outside of the Project site and access roads will be permitted.

Section 10 and Table 9 outline the Project's EA Commitments that relate to construction and operations in protected areas.

3 OVERVIEW OF PUKASKWA PROVINCIAL PARK (PP)

The Pukaskwa River PP is located south of White River, and Northwest of the town of Wawa. It begins at Gibson Lake which is approximately 25 km south of the Town of White River. The park is attached to the eastern margin of Pukaskwa National Park, as the river passes through the National Park and eventually drains into Lake Superior. The Pukaskwa River PP is a non-operating waterway classed park that offers remote recreational activities as well as educational experiences (MNR, 2006). Due to the quality of the recreational water routes, and the absence of any park infrastructure, visitors are met with an advanced recreational opportunity. Motorboats are permitted; however, snowmobiles and ATVs are prohibited within the park (Golder, 2018a). Similarly, sport fishing and existing authorized sport hunting, wild rice, baitfish, and fur harvesting are permitted. Although, new wildlife and vegetation harvesting activities are not (MNR, 2006).

The park makes up approximately 1465 hectares which is limited to the immediate area around the Pukaskwa River, and protects approximately 22 km of the river including associated lakes and headwaters that are attached. The remaining 55 km of the river are protected by the Pukaskwa National Park. The land that dominates the area inhabited by the park is made up of the Canadian Shield which is composed of igneous and metamorphic rocks

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(MNR, 2006). These rocks represent some of the oldest on earth. The mountainous and rugged terrain that make up the majority of the parks backcountry was shaped during the last glacial period when the entire area was subjected to various glacial processes. These processes have been manifested into the rugged “rocky dome” topography that are characteristic of Pukaskwa River PP (MNR, 2006).

3.1 Park Classification

Provincial parks policy has evolved since the establishment of Algonquin Park in 1893. Today, PPs are governed by three key tools: *the Ontario Provincial Parks and Conservation Reserves Act* (2006), the Ontario Provincial Parks Policy Statement (1978), and Ontario Provincial Parks: Planning and Management Policies (1992). The latter was amended by the Ontario’s Living Legacy Land Use Strategy (MNR, 1999), for PPs established as a result of the Lands for Life planning process.

The PP system incorporates six classes of parks, which are selected to meet representation targets in addition to the protection of special values. Pukaskwa River PP is classified as a waterway park (Golder, 2018a). Waterway parks are selected river and lake corridors that complement other parks by representing elements of diversity not found within the other park classes. The class target is to establish one waterway park in each ecological district (Golder, 2018a).

Pukaskwa River PP falls within ecoregion 3E and ecodistrict 3E-4 and is characterized by boreal forest. The waterway status reflects the park’s natural features, as well as its important recreational values to canoeists, campers, anglers and hunters (MNR, 2006).

3.2 Pukaskwa River PP Management Plan Summary

The Pukaskwa River PP (P1513) represents a remote recreational experience that has no existing park infrastructure and four unmanaged campsites located along the rivers canoe route (MNR, 2006). Pukaskwa River PP was regulated in December of 2002. The approved park management statement (MNR, 2006) provides direction on significant decisions regarding resource stewardship, development, operations and permitted uses with full public and aboriginal consultation.

The Pukaskwa River Provincial Park management statement stands as a placeholder for a more comprehensive plan. Its aim is to ensure custodial management of park resources as is outlined in four (4) key objectives:

- Protection: To protect provincially significant elements of the natural and cultural landscapes of Ontario.
- Recreation: To provide provincial park outdoor recreation opportunities ranging from high intensity day-use to low-intensity wilderness experiences.
- Heritage Appreciation: To provide opportunities for exploration and appreciation of the outdoor natural and cultural heritage of Ontario.
- Tourism: To provide Ontario’s residents and out-of-province visitors with opportunities to discover and experience the distinctive regions of the Province.

3.3 Pukaskwa River PP Recreation Objective Summary

Pukaskwa River PP provides opportunities for a variety of high quality recreational uses compatible with the character of the park; the recreation objective for the park is to provide visitors with opportunities such as white water canoeing and kayaking, canoe tripping, and camping. Due to the remoteness of the park, many of the activities are limited to individuals with advanced wilderness experience (Golder, 2018a).

3.4 Utility Corridors Development

There is one existing crossing of the park by a Hydro One utility corridor. The crossing occurs in a territory to the east of the park boundary where Pukaskwa River PP connects to Pukaskwa National park (MNR, 2006). All public utilities (gas pipelines, transmission lines, communication towers etc.) must avoid the park wherever possible; however, where avoidance is not possible, new utilities may cross to maintain essential public services (OMNR, 2004a). The fulfilment of conditions in Sections 20 and 21 of the PPCRA are required before any work permits will be issued.

Future proposals for utility corridors that may impact the park, will be reviewed on a case-by-case basis. Furthermore, protection of parks features and values will be of the utmost importance and all requirements for approval must meet the *Environmental Assessment Act (MNR, 2006)*.

3.5 Project Interaction(s) with Pukaskwa River PP

The Project ROW crosses the park for approximately 0.570 km along a relatively narrow portion of the river, which includes an existing road and bridge immediately west of the ROW (Golder, 2018a). Approximately 170 m of temporary road access is required to access two (2) new transmission tower sites (E204 and E205) within the park, which are located on either side of the Pukaskwa River.

The transmission line conductor crosses the Pukaskwa River between structures E204 and E205; Structures E204 and 205 are located on the north and south side of the river, respectively, and within the park boundary (Attachment A, Figure 3). The total Project footprint or easement required within the park is 4.0 ha, for which a park management plan amendment is required. No permanent access roads, camps or laydown sites are proposed within the park and no waterbody crossings structures are required; roads will be decommissioned following construction and vehicle access along the transmission line will be blocked at the park boundaries. Limits of approach to the Pukaskwa River's edge will be maintained at all times during construction of the two towers, and appropriate control of sediment and soil erosion will be implemented to limit turbidity of the river's waters.

4 ENVIRONMENTAL CONSIDERATIONS FOR PUKASKWA RIVER PP

Table 2 and Figures 1-3 in Attachment A outline the location and characteristics of known environmental features located within or adjacent to the Project footprint within park boundaries. These are summarized as follows:

- Structures E204 and E205 fall within an identified area of high Bat Maternity Roost Potential of 2.6 ha that occurs within the footprint of the project. (Table 2, Attachment A, Figure 1).
- Three (3) seasonal concentration areas for colonial nesting bird breeding habitat (polygons H00180, H00190 and H0552) totaling 86 ha occur within the park boundary near the ROW; 1.2 ha of this habitat type (0.01%) overlaps with the Project footprint within the park (Table 2, Attachment A, Figure 2,).
- Approximately 3.6 ha (0.002%) of the Project footprint falls within a larger bear management area WA-33-003 & WA-33-004 that covers 1434 ha inside park boundaries. (Table 2, Attachment A, Figure 1,).
- There is one existing water-crossing located within the park (9950.00-WC-A). However, no other water-crossing is required. Drainage culverts and/or cross-ditching may be required to control road surface run-off and will be installed as required during construction.

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- 1462 ha of the Discontinuous Distribution Range (DDR) of the Lake Superior Coastal Range (LSCR) herd are within the park, and 3.69 ha of this range will be impacted by the area cleared for the ROW, 4m Offset, and Temporary new road access.

Table 2: Summary of Environmental Considerations in Pukaskwa River PP

Feature ID	Environmental Feature	Figure Reference	Area Within Park (ha)	Area within Project ROW (ha)	Area within 4m Offset (ha)	New Temp Road Access (ha)
High	Bat Maternity Roost Potential	1	3.31	2.60	0.37	0.02
WA-33-003	Bear Management Area	1	968.19	0.00	0.00	0.04
WA-33-004	Bear Management Area	2	465.88	3.19	0.46	0.00
H00180	Seasonal Concentration Area – Colonial Nesting Bird Breeding Habitat	2	23.54	0.39	0.06	0.00
H00190	Seasonal Concentration Area – Colonial Nesting Bird Breeding Habitat	2	25.06	0.77	0.11	0.00
H00203	Seasonal Concentration Area – Colonial Nesting Bird Breeding Habitat	2	36.97	0.00	0.00	0.04
H01595	Significant Wildlife Habitat – Waterfowl Nesting Area	2	16.75	0.00	0.00	0.00
-	Discontinuous Caribou Range	-	1462.46	3.19	0.46	0.00

5 CONSTRUCTION ACTIVITIES AND SCHEDULE

5.1 Proposed Construction Timing

Proposed construction timing for Workfront 9 and Pukaskwa River PP (located between structures E204 and E205) is outlined in Table 3; all work proceeds from north to south.

As per EA Condition #90 (Table 9), construction activities have been scheduled, as much as possible, to avoid or minimize potential effects on known sensitive areas and features, Restricted Activity Periods (RAP) and peak visitor periods (typically June to September) while meeting the mandated Project In-Service Date (ISD). A screening exercise was completed to compare known environmental features within park boundaries and the proposed construction schedule to RAPs (Section 5.3).

Clearing and access development is planned for late fall (November) 2019, followed by foundation installation, assembly and erection during late fall/early winter 2020/2021. Stringing is scheduled in Pukaskwa River PP in mid-July 2021 and will be brief in duration, lasting approximately 10 days between towers E204 and E205 (Table 3). Reclamation/road decommissioning will occur as soon as possible after stringing is completed, and is scheduled for approximately 5 days in September 2021.

Table 3: Proposed Construction Activity Timing for Workfront 9 and Pukaskwa PP (E204 - E205)

Workfront 9: E091 to F009			Approximate Dates*	
			Structure E204	Structures E205
Clearing	October 20, 2019	November 20, 2019	November 15, 2019	November 20, 2019
Road Building & Access	November 1, 2019	November 30, 2019	November 15, 2019	November 20, 2019
Foundations and Anchors	August 25, 2020	October 25, 2020	October 15, 2020	October 25, 2020

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Assembly	October 5, 2020	December 15, 2020	December 10, 2020	December 15, 2020
Erection	December 1, 2020	January 15, 2021	January 10, 2021	January 20, 2021
Stringing	May 15, 2021	July 21, 2021	July 10, 2021	July 20, 2021
Decommissioning and Reclamation	August 5, 2021	September 20, 2021	September 15, 2021	September 20, 2021

* Schedule dates are based on the most recent TILOs and may be adjusted pending regulatory approval

5.2 Construction Details: Access Roads

Temporary access roads within the Pukaskwa River PP will be planned and constructed to minimize impacts to the park within topographical constraints. Approximately 170 m of new temporary road access is required within the PP, as outlined in Table 4 and Figures 1-3.

Access to Structure E204 & E205

The two structures, E204 and E205, are located on the north and south side of Pukaskwa River, respectively. The area is dominated by coniferous trees, as well as poorly developed soils with Canadian shield bedrock that is very close to the surface. Despite the distance to bedrock the area around Structure E204 and E205 was not identified as a potential blasting area. Also, due to the park's boundary being limited to the immediate area surrounding Pukaskwa River, the development of new temporary roads will be primarily outside of the park. A total of 170 m of new access will be required to be built within the park boundary, to access the two structures (Table 4, Attachment A, Figure 1-3).

Road maintenance work will take place throughout clearing and construction. Geotechnical, Foundation, and Assembly/Erection crews are scheduled from October 2020 to January 2021. The road network within the PP will remain open until completion of stringing activities in July 2021. During this time, ongoing inspection and maintenance of the road network and erosion and sediment control (ESC) measures will be completed, as required. Maintenance activities may include grading, surfacing, ditch clean up, brushing, ESC or drainage management. Access will be restricted at the park boundaries following reclamation.

Table 4: Type and Length of Road Access required in Pukaskwa River PP

Road Type	Definition	Length within PP (km)
AE1, AE2	Existing roads - no improvements required	0.60
AU1, AU2	Existing roads – improvements required	0.00
AN	New temporary roads to connect with existing roads along the ROW	0.17
Total Road Length:		0.77

5.3 Restricted Activity Periods

Table 5 outlines the results of RAP screening against the proposed Project schedule for the key environmental features found within Pukaskwa River PP (as described in Section 4).

Based on a November 2019 clearing start date, work requiring vegetation removal and ground disturbance within the park (i.e., vegetation clearing, road access development, foundation installation and tower erection) are planned for completion outside of the RAPs for migratory birds, waterfowl and bat maternity roosting (Table

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5). These activities are scheduled during late fall and winter 2019 and early 2020, with the highest potential for frozen ground conditions, to minimize potential for impacts to wetlands, water quality, amphibians, vegetation and/or rare plant communities within the park. Conductor stringing between structures E204 and E205 is planned for completion in mid-July 2021 which does occur during the RAPs for migratory birds and waterfowl, and overlaps with the high park use period by approximately 10 days. Not all construction activities will occur outside the RAP, such as stringing; features that were not identified by the pre-construction surveys, and subsequently found during construction, will be reported to Valard's Environmental Lead to initiate avoidance and/or site-specific mitigation planning.

The current schedule of activity within the Pukaskwa PP avoids the RAP for amphibian breeding habitat (typically associated with wetlands or wet areas), but overlaps with amphibian hibernation period (October 1 to March 15). Pre-construction surveys of the Project footprint within the park will be conducted in conjunction with wetland surveys, to identify any potential amphibian hibernation microsites and develop appropriate mitigation (i.e.: application of a suitable avoidance buffer).

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Table 5: Construction Timing and Restricted Activity Period Screening for Key Environmental Features in Pukaskwa River PP

Identified Feature, Habitat, or Species	Timing Restrictions	Recommended Mitigation	Timing Conflict (Y/N) and Mitigation
Migratory birds	Migratory bird nesting period: April 15 to August 31	Avoid clearing activities during the migratory bird nesting period; recommended setbacks from nesting sites varies from 20 m to 300 m depending on the species	N - no clearing anticipated during RAP for birds
Waterbodies	September 1 to June 20 (fall and spring spawning; and, September 1 to July 15 (fall and spring extended spawning).	Avoid construction activities below the high-water mark (e.g., clearing vegetation, installing or removing equipment crossing structures or fill) during the restricted activity timing window	N – no new waterbody crossings within park boundaries
SWH – Bat maternity roost habitat	May 15 to August 31* *Recent discussions with MECP regarding timing restrictions for SAR, defined the appropriate bat maternity roosting (low tolerance) period as May 15 to August 31 for the Project (see Project Information Gathering Form (IGF) submitted to MECP for bat maternity roosting, May 24, 2019).	Avoid clearing activities during the maternity roosting period,	N - no clearing anticipated during RAP.
SWH – Bat Hibernacula	October 1 to April 1	Avoid clearing activities within a minimum of 400 m from a known bat hibernaculum entrance. Setbacks for each hibernaculum known to be occupied must be determined in consultation with MECP on a case by case basis. Conduct pre-construction surveys in suitable habitat affected by the Project to determine whether candidate hibernacula are occupied	N – no hibernacula were identified within park boundaries.
SWH – Sharp-tailed grouse lek	General mating season: March to June	Recommended setbacks from lek is 200 m all year round	N - no known grouse leks within park boundaries.
SWH – Raptor nesting sites	Nesting period: March 5 to August 31 <ul style="list-style-type: none"> ■ Bald eagle: March 5 to August 31 ■ Osprey: April 1 to August 15 ■ Northern goshawk: March to June ■ Cooper’s Hawk: March to July ■ Sharp-shinned Hawk: April to July ■ Red-shouldered Hawk: March to July 	Recommended setbacks from a raptor nesting site varies from 50 m to 800 m depending on the species	N - no known raptor nesting sites within 2 km of construction within park boundaries.
SWH – Amphibian breeding habitat	Breeding period: March 15 to June 7 Hibernation Period: October 1 to March 15	Recommended setbacks from breeding sites varies from 30 m to 120 m depending on the type of habitat and species	Y – pre-construction amphibian surveys, mitigation and/or monitoring will be employed as required.
SWH – Moose aquatic feeding areas	Aquatic feeding period: May 1 to June 30	Avoid clearing activities within 120 m from a known aquatic feeding area	N – no known Moose Aquatic Feeding Areas (MAFA)

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SWH – Denning site	Denning period varies per species.	Recommended setbacks from denning sites varies from 20 m to 300 m depending on the species	N – no known den sites; pre-construction wildlife surveys and mitigation as required.
Research Plots	N/A	Setback distances of 0 m, 50 m, 75 m, 78 m, 120 m, 150 m and 1,000 m and protection levels 1 (highest level of protection) to 5 (lowest level of protection).	N – no known Research Plots

5.4 Clearing Plan

Table 6 and Figure 3 describe the proposed clearing methods and associated areas within Pukaskwa River PP, which total approximately 3.22 ha, including 2.32 ha of merchantable timber and 0.34 ha of non-merchantable. Clearing methods will be consistent with the commitments outlined in the Amended Environmental Assessment (EA) Report (Golder, 2018a) and in consideration of MECP feedback.

To determine clearing categories, a GIS/Lidar analysis was completed to define areas as containing merchantable or non-merchantable timber values. Non-Productive areas have no vegetation to remove, such as previously disturbed sites (e.g., existing roads) or grass dominated wetlands. Retention areas are located within the ROW boundaries and represent locations where vegetation is not considered a hazard to the transmission line or in direct conflict with access roads or structure sites.

No clearing occurs in retention areas, which are comprised of low and slow growing vegetation (< 2m height, or < 3m mature height), also referred to as ‘compatible’ vegetation (e.g., compatible with the operational standards for transmission lines). The practice of ‘stubbing’ or leaving stumps of mature or larger diameter timber will be completed in areas where mechanical clearing occurs to retain wildlife tree values, in accordance with the Hazard Trees and Ecological Integrity Best Management Practices Primer (V2.1) (Ontario Parks, 2018).

Table 6: Clearing Metrics for Pukaskwa River PP

Clearing Method	Area (ha)	Total Area (ha)	
Mechanical	2.32	Merchantable	2.32
Hand Fall	0.34	Non-Merchantable	0.34
Non-Productive	0.56	Non-Treed	0.56
		Total	3.22

6 ENVIRONMENTAL PROTECTION AND MITIGATION

The following sections describe site-specific mitigation for features that are not avoided/mitigated through application of RAPs (Table 4, Section 5.3) and how we plan to mitigate.

6.1 Pre-Construction Field Reconnaissance Approach

To protect known or discovered environmentally sensitive features and/or SWH at the site level, pre-construction environmental surveys will be completed by qualified Resource Specialists in advance of clearing or construction operations to identify and/or confirm sensitive features and guide the development and implementation of appropriate site-specific mitigation and monitoring protocols to be developed, as required, in consultation with MECP. Pre-construction environmental surveys shall focus on, but not be limited to:

- Wetlands;
- Rare plants;

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- Migratory birds/nesting areas;
- Waterfowl nesting areas;
- Known and potential bat maternity roosting habitat;
- Fish and fish habitat (for undocumented stream crossings, or to fill information gaps); and
- Other SWH features – amphibian breeding, reptiles, den sites, etc.

Where previously undocumented SWH or species are identified, these will be reported to the Valard Environment Lead to initiate avoidance and/or site-specific mitigation planning (if not addressed herein) and associated communications with the Owner, Construction Management and MECP. The Biologist/Resource Specialist will provide input on appropriate mitigation, work methods, travel routes and recommended buffer zones. In addition:

- Critical habitats and 'No-go' zones will be identified on site plans and environmental alignment sheets;
- Contingency plans, as outlined in the Project CEPP (NextBridge, 2019) shall be implemented, as appropriate;
- Access or structures may be adjusted away from previously unidentified or microhabitat features, streams or wetlands, if feasible;
- Work crews will be oriented and aware of work activity restrictions associated with SWH;
- 'No-go' zones will be clearly flagged in the field and monitored during construction to ensure work activities avoid identified habitat or features;
- Construction activities may be re-scheduled to avoid RAPs or additional mitigation measures, including construction monitoring, may be required to allow construction to proceed under certain conditions; and
- Approved mitigation measures, such as relocation of the species/feature (if feasible), may be implemented proactively if complete avoidance or work outside of the RAP or recommended buffer zone is not possible.

Throughout construction, Valard's Environmental Management System (EMS) process shall be implemented, which aims to:

- Identify and document critical or sensitive habitats, species or features (known or discovered during pre-construction surveys);
- Screen against construction work plans (based on the 3 week look ahead schedule);
- Identify potential work or timing conflicts;
- Schedule or re-schedule work according to site conditions and/or timing windows;
- Consult with MECP on proposed mitigation, monitor work and implement additional mitigation as required; and
- Document and report to MECP results of any additional mitigation and/or monitoring programs.

6.2 Mitigation for Wetlands

Table 7 outlines ways in which project activities may impact wetlands. The highest potential for negative effects to wetlands is associated with activities that involve vegetation removal and ground disturbance during non-frozen

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ground conditions (in the spring, summer and early fall). Based on the available mapping, the Project is not anticipated to interact with wetlands in Pukaskwa PP. If wetlands are identified during pre-construction surveys, the following mitigation would apply and other site-specific mitigation and monitoring protocols developed, as required, in consultation with MECP.

Clearing and access development within Pukaskwa River PP will occur in late fall 2019, when, depending on annual weather patterns, frozen ground conditions are possible. Foundation installation occurs in the winter and will likely coincide with frozen conditions, which will reduce the potential for impacts to wetland habitat.

Stringing operations and reclamation/access decommissioning are planned during non-frozen ground conditions; however, the risk of damage associated with these activities will be minimized by following Project environmental requirements and implementing standard best management practices during work. The completion of environmental pre-construction surveys prior to stringing and reclamation operations, and monitoring of work occurring in non-frozen wetland habitat(s), will reduce the potential for Project-related impacts.

Permanent effects to wetlands may occur where towers are located within mapped wetland boundaries. Temporary effects to wetlands may be associated with all project activities that overlap with wetlands outside of the frozen/winter period. Puller and/or tensioner sites will be located outside of park boundaries and will not be located on wetlands.

Except where permanent infrastructure is placed within wetland boundaries, all effects to wetlands are expected to be short term in duration, and reversible following decommissioning of roads and reclamation of the Project ROW. Post-construction wetland monitoring will be completed to assess impacts to wetlands and the effectiveness of mitigation measures. Remediation will be prescribed where wetland function has been compromised.

Table 7: Potential Interactions with Wetlands by Project Phase

Project Phase	Duration	Potential Interaction
Construction (Clearing, Access, Foundations, Erection)	November 2019 to January 2021	<ul style="list-style-type: none"> Alteration of hydrology or water quality Compaction or damage/alteration of vegetation Impacts associated with malfunctions / accidents of equipment Introduction of invasive species
Stringing	July 2021	<ul style="list-style-type: none"> Limited potential interaction, assess during pre-construction surveys.
Decommissioning/ Reclamation	September 2021	<ul style="list-style-type: none"> Sedimentation and erosion from site reclamation activities Spills or mobile equipment releases
Operations and Maintenance	After 2022 ISD	<ul style="list-style-type: none"> Spills or mobile equipment releases.

6.3 Clearing and Vegetation Management

No new waterbody crossings are planned within the Pukaskwa River PP boundaries; stringing operations shall be planned and conducted to avoid any contact with the bed or banks of the Pukaskwa River. Vegetation clearing within the park shall follow the following Best Management Practices and procedures outlined in the Project CEPP (NextBridge, 2019), Workfront 9 DPP, and Hazard Trees and Ecological Best Management Practices Primer (V2.1) (Ontario Parks, 2018). Hand falling will be implemented around Structure E204 & E205 when approaching the river's edge to maintain limits of approach for machinery.

Vegetation clearing within 90 m of the Pukaskwa River canoe route and associated portage will be limited to what is necessary for construction safety and NERC operations standards; mechanical clearing is preferred and will be implemented if supported by site conditions (i.e., frozen ground conditions and appropriate soils). Furthermore,

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areas that are identified as canoe routes or portages will be governed according to EA Commitment #79 (Table 9).

- Compatible vegetation (e.g., conifers below 2 m in height and low growing shrub species) will be retained to minimize visual evidence of disturbance from activities;
- Stubbing of mature or larger diameter trees will be completed as possible to maintain wildlife values;
- Large vegetation debris shall be removed from the site if mechanical clearing is possible; smaller vegetation debris or slash will be left as coarse woody debris to decompose on site. If hand falling is required within the 30-m setback of Pukaskwa River, all coarse woody debris will be left in place on site.
- Maintain visibility of portage on either side of the ROW (e.g., no stockpiled vegetation or soils at the portage access points) and access roads for recreational user accessibility;
- During construction, keep portages cleared of vegetation debris and maintain the existing grade of the portage in a manner that it is safe for the recreational users; and,
- No disturbance of portages outside of the Project site and access roads will be permitted. Should clearing be required within a wetland area(s), it will be completed using low ground pressure equipment to reduce compaction and facilitate natural recovery.

As per EA Commitment 131, the following additional mitigation measures will be in place for construction and reclamation activities in PP:

- Construction equipment, including rig mats, will arrive on the Project Site clean (i.e., free of soil and vegetative debris) and be inspected by an Environmental Monitor before entering the park (as per guidance provided in the *Clean Equipment Protocol for Industry* (Halloran *et. al*, 2013).
- Grubbing and stripping will be limited to the transmission structure locations (tower and crane pad sites) and temporary access roads.
- Areas prone to erosion will be seeded with an MECP approved, certified seed mix/native cover crop (e.g., cereal crop) as soon as feasible after construction;
- Conifers will be planted as required at any Project-related disturbance off the transmission line ROW in consultation with MECP.
- Herbicides will not be used during construction or post-completion maintenance. Also, herbicides will not be used within 60 meters of any protected areas near the park boundary.

6.4 Erosion and Sediment Control for Construction Activities

Standard or site-specific erosion control measures will be implemented for all work within provincial parks and conservation reserves, as required. This may include but is not limited to the following:

- **Preservation of existing vegetation** – retain compatible (low-growing) vegetation at erosion-prone sites where practical. Limit clearing to the minimal area required to complete the proposed work(s);
- **Just-in-Time Grading** – grade only in areas needed for immediate construction activities. This will leave the existing ground cover in place for as long as possible, minimizing the time that soil is exposed to

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potential erosion; seeding or mulching should be done as soon as possible once the work is completed to re-establish ground cover;

- **Shut Down Considerations** – inspect and maintain erosion and sediment control during shut down periods related to seasonal stoppages, weather-related delays or other issues. Stabilize erosion prone sites prior to planned shut-downs to prevent sediment mobilization;
- **Slope Treatments** – surface roughening is a slope treatment in which depressions or grooves are provided on slopes to help trap seed, reduce runoff velocity and increase infiltration;
- **Seeding** – carried out to stabilize disturbed areas and to establish a temporary cover. Seeding may be either a temporary or permanent practice;
- **Erosion Control Blankets** – typically used on short, steep slopes where there is a high erosion potential and slow vegetation establishment. They typically consist of degradable netting enclosed straw, wood fibre or coconut fibre;
- **Grass lined swales** – shaped sloped depressions constructed to convey run-off. The drainage area should be 2 ha or less and a grade of 1-5%;
- **Buffer strips** – used around construction site perimeters, above steep slopes and around protected/sensitive areas. Often accompanies silt fencing;
- **Silt fences** – used for controlling sedimentation from sheet and/or rill erosion on relatively short slopes; should not be used where the flow exceeds 0.03 m³/s and should not be used to accommodate a drainage area of more than 0.1 ha per 30 m of fencing;
- **Check dams** – temporary or permanent berms used to divert channel runoff to a desired location (not a watercourse or wetland). They should be limited to drainage areas of less than 1 ha and channel slopes of less than 10%;
- **Sediment traps** – temporary sediment containment installations constructed by excavating and/or embanking an area and diverting sediment laden run-off to said area. Outlets must be stabilized and sediment should be removed when it reaches half the design depth of the trap. Drainage area should be less than 2 ha and storage volumes should be at least 25 m³/ha; berms should not be more than 1.5 m high with a minimum top width of 1.5 m and slopes no steeper than 3:1;
- **Inlet protection measures** – considered the last line of defense; installation consists of a permeable barrier installed around an inlet to reduce sediment content in the water before it enters the inlet; and
- **Dewatering** – happens most often when dealing with water during a diversion event; which may be associated with culvert installations, etc.

7 DECOMMISSIONING ACTIVITIES AND SCHEDULE

Reclamation will commence after stringing activities and commissioning (QA/QC). Complete reclamation and decommissioning of the roads within the park is planned for September 2021, and is anticipated to be completed within 5 days (Table 3). All temporary access roads will be decommissioned.

Reclamation crews will re-contour structure sites to ensure positive drainage. Any berms over 1 m and steep excavated slopes will be re-sloped to a stable angle of repose. Reclamation crews will inspect the ROW and ensure construction waste has been cleaned up and removed from the provincial park. Any imported gravel for

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overland roads within identified wetlands, as required, will be removed and taken to appropriate disposal sites. Any geotextile fabric and corduroy material will also be removed. All construction materials will be removed from Pukaskwa PP. All access roads will be fully restored and re-contoured to pre-construction profiles/grade.

Decommissioning of temporary access roads follows the reverse process outlined in Section 5.2. Natural re-vegetation is the preferred method of re-vegetation, but any exposed/erodible upland areas will be seeded with an MECP-approved, certified native seed mix/native cover crop (e.g., cereal crop) to encourage natural site recovery.

- Areas prone to erosion will be seeded with an MECP approved, certified seed mix/native cover crop (e.g., cereal crop) as soon as feasible after construction;
- Conifers will be planted as required at any Project-related disturbance off the transmission line ROW in consultation with MECP.

On federal land, provincial Crown land or municipal land, natural regeneration will be undertaken; noting that this is the preferred method of reclamation where erosion is not expected. Erosion prone areas within provincial parks or conservation reserves, will be seeded with a native cover crop (e.g., cereal crop) or certified seed mix approved by the applicable regulatory agency as soon as feasible after construction.

7.1 Environmental Considerations for Decommissioning

Environmental features within or adjacent to the Project footprint in Pukaskwa River PP and associated RAPs were described in Section 5; mitigation is described in Section 6. Based on the proposed decommissioning timing (September 2021), the following features may require special consideration (assessment, mitigation planning and/or environmental monitoring) before and during reclamation work:

- **Wetlands** – based on mapping, no interaction with wetlands is anticipated in Pukaskwa PP; mitigation, should wetlands be encountered, may require the use (and subsequent removal) of access mats to support equipment completing reclamation work within and adjacent to the PP. Mats will be pulled out behind the work as individual areas are reclaimed.
- **Public Access Restriction** – access restriction features (gates, rock, or earth berms) will be placed to block public access at provincial park boundaries to prevent use of the ROW corridor by vehicles, snowmobiles or ATVs. Access restriction will be discussed with MECP to ensure alignment on the appropriate method, location, reflective features/signage and other considerations (public safety, alternate access, etc.).
- **Signage** indicating public access restriction will be installed at provincial park boundaries on the ROW, with wording approved by the Park Superintendent.

8 OPERATIONS ACTIVITIES AND SCHEDULE

Two transmission towers (E204 and E205) will remain within park boundaries following construction. Routine operations and maintenance activities will include tower, insulator and conductor inspections and maintenance as well as vegetation maintenance adjacent to the CR boundary, as required to meet operational safety standards. During operations and maintenance activities, the following general procedures apply to all ROW access (refer to Section 1.4 of the Project Overarching DPP (NextBridge, 2019a) for additional information):

- Inspections will be performed via truck, all-terrain vehicle, foot, helicopter, unmanned aerial vehicle, or snowmobile, as appropriate, depending on available access.

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- Herbicides will not be used to control vegetation in or within 60 m of the protected area boundary during operations and vegetation maintenance activities; manual clearing is required within the protected area boundaries.
- Where needed, ground access will be conducted with one pick-up truck or all-terrain vehicle using the ROW and existing access roads only. Ground access patrols will likely be conducted by a single person. Personnel will drive on the ROW where terrain permits; however, a dedicated road that follows a direct path from structure to structure in the ROW will not be built, used or maintained during operations.
- Operations personnel will access the ROW using permanent access roads intersecting the ROW. Once on the ROW, personnel will traverse along the ROW using the appropriate vehicle in compliance with required permits or authorizations. It is expected that there will be sufficient access on the ROW to traverse using an all-terrain vehicle, Argo, pickup truck or snowmobile, where terrain allows.
- Personnel may use existing water body crossings where they exist on access roads; however, new permanent crossing structures are not expected to be built for the sole purpose of operations. Therefore, personnel will travel down the ROW until a water body with no crossing structure is encountered, and then turn around and return to the access road used to enter the ROW.
- If operations personnel determine that an additional water body crossing will be necessary, this will be discussed with the appropriate regulatory authority and required permits or authorizations will be obtained prior to proceeding with the work.
- Operations personnel will not ford water bodies without a permit. If the need for a ford is identified and approved by the appropriate regulatory agency, it will occur if an existing crossing at another location is not available or practicable to use, and in accordance with the conditions of the regulatory approval.
- If there is a maintenance or emergency response activity that requires additional access or additional permitting requirements NextBridge will identify these requirements and consult with the appropriate regulatory authorities, as required. If necessary, NextBridge will coordinate or obtain permission for access from property owners for the use of gates, bridges, and roads.

Access to specific structure sites (E204 and E205) from the edge of the park boundaries; approval and/or Work Permits from MECP will be obtained to conduct routine infrastructure or vegetation maintenance activities within the park boundaries and NextBridge will apply for these in advance of proposed activities.

Details on schedule, methods, mitigation and BMPs for routine transmission line and vegetation maintenance activities are outlined in the Operational Environmental Management Plan (OEMP, Golder 2018b and Overarching DPP (NextBridge, 2019a) for the Project.

8.1 Environmental Considerations

Routine maintenance activities shall be planned and conducted in consideration of known environmental features and timing restrictions (as outlined in Sections 4 and 5), and in consideration of the park's peak operating season(s), typically June – September.

9 PERMITTING APPROACH

For Project development within protected areas, all easements and WP are processed by the MECP under the PPCRA. As outlined above, a park management plan amendment is required to issue permits for development

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of Project infrastructure within PP boundaries. This process was triggered by regulatory approval of the Amended EA submission in March 2019, and is currently in progress by MECP. Permits required from MECP for Project activities within Pukaskwa River PP (Table 8) include:

- **LUP** – required for the transmission line ROW easement
- **WP** – required for temporary access roads, watercourse crossings a WP is required for installation or repair, and for removal/decommissioning
- **Research Authorization Letter** – for fish salvage or preconstruction surveys (amphibian re-location, etc.)
- **Species at Risk** - Overall Benefit Permit or Letter of Authorization for SAR habitat present (i.e.: bat maternity roost habitat)

Table 8: Required Permits, Authorizations and Timing

Permit or Authorization	Issuing Authority	Proposed Submission Timing	Review Period	Date Required to support Project Construction
Section 21 Conditions of Approval (PPCRA)	MECP under the PPCRA	Justification provided within DPP	Unknown	November 15, 2019
LUP – ROW Easement	MECP	October 15, 2019	30 days, concurrent with DPP review	November 15, 2019
WP – Temporary Roads	MECP	October 15, 2019	30 days, concurrent with DPP review	November 15, 2019
Research Permit for Pre-Construction Surveys (if required)	MECP	August 15, 2019	30 days, concurrent with DPP review	November 15, 2019
Species at Risk Permit Process	MECP	August 15, 2019	Min 30 days - IGF Min 30 days - AAF Min 90 days - OBP	November 15, 2019

***Note:** Date Required is based on the current TILOS and is subject to change pending regulatory approval.

10 EA COMMITMENTS

Commitments associated with protected areas outlined in the Amended Environmental Assessment are summarized in Table 9. It should be noted that many of the instances where MNR is identified as the regulator, it is now MECP.

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Table 9: EA Commitments Related to Protected Areas

EA Commitment #	Commitment
14	The Owner will provide at least 45 days advanced notice of construction activities to recreational users through formal notification in local newspapers and at protected parks and campsites locations (e.g., park entrances).
20	Work Permits and Land Use Permits will be obtained from MNRFP within provincial parks as applicable.
36	The Owner will actively consult with the MNRFP, MECP, and other relevant stakeholders on proposed measures to minimize interruption of recreational use and access restrictions to protected areas.
37	Clearly mark the boundaries of protected areas along the right-of-way (ROW).
73	The Owner will work with the Ontario Parks to plan construction around the peak park season, from June to September, where the Project Site is located within a provincial park.
76	No blasting near provincial parks on weekends and holidays beginning May Long weekend and ending Labour Day weekend, inclusive.
79	<p>Implement the following mitigation measures for canoe routes and portages:</p> <ul style="list-style-type: none"> • vegetation clearing within a minimum of 90 m around Category A canoe routes (i.e., Pukaskwa River canoe route, White River canoe route and Pukaskwa River canoe route) and their associated portage will be limited to where necessary for safety and compatible vegetation (e.g., below 2 m in height) will be retained where practicable (MNRFP 2015); • vegetation clearing within a minimum of 30m around Category B canoe route (i.e., White River canoe route, Michipicoten River canoe route and Magpie River canoe route) and their associated portage will be limited to where necessary for safety and compatible vegetation (e.g., below 2 m in height) will be retained where practicable (MNRFP 2015); • vegetation clearing around a canoe route will be limited to where necessary for safety and compatible vegetation (e.g., below 2 m in height) will be retained where practicable to meet regulatory requirements and minimize visual evidence of disturbance from activities; • retain compatible vegetation (e.g., below 2m in height) around a portage where practicable to meet regulatory requirements; • maintain visibility of portage on either side of the ROW (e.g., no stockpiled vegetation or soils at the portage access points) and access roads for recreational user accessibility; • during construction, keep portages cleared of vegetation debris and maintain the existing grade of the portage in a manner that it is safe for the recreational users; and • no disturbance of portages outside of the Project Site and access roads will be permitted."
90	Construction activities will be staged in protected areas to avoid or minimize potential effects on ecologically sensitive areas, life cycle periods, and peak visitor periods, when construction schedule allows. Mitigation will be applied to reduce negative effects on protected areas.

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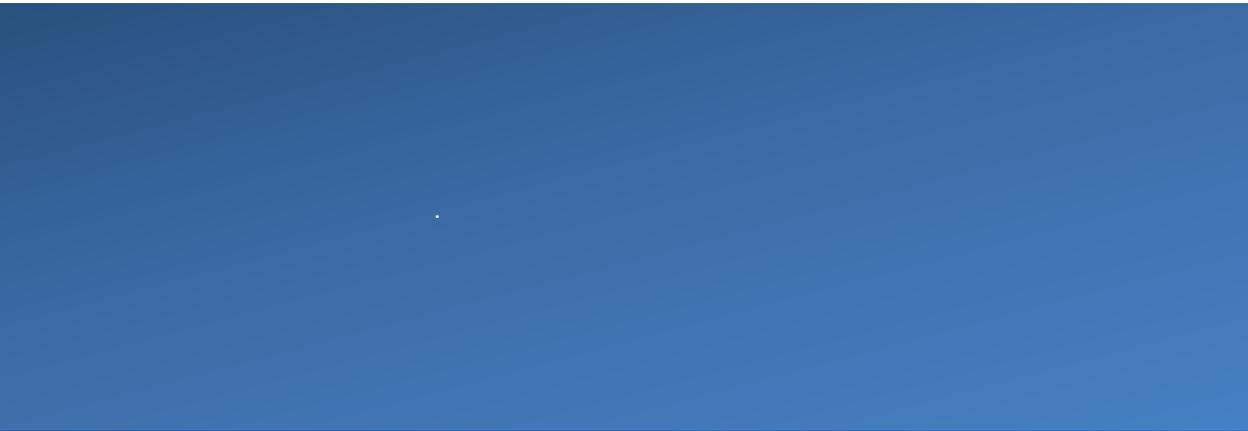
EA Commitment #	Commitment
99	<p>Avoidance of the Critical Landform/Vegetation Association (CLVA) in Gravel River Conservation Reserve was not practicable as a change in routing design at that location would result in additional greenfield disturbances. The following measures will be implemented to mitigate potential effect of the Project on this CLVA:</p> <ul style="list-style-type: none"> • Obtain a work permit from the MNRF under the Provincial Parks and Conservation Reserves Act for development within a CLVA; • The Owner will employ the services of qualified Environmental Inspector(s) to guide implementation, monitor and report on the effectiveness of the construction procedures and mitigation measures for minimizing potential impacts; • Clearly mark known site-specific features (e.g., rare plant, wetland, water body, SWH) and associated setbacks as shown on the Environmental Alignment Sheets and the Access and Construction Environmental Maps. • Flag undisturbed adjacent areas to the extent required to protect adjacent seed sources from being affected. • The Owner will review protective and mitigative measures with the General Contractor (Valard). • The Owner will follow weed control and management measures outlined in the Weed Management Plan (refer to Section 8.4)
130	<p>Reduce unauthorized users and access to protected areas by installing signage and other appropriate barriers on access roads where permissible by MNRF/MECP.</p>
131	<p>Implement the following mitigation measures when construction is required in provincial parks:</p> <ul style="list-style-type: none"> • construction equipment, including rig mats, will arrive on the Project Site clean (i.e., free of soil and vegetative debris); • confine grubbing and stripping to the transmission structure locations and new access roads; • seed areas prone to erosion with a native cover crop (e.g., cereal crop) and certified seed mix approved by the applicable regulatory agency as soon as feasible after construction; • plant conifers when reclaiming laydown yards, construction camps, and storage yards and other disturbances located off of the transmission line ROW and in consultation with the landowner or communities and applicable regulatory authority. • the use of herbicides during construction is prohibited.
283	<p>Water body crossings will be designed and constructed in compliance with LRCA, DFO and/or MNRF regulatory permits and approvals, if applicable, recognizing that all newly installed or upgraded crossing structure at mapped or unmapped water bodies are expected to require permitting through one or more of:</p> <ul style="list-style-type: none"> • O. Reg. 239/13 under the Public Lands Act (administered by MNRF for water body crossings on Public/Crown land), • O. Reg. 454/96 under the Lakes and Rivers Improvements Act (administered by MNRF for water body crossings on Private or Crown Land), • Provincial Parks and Conservation Reserves Act (PPCRA) (administered by MNRF for water body crossings within provincial parks and conservation reserves), • the Fisheries Act and Species at Risk Act (administered by DFO), and • O. Reg. 180/06 for the Development, Interference with Wetlands and Alterations to Shorelines and Watercourses under the Conservation Authorities Act (Government of Ontario 1990a; administered by LRCA for water body crossings in LRCA jurisdiction).

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EA Commitment #	Commitment
1029	<p>NextBridge commits to providing a DPP for each construction workfront and each provincial park and conservation reserve where construction will occur. Per the tables of contents agreed upon with the MECP and MNRF, the DPPs will include, but not be limited to, the following information:</p> <ul style="list-style-type: none"> • the pre-construction field reconnaissance approach; • detailed construction schedule and design information; • approaches to protecting environmental values; • training and employment opportunities for Indigenous communities; and • Traditional Ecological Knowledge (TEK)/Traditional Land and Resource Use (TLRU) protocol. <p>The DPPs will be submitted to the MECP and MNRF for review prior to the submission of MNRF permit applications.</p>
1038	<p>NextBridge commits to install the structure at this location (the Kama Cliffs Conservation Reserve) via helicopter and to remove the access road overlapping the Mazukama Falls area from the Project footprint.</p>
1052	<p>Where there are no reasonable alternatives to avoid the CLVA in Gravel River Conservation Reserve, NextBridge will use low-pressure tread equipment and rig mats, and other mitigation measures agreed upon with the MNRF.</p>

11 REFERENCES AND BIBLIOGRAPHY

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