Appendix Q

Final Cultural Heritage Technical Support Document

MARTEN FALLS FIRST NATION
COMMUNITY ACCESS ROAD

Cultural Heritage Report: Existing Conditions & Preliminary Impact Assessment

Version #2

February 2026

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AECOM: 2024-12-21

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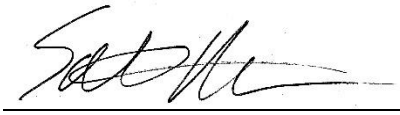

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Revision History

Revision Number	Date	Revised By:	Revision Description
0a	August 28, 2023	Liam Smythe, B,URPl	Preparation of initial draft.
0b	December 19, 2023	Jake Harper, MA	Incorporation of team feedback and finalization of draft.
0c	March 15, 2024	Preston Arens, PhD	Draft revision to incorporate residual impacts assessment of the preferred route.
0d	May 15, 2024	Preston Arens, PhD	Draft revisions based on internal AECOM review.
1a	July 4, 2024	Preston Arens, PhD	Client comments.
1b	September 27, 2024	Preston Arens, PhD	Client comments.
2a	December 22, 2025	Preston Arens, PhD & Liam Ryan, MES, MCIP, RPP, CAHP	Full draft revision to address comments from Indigenous communities and government ministries and to include Indigenous Knowledge Data from Indigenous communities that was received since the completion of the initial draft.
2b	January 5, 2026	Preston Arens, PhD	Team and Client comments and draft finalization.
2c	February 5, 2026	Preston Arens, PhD & Liam Ryan, MES, MCIP, RPP, CAHP	Final

Executive Summary

This Cultural Heritage Report: Existing Conditions and Preliminary Impact Assessment (Cultural Heritage Report) presents an inventory of cultural heritage resources, identifies the existing conditions of the Marten Fall Community Access Road (the Project) Study Area, identifies potential impacts to the cultural heritage resources, and proposes appropriate mitigation measures. This Cultural Heritage Report aims to document heritage features that are relevant to local communities. Heritage features may include built heritage resources and cultural heritage landscapes that reflect the Indigenous and / or European history in the area.

This Cultural Heritage Report is being undertaken to support a coordinated Impact Assessment required for project review by the Impact Assessment Agency of Canada under the federal *Impact Assessment Act* and Environmental Assessment for project review by the Ministry of the Environment, Conservation and Parks under the Ontario *Environmental Assessment Act*.

Based on the results of background research, data mapping, community engagement, and the Preliminary Impact Assessment, this Cultural Heritage Report demonstrates that the Local Study Area traverses a potential cultural heritage landscape, which is defined as the Mid-Albany Cultural Heritage Landscape. The definition of this potential cultural heritage landscape is based on the physical composition of the Local Study Area (**Section 6.1**), the nature and distribution of cultural heritage and Indigenous Knowledge data points and areas of interest within the Local Study Area (**Section 6.3.1 and Section 6.3.2**), the fundamental connections between Indigenous Knowledge and the land, and the strong association between cultural landscapes and waterways in and around the Local Study Area.

The Residual Effects assessment undertaken as part of this Cultural Heritage Report determined that all proposed project alternatives have the potential to impact the potential Mid-Albany Cultural Heritage Landscape. Based on the analysis in **Section 7**, however, the following recommendations can be made:

- For **Segment 1**, **Alternative 1** is preferred overall due to its lower residual effect to the potential cultural heritage landscape.
- For **Segment 2, Alternative 4** is preferred overall due to its lower residual effect to the potential cultural heritage landscape
- For **Segment 3,** the two alternatives had similar potential effects, so neither is preferred over the other.

The Preferred Route was identified by the Marten Falls First Nation Project Team and takes into consideration Residual Effects relevant to cultural heritage as well as the recommendations of other reports conducted as part of the Environmental Assessment

process. Hereafter, the Preferred Route refers to **Segment 1 - Alternative 1**, **Segment 2 - Alternative 4**, and **Segment 3 - Alternative 4**.

The Preliminary Impact Assessment identified that the Local Study Area overlaps one potential cultural heritage landscape, defined in **Section 6.3.3** as the Mid-Albany Cultural Heritage Landscape. The Construction Disturbance Area of the Preferred Route is anticipated to result in both direct and indirect impacts to the potential cultural heritage landscape. Within the Local Study Area, the Preliminary Impact Assessment identified 143 potential heritage attributes of the potential cultural heritage landscape, including:

- 59 Harvest Areas, including 9 general Harvest Areas and 50 specific Harvest Areas.
- 34 Habitation Areas, including 33 specific Habitation Areas in addition to the Marten Falls First Nations Reserve;
- 15 Cultural, Spiritual, and Sacred Areas;
- 33 Travel Routes including 29 land and 4 water routes; and
- 2 Provincial Parks

The Preliminary Impact Assessment further identified that of the 143 potential heritage attributes within the Local Study Area, 63 are anticipated to be directly impacted by the Preferred Route, including:

- 23 Harvest Areas, including 9 general Harvest Areas and 14 specific Harvest Areas;
- 6 Habitation Areas, including the Marten Falls First Nations Reserve;
- 6 Cultural, Spiritual, and Sacred Areas;
- 27 Travel Routes, including 23 land and 4 water routes; and
- 1 Provincial Park

In addition, the Preliminary Impact Assessment notes that there is a high probability that Project impacts may not be confined to the Construction Disturbance Area. It is anticipated that additional direct or indirect impacts to Harvest Areas, Habitation Areas, Cultural, Spiritual and Sacred Areas, Travel Routes, and Provincial Parks that are within the Local Study Area but are not directly overlapped by the Construction Disturbance Area may occur over the life of the Project.

This report recognizes the interconnection of the data points with each other and the surrounding area and that as a result, direct and indirect impacts may not be distinguishable, nor may they be readily confined to the anticipated footprint of the Preferred Route. In consequence, this report has moderate confidence in the precise location of potential impacts and high confidence that potential impacts will affect areas beyond individually mapped data points.

Recommendations

The following recommendations have been developed based on the results of the background research, data mapping, community engagement, the Preliminary Impact Assessment, and professional expertise.

General Mitigation Measures

For the potential Mid-Albany Cultural Heritage Landscape and associated potential heritage attributes within the Local Study Area, general mitigations measures should be developed and observed, including the following:

- Continue to refine the Local Study Area and the Preferred Route to avoid adverse impacts to the potential Mid-Albany Cultural Heritage Landscape and associated potential heritage attributes, wherever possible.
- Construction activities should be suitably planned and undertaken to avoid impacts, including but not limited to:
  - Informing construction crews of the location of the potential Mid-Albany Cultural Heritage Landscape and its associated potential heritage attributes.
  - Confining construction related activities to the proposed right-of-way of the Preferred Route.
  - Establishing a construction monitoring process which includes implementing no-go zones and procedures to avoid impacts to the potential heritage attributes of the potential Mid-Albany Cultural Heritage Landscape.
- Should there be changes to the Project, including but not limited to, new anticipated impacts, and refinement and / or expansion of the Study Area, a Qualified Person(s) should review this Cultural Heritage Report and revise these recommendations as required.

Next Steps

This report has determined that there is potential for direct and indirect adverse impacts to one potential cultural heritage landscape and, prior to initiating any construction activities, it is recommended that:

- Research and evaluate the potential Mid-Albany Cultural Heritage Landscape and its associated potential heritage attributes for Cultural Heritage Value or Interest and level of significance. The research and evaluation should be completed by a Qualified Person(s) and recorded in a Cultural Heritage Evaluation Report. As the Cultural Heritage Evaluation Report is a requirement

of the Province of Ontario but is not among the deliverables identified in the Cultural Heritage Study Plan (**Appendix D**), it is recommended that the Cultural Heritage Evaluation Report be delivered as a stand-alone document. The Cultural Heritage Evaluation Report will be provided to the Project Team, the Ministry of Citizenship and Multiculturalism, and will be made available to other interested parties upon request. The Cultural Heritage Evaluation Report will be completed as early as possible during the Environmental Assessment / Impact Statement process.

- The Cultural Heritage Evaluation Report will use Ontario Regulation 9/06 and Ontario Regulation 10/06 of the *Ontario Heritage Act* to evaluate for Cultural Heritage Value or Interest of the potential cultural heritage landscape in accordance with the *Ontario Heritage Act* and the Ontario Standards and Guidelines for Conservation of Provincial Heritage Properties. Should any portions of the Local Study Area be found to have provincial heritage significance under Ontario Regulation 10/06, additional work may require Minister's Consent, as defined in Section 3 of the *Ontario Heritage Act*.
- If the potential cultural heritage landscape is determined to meet the criteria of either Ontario Regulation 9/06 or Ontario Regulation 10/06 of the *Ontario Heritage Act,* and continues to be adversely impacted by the Project, it is recommended that a Heritage Impact Assessment be prepared to fully assess impacts, including long-term residual effects, and propose mitigation measures to conserve the Cultural Heritage Value or Interest of the cultural heritage landscape. Any Heritage Impact Assessment will be completed as early as possible during the design process and prior to construction activities. The Heritage Impact Assessment will be prepared in accordance with Information Bulletin 3: Heritage Impact Assessments for Provincial Heritage Properties (MCM, 2017).

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1. Introduction

This Cultural Heritage Report: Existing Conditions and Preliminary Impact Assessment (hereafter 'Cultural Heritage Report') identifies the existing conditions of the Marten Falls Community Access Road (the Project) Study Area, presents an inventory of built heritage resources / cultural heritage landscapes, identifies potential impacts based on the Preferred Route to those cultural heritage resources and recommends mitigation strategies where adverse impact are anticipated. This report is included as an Appendix to the Draft and Final Environmental Assessment / Impact Statement Report for the Project.

Marten Falls First Nation is a remote First Nation community in northern Ontario, approximately 430 kilometres from Thunder Bay, Ontario, located at the junction of the Albany and Ogoki rivers. Marten Falls First Nation is proposing a multi-purpose all-season Community Access Road (the Project) that will connect the community to the Ontario provincial highway network. The Project includes the construction and operation of an all-weather road with the following key characteristics:

- Approximately 184 km (see **Section 7** for further details on the selection of the Preferred Route) of two-lane gravel all-season road on a new right-of-way;
- Approximately 100 metres wide right-of-way cleared to a width of 60 metres; and
- Proposed designated speed limit of 80 km per hour.

Marten Falls First Nation is currently accessible year-round by air transportation out of Thunder Bay, Ontario and Nakina, Ontario, and by a winter access road constructed on an annual basis, if winter conditions permit. Since the 1990s, Marten Falls First Nation has received provincial funding to maintain the 140 kilometres of winter road to the community.

1.1 Project Overview

The Project consists of a Community Access Road from Painter Lake Road located approximately 57 kilometres north of Nakina, Ontario to the Community of Marten Falls First Nation. The Community Access Road will serve community access and industrial supply needs for both the community (such as fuel, construction supplies, water treatment supplies) and industrial proponents (such as mining, forestry), thereby minimizing infrastructure corridors in the Far North. Therefore, the Project will be for a multi-purpose road built to meet industrial use specifications. Further details about anticipated Project components are discussed in **Section 8**.

In April 2018, Marten Falls First Nation signed an agreement with the Ministry of the Environment, Conservation and Parks to prepare an environmental assessment under the *Ontario Environmental Assessment Act*, 1990 for the design, construction and operation / maintenance of the Project. A study under the *Ontario Environmental Assessment Act* was

formally initiated by Marten Falls First Nation in March 2019 when the Notice of Commencement for a Terms of Reference for the Project was published.

All-season public roads that require 75 kilometres or more of new right-of-way, as per Schedule 1 (51) of the Physical Activities Regulations under the Impact Assessment Act, may be subject to the Act (Government of Canada, 2024). After considering the detailed Project Description, the Agency determined that a federal impact assessment is required for the Community Access Road and an Impact Statement needs to be submitted to the Agency for review and approval. The Agency prepared and released the Marten Falls Community Access Road Project: Tailored Impact Statement Guidelines in February 2020 (Impact Assessment Agency of Canada, 2020b) to outline the information and studies necessary to conduct the impact assessment.

The Federal and provincial governments are co-operating on the assessment of the Community Access Road, in accordance with the Co-operation Plan (Impact Assessment Agency of Canada, 2020c). The Co-operation Plan allows Marten Falls First Nation to prepare one single Environmental Assessment / Impact Statement submission to satisfy both the federal and provincial processes (Government of Canada).

1.2 Qualifications of Individuals

A list of names and qualifications of the authors and technical reviewers of this report is presented in **Table 1-1.**

Table 1-1: Qualifications of Individuals

Name	Title	Qualifications / Years of Experience
Liam Ryan	Cultural Heritage Planner, Team Lead	MES, MCIP, RPP, CAHP 5 Years Experience
Tara Jenkins	Senior Cultural Heritage Specialist, Team Lead	MA, GPCertCHS, CAHP 26 Years Experience
Preston Arens	Cultural Heritage Specialist, Author	PhD 4 Years Experience
Liam Smythe	Cultural Heritage Specialist, Author	B.URPl 7 Years Experience
Jake Harper	Heritage Historian, Author	MA 5 Years Experience
Samantha Markham	Project Archeologist, Cultural Heritage Manager, Technical Reviewer	MES 15 Years Experience

2. Study Approach and Methodology

2.1 Purpose and Objectives

This Cultural Heritage Report is being undertaken to support a coordinated Impact Assessment required for Project review by the Impact Assessment Agency of Canada under the federal *Impact Assessment Act* and Environmental Assessment for Project review by the Ministry of the Environment, Conservation and Parks under the Ontario *Environmental Assessment Act*.

The key objectives of conducting an Environmental Assessment / Impact Assessment are to describe the existing environment, gather sufficient information to predict Project-related effects (such as positive and negative, direct and indirect) on the environment, determine measures needed to avoid or minimize adverse Project effects, and enhance beneficial Project effects where feasible, and to undertake consultation and engagement throughout.

Cultural (Built) Heritage is one of the Valued Components identified as part of the Project. Valued Components are defined as the environmental, health, social, economic, or additional elements of the natural and human environment that may be impacted by a proposed project and are of concern or value to the public, Indigenous peoples, federal authorities and interested parties (Impact Agency of Canada, 2021).

The scope of this Cultural Heritage Report included the preparation of a built heritage resource and cultural heritage landscapes inventory, including descriptions of identified cultural heritage resources. A preliminary analysis of potential effects of the undertaking on identified potential cultural heritage resources has been conducted, along with the identification of impact management measures based on the Project alternatives.

The Cultural Heritage Report has been prepared in accordance with the Cultural Heritage Study Plan and the Regulator Comments (**Appendix D**). It is also based on background research, Indigenous Knowledge, data mapping, community engagement, the Preliminary Impact Assessment, and the application of the Ministry of Citizenship and Multiculturalism's Criteria Checklist (**Appendix E**),

Background Research

Historical maps and information collected from primary and secondary sources were examined to determine if the Local Study Area contains any built heritage resources and cultural heritage landscapes.

Primary Sources

- Indigenous Knowledge;
- Field Survey;

- Primary documentary sources (both current and archival written accounts, maps, drawings, plans and images); and
- Public and Indigenous community engagement.

Secondary Sources

- Scientific or academic publications;
- Reports of previous Archaeological Assessments;
- Ministry of Citizenship and Multiculturalism's Ontario Archaeological Sites Database for a listing of registered; and archaeological sites within a 5 kilometre radius of the study area.

Field Data

Field data collected during the Cultural Heritage Report field work includes pictorial records and associated notes and mapping. Any information collected as part of the Cultural Heritage Report field work will be stored digitally on AECOM's server. The pictorial records have been incorporated in the Cultural Heritage Report to illustrate the existing conditions of the Local Study Area and help to reinforce background data collected via satellite, topographic, and historic mapping. This informs the appropriate impact management measures and recommendations for minimizing and avoiding negative effects on identified cultural heritage resources.

Indigenous Knowledge

Indigenous Knowledge data collected through consultation with Indigenous Nations that has been used to inform the Cultural Heritage Report is not included directly within this report, as per agreements in place with the First Nations communities. This is sensitive information that is not made public as part of the Cultural Heritage Report. A copy of the sensitive material may only be provided in a Supplementary Documentation-type report to the client, Indigenous Communities, the Project Team, and the Ministry of Citizenship and Multiculturalism.

2.2 Assessment Boundaries

2.2.1 Temporal Boundaries

Project phases, which are temporal boundaries, are developed to establish the timeframes within which potential effects of the Project are to be considered in the Environmental Assessment / Impact Statement Report. The Project is planned to occur in two phases, which are briefly described below:

- **Construction Phase:**
  The time from start of construction, including site preparation activities, to the start of operations and maintenance of the Community Access Road. Decommissioning

of construction works is included in the construction phase. The construction phase is anticipated to take approximately three to ten years to complete.

- **Operations and Maintenance Phase:**
  The operations and maintenance phase starts once construction activities are complete and lasts for the life of the Project. The operations and maintenance phase of the Project is considered to be 75 years based on the expected timeline for when major refurbishment of road components (like bridges), is anticipated.

There are currently no plans to decommission the Community Access Road as there is no expected / known end date for its need. Therefore, future suspension, decommissioning and eventual abandonment of the Community Access Road will not be considered in the Environmental Assessment / Impact Statement Report. It will be considered if and when a decommissioning or abandonment application is made for the road.

In determining the temporal boundaries, in particular the long operations and maintenance phase, consideration was given to the long-term effects on the well-being of present and future generations (Sustainability Principle #2). The final temporal boundaries to be used in the Environmental Assessment / Impact Statement Report will be based on regulatory agency guidance, professional judgement and input received through the Project consultation process.

2.2.2 Spatial Boundaries: The Study Areas

Study areas identify the geographic extents within which potential effects of the Project are likely to occur and are considered in the Environmental Assessment / Impact Statement Report. The existing conditions and potential effects are documented for two study areas selected for the Project:

- **Construction Disturbance Area:** the area where direct effects of the Project are likely to occur; and
- **Local Study Area:** the area where environmental effects of the Project related to temporary land use and / or access areas are likely to occur.

The Construction Disturbance Area encompasses the 100-metre-wide Community Access Road right-of-way (including temporary construction access roads, work areas, worker camps, and long-term aggregate sources and associated access roads.

The Local Study Area currently being considered within the scope of the ongoing regulatory review process generally includes the area within 5 kilometres of the centreline of route Alternative 1 and Alternative 4 (2.5 kilometres to either side of the centreline). The study area generally allows for the documentation of existing conditions and prediction of potential environmental effects for the Project. A 5 kilometre wide study area also allows

for route refinements during development of Project design (such as adjustment of the alignment to avoid sensitive features).

The study areas for each Valued Component vary from the above-described general study areas based on the potential for the Project to directly or indirectly affect each Valued Component assessed in the Environmental Assessment / Impact Statement. In consequence, discipline-specific Local Study Area and Regional Study Areas have been defined for the Project.

The discipline-specific study area of this Cultural Heritage Report did not require an alternative study area as the 5 kilometre buffer meets all regulatory requirements for cultural heritage screening, and so the Local Study Area used in this report is 5 kilometres from the centreline of potential routes as defined above. The Local Study Area is shown on all figures. **Figure 2-1** shows the Local and Regional Study Area and **Figure 2-2** shows the route alternatives and segments.

Table 2-1 provides a description and rationale of the Study Area.

Table 2-1: Cultural Heritage Report Study Area Description and Rationale

Study Area	Geographic Extent	Rationale
Construction Disturbance Area (Route Alternatives, Preferred Route)	• The Construction Disturbance Area encompasses the 100-metre-wide Community Access Road right-of-way (including temporary construction access roads, work areas, worker camps, and long-term aggregate sources and associated access roads).	• The Construction Disturbance Area captures the Preferred Route. • To capture built heritage resources and cultural heritage landscapes in an area where most of the direct effects of the Project are likely to occur.
Local Study Area (Cultural Heritage Study Area)	• Total 5 kilometre wide area along the centreline of all possible routes, including Alternative 1 and Alternative 4.	• The Local Study Area captures any temporary land use and / or access areas. • To capture cultural heritage resources, including built heritage resources and / or cultural heritage landscapes that may be indirectly impacted by the Project.

Figure 2-1: Cultural Heritage Report Local and Regional Study Area

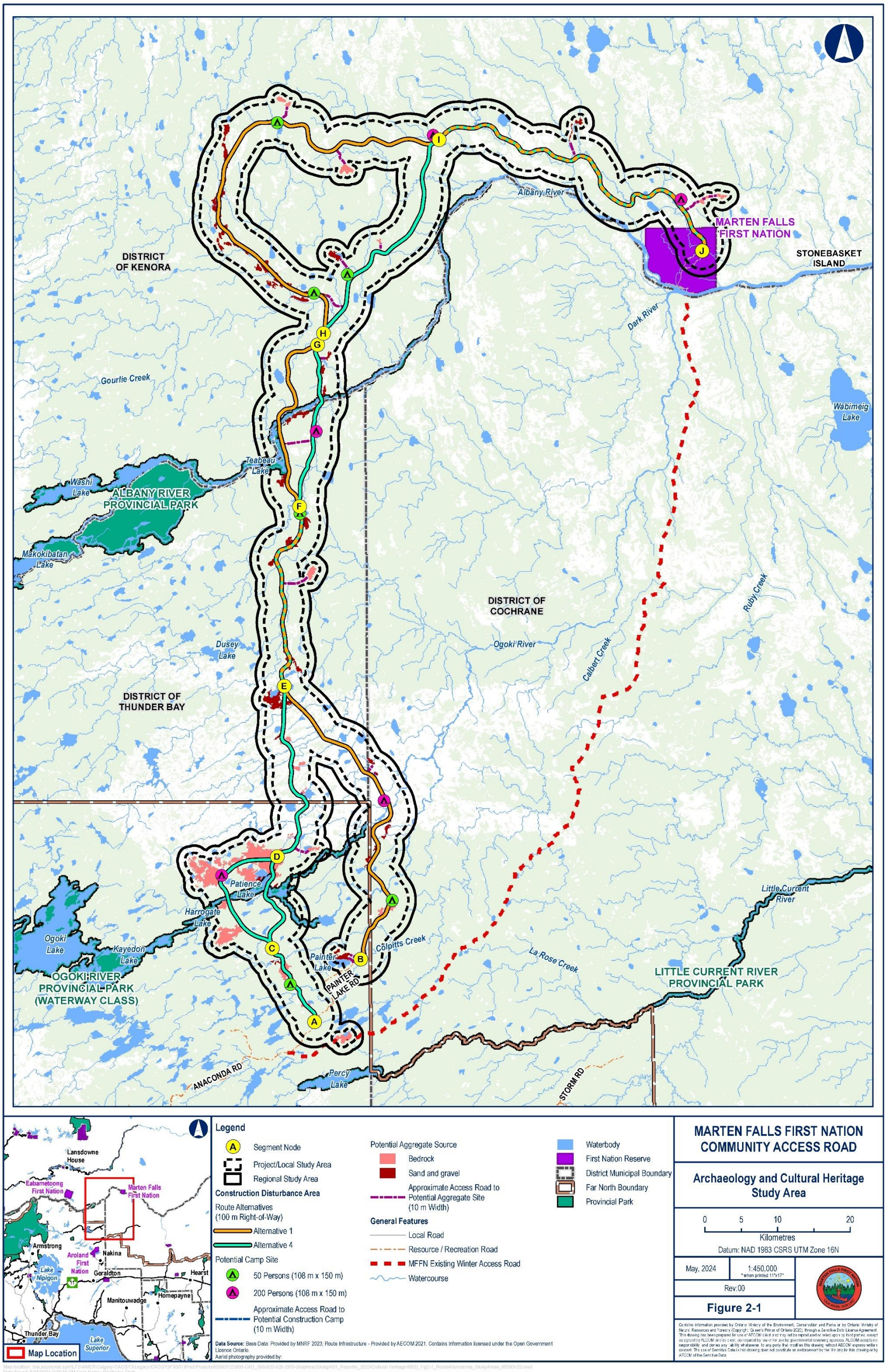
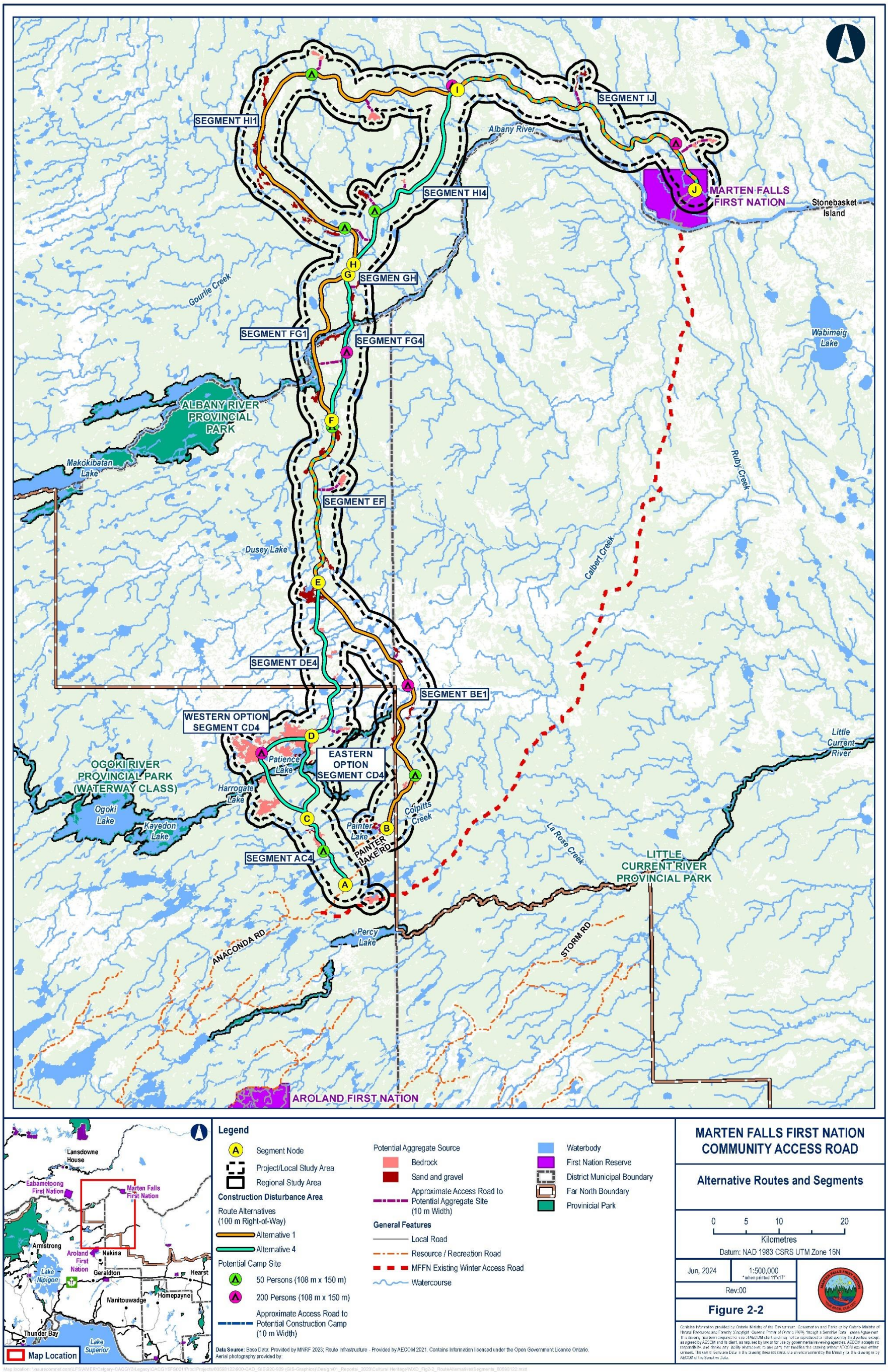


Figure 2-2: Alternative Routes and Segments



2.3 Existing Environment Study Design

2.3.1 Background and History

This Cultural Heritage Report focuses on conducting and analyzing background research and field survey results for the purposes of identifying effects of the proposed undertaking on any cultural heritage resources. The following general steps were taken to identify built heritage resources and cultural heritage landscapes within the Study Area:

- Background historical research to identify major historical themes and activities within the study area, including a review of historical maps;
- A review to identify properties within the Local Study Area that have been designated under Part IV or V of the *Ontario Heritage Act* or listed on a District inventory or heritage register;
- Community engagement including members of Marten Falls First Nation and other Indigenous communities with particular knowledge regarding the built heritage resources and / or cultural heritage landscapes within the Local Study Area;
- A field review was originally proposed to confirm the location and condition of known built heritage resources and cultural heritage landscapes. The field review was to consist of a fly-over of the Study Area to confirm known heritage resources and identify potential cultural heritage resources that have not been previously identified on federal, provincial, or municipal databases. Due to health and safety, and weather restrictions, only a ground-level field review of the Marten Falls First Nation community itself was undertaken (see **Section 2.4** below); and
- Conducted a Preliminary Impact Assessment to propose appropriate impact mitigation measures and recommendations for minimizing and avoiding negative effects on built heritage resources and cultural heritage landscapes that are anticipated to be directly impacted by the Preferred Route, and the identification of further reporting requirements such as Cultural Heritage Evaluation Reports and / or Heritage Impact Assessments, if necessary (see **Section 8**).

2.4 Field Investigations

On July 18, 2023, the AECOM Cultural Heritage Team travelled into Marten Falls First Nation by airplane from Thunder Bay and Geraldton. The Cultural Heritage Team was comprised of Liam Smythe, Cultural Heritage Specialist; Samantha Markham, Cultural Resources Manager & Project Archaeologist; and Project Coordinators for Marten Falls First Nation, Bob Baxter and Rowena Moonias. The purpose of the field review was to

collect photographic records with associated notes and mapping to illustrate the existing conditions of the Study Area and help to reinforce background data collected via satellite, topographic, and historic mapping. Due to Health and Safety Restrictions with AECOM, the field review was limited to areas of the Marten Falls First Nation community only.

Liam Smythe and Samantha Markham undertook the field survey of the Marten Falls First Nation community led by Rowena Moonias. The Cultural Heritage Team travelled by car to several significant points in Marten Falls community, including the north side of the convergence of the Ogoki and Albany Rivers, the site of the former Hudson's Bay Company store, the former Anglian Church, and two cemetery sites.

The information collected during the field review informs the appropriate impact management measures and recommendations for minimizing and avoiding negative effects on identified cultural heritage resources.

2.4.1 Field Review Limitations

As noted in **Section 2.3.1** above, an aerial field review of the Study Area originally proposed to identify potential cultural heritage resources not previously identified on federal, provincial, or municipal databases, and to confirm the existing conditions of the Local Study Area. Due to health and safety concerns, and poor atmospheric conditions resulting from wildfires in northern Ontario and Quebec during the summer of 2023, this aerial field review was not undertaken. Information and photographs collected during a previous field review completed by members of AECOM's Cultural Heritage Team in September 2019 during preparation of the Stage 1 Archaeological Assessment Report for the Project was used to inform this Cultural Heritage Report. Photographs from the 2019 field review have been included in **Section 4** of this report. Given this limitation, AECOM was unable to verify the features identified in the historical research of this report to assess if they were visible on the landscape.

3. Information Shared by Indigenous Peoples & Other Interested Persons Which Informed This Report

In the course of completing the description of baseline conditions and effects assessment for this report, information provided by Indigenous knowledge holders, Indigenous community members, regulators and public stakeholders was used to develop the approach and assessment conducted for this study. This information and how it informed the development of this report are described below. This section does not detail all the information, comments or questions received related to the Project and is limited to only the information which informed this Report. For a full description of all consultation and engagement related to the Community Access Road refer to the Record of Consultation and Engagement for the Environmental Assessment / Impact Statement Report. Information related to the Indigenous Knowledge Program can be found in the *Marten Falls Community Access Road: Aboriginal and / or Treaty Rights and Interests Existing Conditions Report* (Dillon, 2024).

3.1 Indigenous Knowledge

Indigenous Knowledge refers to Indigenous systems of knowledge as well as cultural practices related to the production of knowledge based on traditional belief systems, relationships to the environment, and community practices. It is the accumulated and living knowledge built upon the historic experiences of Peoples living on the land and adapting to social, economic, environmental, spiritual and political change (Chiefs of Ontario, n.d.) It includes knowledge about the natural environment (such as locations of caribou seasonal use and calving areas), the relationships between environmental changes and species or ecosystems, and how potential effects to the environment can be avoided or reduced.

Indigenous Land and Resource Use refers to specific areas and resources used for traditional purposes when Indigenous peoples learn and practice their Indigenous Knowledge (Garvin & Northern Forestry Centre (Canada), 2001). This includes the areas and sites used for hunting, trapping, fishing, and gathering and the resources harvested, as well as cultural sites, features and practices—sometimes referred to as Traditional Land Use.

In 2019, the Marten Falls First Nation Community Access Road Project Team launched a program to collect Indigenous Knowledge. The Indigenous Knowledge Program is a critical component of the information base upon which the assessments will rely. The information generated through the Indigenous Knowledge Program has been woven with scientific approaches, and both knowledge systems will be given equal consideration in forming the

foundation for existing conditions, predicting potential project effects, and determining appropriate mitigation and monitoring methods.

The Indigenous Knowledge Program occurs in two concurrent phases:

1. Collecting existing Indigenous Knowledge and information on Indigenous land and resource use to help inform the early stages of the assessments; and
2. Completing project-specific Indigenous Knowledge and Lands & Resource Use studies.

The protection and confidentiality of Indigenous Knowledge and information on Indigenous land and resource use is of the utmost importance to the Project Team. To honour and respect this important information, Indigenous Knowledge Sharing Agreements were established with interested communities prior to the use of community information. The Sharing Agreement outlines how confidential and sensitive information will be woven into the Project's environmental / impact and design processes.

The Proponent strove to respectfully collaborate with Indigenous communities on how Indigenous Knowledge and information on Indigenous land and resource use and cultural values were considered in reporting, and how potential effects to Aboriginal and Treaty Rights and Interests were assessed. Measures to support this included but were not limited to: engaging Indigenous communities to solicit information on Indigenous Knowledge and Indigenous land and resource use and cultural values; to inform baseline conditions, providing Indigenous communities with draft sections of the Environmental Assessment / Impact Statement Report; to illustrate how Indigenous Knowledge and information on Indigenous land and resource use and cultural values has been integrated, and to confirm it has been presented appropriately, and completing collaborative working sessions with Indigenous communities for the effects assessment on Aboriginal and Treaty Rights and Interests. Further information on how potential effects on Indigenous rights were assessed is provided in the *Aboriginal and Treaty Rights and Interests Study Plan* (Dillon, 2021).

Information provided by Indigenous knowledge holders, recognized as such by their Indigenous community, has been, obtained through literature review and shared directly by Indigenous nations in support of this Project through face-to-face meetings or receipt of Indigenous knowledge reports. The information, some of which is confidential, that has been used to inform this reporting is described in **Table 3-1** below.

Table 3-1: Indigenous Knowledge and How Considered

Information	How Considered
• **Data collected through the Indigenous Knowledge Data Collection Program, including both areas of interest and individually plotted data points.**	• Used to develop heat maps to complete the Residual Effects analysis in regard to Cultural Heritage. • Used to complete the Preliminary Impact Assessment of the Preferred Route
• **Indigenous Knowledge reports, including:** – Marten Falls First Nation Indigenous Knowledge, Land Use and Occupancy Study for Northern Access Roads (Suslop Inc.: 2023) – Aroland First Nation Indigenous Knowledge and Land Use Study for the Marten Falls Community Access Road (Shared Value Solutions: 2024) – Weenusk First Nation Existing Conditions Report: Marten Falls Community Access Road Project (MNP, LLP: 2024) – Kashechewan First Nation Existing Conditions Report: Marten Falls Community Access Road Project (MNP, LLP: 2024) – Draft Fort Albany First Nation Indigenous Knowledge and Use Study Specific to the: Proposed Marten Falls Community Access Road (Knut Kitching, and Firelight Research Inc.: 2024).	• Used to complete the Preliminary Impact Assessment of the Preferred Route

3.2 Marten Falls First Nation Community Engagement Session

During the visit to Marten Falls First Nation on July 18, 2023, the Cultural Heritage Team conducted an engagement session in the gymnasium at the community school between 12:00 pm and 3:00 pm. Tables were set up with large-format, printed copies of the Marten Falls First Nation Community Access Road draft project mapping, the historic map set, and mapping generated using data provided by the Indigenous Knowledge Team (**Photograph 1**). Questionnaires and information sheets were provided, providing an overview of the information the Cultural Heritage Team is looking to collect.

A total of 21 individuals from the Marten Falls First Nation community attended the engagement session. Discussions at the session happened organically; the Cultural Heritage Team provided an explanation of what work has been completed to date and the presence of the mapping typically led to a generalized discussion of culturally significant areas, and how they will be protected or mitigated during construction (**Photograph 2**). Members of the Marten Falls First Nation community expressed a general interest in the project mapping and how the information was compiled. Some attendees noted features by writing on the map or marking them with notes.

During previous consultation it was suggested that the AECOM team meet with Elders and Knowledge Keepers who are unable to travel during their visit to the community. The Cultural Heritage Team visited the Elders' complex upon arriving in the community, however none of the individuals present were able to converse with the Cultural Heritage Team.

Table 3-2: Indigenous Community Information and How it was Considered

Information	Type	How Considered
• **Cultural heritage data related to the Community Access Road**	• Community Engagement Session led by AECOM's Cultural Heritage team, held in-person at Marten Falls on July 11, 2023	• Used to develop heat maps to complete the Residual Effects analysis in regard to Cultural Heritage. • Used to complete the Preliminary Impact Assessment of the Preferred Route in regard to Cultural Heritage.

Photograph 1: Community Engagement Session setup showing project mapping (AECOM, 2023)

Photograph 2: AECOM Staff conversing with participants at Community Engagement Session (AECOM, 2023)

3.3 Summary of Indigenous Community Engagement

A detailed description of the consultation and engagement process and the input received is available in the Environmental Assessment / Impact Statement Report. **Table 3-1** provides a summary of input received from Indigenous communities including Indigenous Knowledge related to Cultural Heritage. **Table 3-2** includes public engagement and consultation information received specifically related to this Discipline / Valued Component and used in the description of baseline conditions and or this Assessment.

4. Regulatory Framework

This Cultural Heritage Report considers cultural heritage resources in the context of improvements to specified areas, pursuant to the *Environmental Assessment Act.* The purpose of the *Environmental Assessment Act* (Ontario Government, 1990a) is to provide for the protection, conservation and management of Ontario's environment. Under the *Environmental Assessment Act*, "environment" is defined in Subsection 1I to include:

- The social, economic and cultural conditions that influence the life of humans or a community; and
- Any building, structure, machine, or other device or thing made by humans.

Within this context, municipalities, planning authorities, and project proponents must navigate multiple layers of mutually supportive legislation. Regulatory provisions applicable to the Project and relevant to this Cultural Heritage Report are outlined below.

4.1 Far North Act

The *Far North Act* (2010), is the legislative foundation of public land use planning in the Far North. The act does not apply to reserves, federal Crown lands, municipalities, or land that is not public land. The purpose of the *Act* is to provide for community based land use planning in the Far North that:

- Sets out a joint planning process between the First Nations and Ontario;
- Supports the environmental, social and economic objectives for land use planning for the peoples of Ontario; and
- Is done in a manner that is consistent with the recognition and affirmation of existing Aboriginal and Treaty Rights in Section 35 of the *Constitution Act,* 1982, including the Duty to Consult.

As set out in the *Act*, the objectives for land use planning include the following:

- A significant role for First Nations in the planning;
- The protection of areas of cultural value in the Far North and the protection of ecological systems in the Far North by various means including the designation of protected areas in community based land use plans;
- The maintenance of biological diversity, ecological processes and ecological functions, including the storage and sequestration of carbon in the Far North; and
- Enabling sustainable economic development that benefits the First Nations.

Decisions made under the planning guidance of the *Far North Act* must also align with the *Planning Act* and the 2024 Provincial Planning Statement (see **Section 4.3**, below).

4.2 Ontario Heritage Act

The *Ontario Heritage Act* gives the Ministry of Citizenship and Multiculturalism the responsibility for the conservation, protection and preservation of Ontario's cultural heritage resources. The Ministry of Citizenship and Multiculturalism is charged under Section 2 of the *Ontario Heritage Act* with the responsibility to determine policies, priorities and programs for the conservation, protection and preservation of the heritage of Ontario. To that end, the Ministry has published two guidelines to assist in assessing cultural heritage resources as part of an environmental assessment, including: *Guideline for Preparing the Cultural Heritage Resource Component of Environmental Assessments* (Ministry of Citizenship and Multiculturalism 1992), and *Guidelines on the Man-Made Heritage Component of Environmental Assessments* (Ministry of Citizenship and Multiculturalism, 1980). Accordingly, both guidelines have been utilized in this assessment process.

The Guidelines on the Man-Made Heritage Component of Environmental Assessments (Section 1.0) states the following:

> *When speaking of man-made heritage we are concerned with the works of man and the effects of his activities in the environment rather than with movable human artifacts or those environments that are natural and completely undisturbed by man.*

In addition to the above guidelines, the Ministry of Citizenship and Multiculturalism has also published the Standards and Guidelines for Conservation of Provincial Heritage Properties (hereafter Standards and Guidelines, 2010) which apply to properties owned or controlled my Ministries of Prescribed Public Bodies of the Government of Ontario that have cultural heritage value or interest, as defined in Section 3 of the *Ontario Heritage Act*. The Standards and Guidelines apply to provincial heritage properties and provide direction on the identification; evaluation; protection; maintenance; use; and disposal of such properties. As the majority of the Local Study Area is located within provincially owned or controlled land, including Crown lands and Provincial Parks, the Standards and Guidelines apply. For the purposes of this Cultural Heritage Report, the Standards and Guidelines support the identification of potential provincial heritage properties, and any recommendations for future evaluation of such properties according to the Standards and Guidelines (see **Section 9**). Should any portions of the Local Study Area be found to have provincial heritage significance, additional work may require Minister's Consent, as defined in Section 3 of the *Ontario Heritage Act*.

To further support the identification, evaluation, and conservation of heritage properties according to its mandate under the *Ontario Heritage Act*, the Ministry of Citizenship and

Multiculturalism has also published the *Criteria for Evaluating Potential for Built Heritage Resources and Cultural Heritage Landscapes: A Checklist for the Non-Specialist*, which helps inform whether a property warrants heritage assessment and / or additional evaluation. The checklist has been completed for this report and is included as **Appendix E**. In the event that a property requires evaluation, the Ministry of Citizenship and Multiculturalism's Ontario Heritage Tool Kit provides a guide to evaluating potential heritage properties (Ministry of Citizenship and Multiculturalism, 2006). The Toolkit states that, to conserve a cultural heritage resource, a municipality or approval authority may require a heritage impact assessment and / or a conservation plan to guide the approval, modification, or denial of a proposed development. The Toolkit has accordingly been consulted in the preparation of this Cultural Heritage Report.

4.3 Planning Act and Provincial Planning Statement

Both the *Planning Act* (1990) and the related Provincial Planning Statement (2024), include provisions relating to heritage conservation and engagement with Indigenous Communities that support each other and align with other legislation, including the *Far North Act*. One of the principal purposes of the *Planning Act* is to integrate matters of provincial interest in provincial and municipal planning decisions. The *Planning Act* informs all parties involved in planning activities of the scope of matters of provincial interest. Outlined in Section 2 of the *Planning Act*, these matters of provincial interest shall be regarded when certain authorities, including the council of a municipality, carry out their responsibilities under the *Act*. One of these provincial interests is directly concerned with:

> *2.(d) the conservation of features of significant architectural, cultural, historical, archaeological or scientific interest.*

Definitions that have specific meanings for use in a policy context accompany the Provincial Planning Statement (2024). For the purposes of this Cultural Heritage Report, the following terms were employed from the Provincial Planning Statement:

> *A **built heritage resource** "means a building, structure, monument, installation or any manufactured or constructed part or remnant that contributes to a property's cultural heritage value or interest as identified by a community, including an Indigenous community." (2024)*

> *A **cultural heritage landscape** "means a defined geographical area that may have been modified by human activity and is identified as having cultural heritage value or interest by a community, including an Indigenous community. The area may include features such as buildings, structures, spaces, views, archaeological sites or natural elements that are valued together for their interrelationship, meaning or association." 2024).*

In addition, the Provincial Planning Statement also defines “significance” as it relates to specific areas of policy. With regard to cultural heritage and archaeology, significant resources are defined as having “…been determined to have cultural value or interest” according to the processes and criteria for determining cultural heritage value or interest established by the Province under the authority of the *Ontario Heritage Act* (Ontario Government, 2024).

Criteria for determining significance for the resources are recommended by the Province. While some significant resources may already be identified and inventoried by official sources, the significance of others can only be determined after evaluation (Ontario Government 2024).

Accordingly, the above mentioned guidelines and relevant policy statements can be used to guide the scope and methodology of this Cultural Heritage Report.

5. Historical Context

5.1 Pre-Contact Overview of Northern Ontario

Archaeological research in northern Ontario is generally limited in comparison to southern Ontario, which has resulted in less robust understanding by archaeologists of the pre-contact settlement history of this part of the province. Soil conditions in northern Ontario and a scarcity of archaeological sites make it difficult to determine absolute dates. Given the challenging landscape and relative scarcity of known archaeological sites, archaeological periods in the north have approximate, and often overlapping date ranges. The following sections provide a detailed summary of the archaeological cultures that have settled in northern Ontario over the past 11,000 years. **Table 5-1** provides a general cultural chronology for northern Ontario.

5.1.1 The Paleo Period

Much of northern Ontario lies within the Pre-Cambrian (Canadian) Shield and is covered in boreal forest. This part of the province is rugged and is speckled with lakes, bogs, and streams. The first people to inhabit northwestern Ontario are referred to as Paleo people, a general term to refer to the first Indigenous occupants in the region in the post glacial period. They reached the north shore of Glacial Lake Minong / Duluth (the pre-cursers to Lake Superior) in about 8,000 B.C. after the glaciers had retreated. During the immediate post-glacial period, the portions on the province that were available for human occupation had a tundra-like ecological and climate regime. Given these conditions, Paleo groups lived in relatively small nomadic groups that followed larger, migratory game (notably caribou), across the landscape, preferring to camp on high ground, immediately adjacent to water sources, such as glacial lakes or spillways, where smaller game and plant food would have also been harvested. Although there were initial occupations dating back to ca. 8,000 B.C. immediately northwest of modern Lake Superior, the central interior of northern Ontario did not become available for human occupation until roughly 5,500 B.C. Thus, the earliest known sites north of the Great Lakes date to this period but are all situated south of the Local Study Area and in relatively close proximity to the modern shores of Lakes Superior and Huron. Tool assemblages appear to be dominated by finely made lanceolate-shaped, sometimes fluted, projectile points, or spear tips. Raw materials obtained from bedrock outcrops or glacial cobbles were used in the production of tools such as distinctive unfluted, ribbon flaked, lanceolate spear points and knives (Dawson, 2004).

5.1.2 The Archaic Period

The next major cultural period following the Paleo is termed the Shield Archaic. The transition to the Archaic lifeway was directly related to changing environmental conditions to those more closely approximating the present. This change is best seen in changes in

technological and stylistic characteristics of the overall lithic toolkit including projectile point styles and assemblage composition. The Archaic period (ca. 5,400 – 250 B.C.) in northwestern Ontario is defined by notched projectile points, the use of native copper, and more frequent recovery of woodworking tools such as wedges and adzes (Wright, 1972; Dawson, 1983; Fox 1977; Hinshelwood, 2004). Throughout the Archaic period the natural environment warmed, and vegetation changed from closed conifer-dominated vegetation cover, to mixed coniferous and deciduous forest to the mixed coniferous and deciduous forest in the north and deciduous vegetation in the south we see in Ontario today (Wright, 1972). During the Archaic period there are indications of increasing populations and decreasing size of territories exploited during annual rounds; fewer moves of residential camps throughout the year and longer occupations at seasonal campsites; continuous use of certain locations on a seasonal basis over many years; increasing attention to ritual associated with the deceased; and, long range exchange and trade systems for the purpose of obtaining valued and geographically localized resources (Wright, 1972; Hinshelwood, 2004).

5.1.3 The Woodland Period

The beginning of the Woodland period in northern Ontario approximately 3,500 years ago is distinguished from the Late Archaic period primarily by the addition of ceramic technology, which provides a useful demarcation point for archaeologists but is expected to have made less difference in the lives of the Woodland peoples. Unlike southern Ontario where the Woodland period is divided into three distinct phases (Early, Middle, Late), the Woodland period of northern Ontario is divided into only two distinct phases, the Middle (Initial) and Late (Terminal) Woodland periods.

The introduction of pottery within the Initial Woodland period beginning ca. 2,200 years ago (700 B.C. – A.D. 1,000) is believed to have occurred in northern Ontario through trade and other influences from the southwest and east, creating the Laurel culture within the Boreal Shield stretching from Saskatchewan to Northern Quebec. Laurel ceramics was dominated by conical style tapered base pottery manufactured using the coil method adorned with decoration across the upper portion of the vessel's exterior surface. The overall Laurel ceramic tradition appears to be related to a broader Initial Woodland pattern known across much of eastern North America and bears strong resemblances to the Saugeen and Point Peninsula traditions in southern Ontario and the northeastern United States.

During the Initial Woodland period, groups would come together into large macro-bands through the spring-summer at lakeshore or marshland areas to take advantage of spawning fish; in the fall inland river valleys were occupied for deer and nut harvesting and groups split into small micro-bands for winter survival. Few Laurel sites have been securely dated, but archaeologists believe that the style persisted until about 1,000 years ago (Hamilton, 2013).

A Woodland tradition present in southern Ontario, the Rainy River District in northern Ontario, and southeastern Manitoba consists of burial mound ceremonialism (Kenyon, 2012). These impressive mounds represent the internment of multiple humans within a single dirt structure. In southern Ontario the most impressive mound structure is the Serpent Mound adjacent to Rice Lake. These mounds were built by the Laurel and extended into the Blackduck peoples during the Middle Woodland tradition. Most of them are low and broad structures, though one at Long Sault Rapids in the Rainy River District is the largest in Canada at 34 metres in diameter and 7 metres high. The mounds contained a plethora of grave goods, including furniture, clay pots, shell, bone and copper beads, which were all sprinkled with red ochre. This behavior appears to be an extension of the Adena and Hopewell Interaction Sphere from the Midwest United States (Mason,1970, 1981; Kenyon, 2012).

The Terminal Woodland period in northern Ontario differed significantly from the settlement and subsistence shift that occurred in southern Ontario where there was increasing reliance on maize horticulture. The climate and landscape of the Canadian Shield prohibited the agricultural shift occurring in the south with continued reliance on fish and large game as in previous periods. Population growth was also restricted by the Canadian Shield environment and settlement patterns were similar to those of the Initial Woodland with large summer camps located close to fish resources and typically located on level, well drained ground with access to canoe landing beaches.

After approximately 1,200 years ago, new technological innovations appear in the archaeological record, indicating Terminal Woodland cultural influences spread widely throughout the Boreal Forest. Archaeologists define the Terminal Woodland period by the use of the bow and arrow and by a variety of new pottery wares that differ drastically from the previous Laurel style (Hamilton, 2013). Within the Terminal Woodland period three distinct cultures arise: the Blackduck Complex, the Selkirk Complex to the north, Sandy Lake Ware to the south. All three wares differ slightly in timespans and overlap geographically (Meyer and Hamilton, 1994). The Blackduck Complex (ca. A.D. 800-1,400) is identified by the contrasting pottery tradition to the Laurel. Pottery vessels were large and globular, rather than conical and tapered and manufacture techniques involved a paddle and anvil technique over coiling. Decorations were also changed and are characterized by horizontal and / or oblique lines along with circular indentations (punctate) that are found on the neck, rim and inner rim of the vessel.

The Selkirk culture is also defined by its pottery style. Manufacturing techniques are similar to that of the Blackduck Complex but with a distinct variation in decoration. The decorative styles, if decorated at all, were simple and generally included either a single row of punctate indentations or impressions made with a cord-wrapped stick (Dawson, 1983). Selkirk pottery is found predominantly in the northern portion of north Ontario. Sandy Lake Ware (c. A.D. 1,000-1750) consists of globular vessel shape, thin and fairly straight walls,

grit or shell temper, and interior notched or plain decoration. Surface finish may be textile impressed, smoother, check or simple stamped (Taylor-Hollings, 1999).

The Terminal Woodland period also sees the emergence of rock art as an expression of spiritual life and ritual practices. Rock paintings, or pictographs, comprised of red ochre mixed with a binding agent such as bear fat or sunflower oil, are typically found within western Ontario on the vertical faces of cliffs where they enter a body of water (Rajnovich, 1994). Pictographs constitute a form of written language, signifying sounds, objects, and ideas in reference to subsistence, geography, climate, history and also sacred or religious beliefs and visions (Dewdney & Kidd, 1962; Bursey *et al*., 2013), although they could have served a variety of cosmological functions and even political ones by marking territory (Wright, 2004:1545). The damming of lakes and rivers by the timber and hydroelectric industries may have drowned many pictograph sites and the fragile nature of the painting themselves also reduces their chances of survival. Rock etchings, or petroglyphs, are also relatively rare within the Canadian Shield, with most examples occurring within the south and east of the province. Likewise, petroforms, or artificial arrangements of stones in pits or cairns, are rare in northern Ontario (Dawson, 1983). **Table 5-1**, below, provides a cultural chronology for the occupation of Indigenous peoples in northern Ontario from an archaeological perspective.

Table 5-1: Indigenous Cultural Chronology for Northern Ontario

Archaeological Period	Culture	Time Period	Characteristics
Paleo	Plano	~8,000 – 4,500 B.C.	• Lanceolate bifacial tools associated with large-game focused hunting; and • Sites often associated with relic lake shores north of the Upper Great Lakes.
Archaic	Shield	~5,400 – 250 B.C.	• Broad spectrum seasonal resource exploitation; • Development of environmental conditions similar to the present; • Slight reduction in group territory size; • Introduction of copper tools; • Highly mobile; • Introduction of bow and arrow technology; and • Domestication of dog.
Middle Woodland	Laurel	~700 B.C. – A.D. 1,000	• Introduction of pottery; • Introduction of horticultural production, primarily through trade; • Development of distinctive Algonquian ceramic styles; and • Large earthen mounds in some regions (like at the western end of Lake Superior).

Archaeological Period	Culture	Time Period	Characteristics
Late Woodland	Blackduck Selkirk	~A.D. 750-1650	• Diverse ceramics – out-flaring vessel rims, textile impressions, and punctates; • Increasing variation in regional stylistic characteristics in various lithics and ceramics; • Evidence of extensive long-range Indigenous trade activities; • Communal burials; and • Direct ancestors of modern indigenous communities.
Contact First Nations	Northern Ojibway	A.D. 1600-1875	• Early written records and treaties; and • Participation in fur trade.
Euro-Canadian	N/A	A.D. 1749-present	• European settlement (French and English).

5.1.4 Known Archaeological Sites

AECOM conducted a data search of the Ontario Archaeological Sites Database for the Stage 1 archaeological assessment completed in 2020 to determine if any registered archaeological sites are located within or adjacent to the Local Study Area. Given the extensive geographic setting, the search of known archaeological sites was increased to 50 kilometres of the Local Study Area boundaries. This search resulted in the identification of four registered archaeological sites. **Table 5-2** provides details on the registered archaeological sites within 50 kilometres of the Local Study Area.

Table 5-2: Registered Archaeological Sites within 50 kilometres of the Study Area

Borden #	Site Name	Cultural Affiliation	Site Type
EjIp-1	Marten (Martin's) Falls House	Indigenous, Euro-Canadian	Hudson's Bay Company fur trade post
EiIr-1	Baxter	Unknown	Unknown
EiIr-2	Twin Point	Unknown	Unknown
EgIk-1	Feldbruegge	Indigenous	Campsite

The Marten Falls House (EjIp-1) is located on the southern bank of the Albany River at Marten Falls. The remains of the Hudson's Bay Company fur trade post were located in 1975 by Barry Newton as they were eroding out of the bank of the river. During the survey of Martin Falls House, the site was extensively surface collected, and two test pits were excavated (Vyvyan, 1980). The material recovered included ceramics, glass, metal hardware, household and personal items, faunal material, and Indigenous material. The two test pits and an intensive surface survey at the only known Archaeological Assessment conducted at this site. It is assumed that the site, if properly surveyed and

mapped archaeologically, would be extensive as it was occupied for an extended period of time and archaeological materials are unlikely to be confined strictly within the post's footprint.

There are no other sites within proximity to the Local Study Area limits due to several factors. These include the lack of development in the area as well as the effects of fluvial processes along waterways where sites would have been washed away over time as a result of natural and purposeful water level fluctuations.

5.2 Post-Contact Overview of Indigenous History

It is important to note that, when discussing the historical documentation of the movement of Indigenous people, what has been documented by early European explorers and settlers represents only a very small snapshot in time. Where Indigenous groups were residing during the period of early European exploration and settlement is restricted to only a very short period of time and does not reflect previous and subsequent movements of these groups. Indeed, there is evidence that, in some cases, what is identified as a movement of people was really little more than a change in the name used to refer to a group as they encountered various settler groups.

This brief history does not reflect the full picture of the pre- or post-contact period occupation of Indigenous groups or cultures. As such, relying on historic documentation in regard to Indigenous occupation and movement across the landscape can lead to misinterpretation. For example, historic documentation of the movement of Indigenous groups into an area may suggest to the reader that these groups had not occupied the area previously; however, this is not the case. It is clear from Indigenous oral histories and the archaeological record that pre-contact Indigenous populations were extremely mobile and not tied to any one specific area. Over the vast period of time prior to the arrival of Europeans, Indigenous groups, language families, and cultures were fluid across the landscape. Similarly, while economic activity altered the way people used the landscape, particularly at the height of the fur trade, the overall socio-cultural system of kinship-based land use and group association remained intact.

At the time of European contact, the Indigenous Nations in the northern part of the province spoke variations of the Algonquian language group, notably Ojibway and Cree. The environmental conditions in northern Ontario remained vastly different from those in the south with unpredictable natural factors such as forest fires and winter icing influencing the size of human population the region could support the distribution of groups and the frequency in which they had to move. Therefore, the groups in northern Ontario remained small, mobile, and loosely associated with each other (Dawson, 2004: 9).

5.3 Watercourse History

Prior to the arrival of Europeans, waterways such as the Albany and Ogoki Rivers provided access to potable water and other life sustaining resources such as fish and plants for local Indigenous inhabitants. Rivers also served as transportation routes for water travel and attracted game to their shores.

5.3.1 Albany River

At 982 kilometres in length, the Albany River is the one of the longest in Ontario. The headwaters of the Albany River start at Cat Lake and flow into Lake Saint Joseph. The waterway park starts at Ossenberg and ends at Wabassee River. From there, the Albany River flows east to James Bay (Kudelik, 2015). As a 135,000 square kilometre watershed, its major tributaries include the Ogoki, Kenogami, Cheepay, and Stooping Rivers (Mika and Mika, 1977). The Albany River marks the northerly boundary of the District of Thunder Bay. The Albany River flows through land characterized by Early Precambrian bedrock and retreating glaciers, which along with the river itself, have resulted in moraines, drumlins, and other water-shaped landforms (Ontario Parks, 2023). The central portion of the Albany River is protected by Albany River Waterway Park, also known as the Albany River Provincial Park (Kudelik, 2015; Ontario Parks, 2023). The park begins at Osnaburgh Lake and extends downstream to the junction of the Wabassi and Albany Rivers to the northwest of Marten Falls First Nation. The Local Study Area transects the park just downstream from Teabeau Lake (**Figure 2-1**).

Mishkeegogamang (formerly Osnaburgh), Eabametoong (formerly Fort Hope), Kashechewan (Fort Albany) and Marten Falls First Nations all have a special connection to the Albany River and rely on the waterway for transportation, recreation, as well as subsistence fishing and hunting (Government of Ontario, 1985). In the early 20th century, the Albany River was considered an excellent transportation route, especially at high tide in the spring (Long, 1985:143). During his 1903 expedition, surveyor William McInnes describes plentiful brook trout and sturgeon of “good size” that were caught by local Indigenous populations in the rapids of the Albany River from Lake St. Joseph to the Fort Hope Hudson’s Bay Company post at Eabamet Lake (Bell, 1904:101). Recreational activities for local Indigenous residents include camping, boating, swimming, and snowmobiling. A winter snowmobile trail crosses the Albany River Provincial Park between Marten Falls and Fort Hope (Government of Ontario, 1985).

5.3.2 Ogoki River

The name Ogoki is Ojibway in origin and believed to be derived from *ogaki*, meaning to ‘reach a place before another’ but may also mean ‘swift current’ (Rayburn, 1997). The Ogoki River is a tributary of the Albany River Watershed that extends from its headwaters between Lake St Joseph and Lake Nipigon, downstream through a series of

interconnected lakes and tributaries to the confluence of the Ogoki and Albany Rivers at Marten Falls First Nation. As with the broader Albany River Watershed, the Ogoki River flows through land characterized by Early Precambrian bedrock and retreating glaciers, in addition to extensive wetlands and uplands (Ontario Parks, 2024a). The Ogoki River is classified as an anastomosing river, which refers to the many connected wetlands, waterbodies, channels and courses connected to the main channel.

Portions of the Ogoki River are protected by two provincial parks, including the Wabakimi Wilderness Park and the Ogoki River Waterway Park, also respectively known as the Wabakimi Provincial Park. And the Ogoki Provincial Park. Wabakimi Wilderness Park encompasses some 2000 square kilometres of lake and river routes including Wabakimi Lake, Whitewater Lake and Whiteclay Lake in the upper Ogoki River System (Ontario Parks, 2024b). The Ogoki River Waterway Park encompasses the central portion of the Ogoki River, beginning just downstream of the Waboose Dam (see **Section 5.3.3** below) and ending at the boundary line between the District of Thunder Bay and the District of Cochrane, which is also the Far North Boundary in that area (**Figure 2-1**). Portions of the Ogoki River Watershed are also protected by the Mojikit Lake Conservation Reserve, which straddles the watershed boundary of the Ogoki River and the Little Jackfish River (see **Section 5.3.3**). The Local Study Area transects the Ogoki Waterway Park at Patience Lake, in addition to crossing the Ogoki River just downstream of the park's eastern boundary (**Figure 2-1**).

5.3.3 River Diversions and Hydrology Information

The Albany River Watershed has been severely impacted by three historic dam diversion projects, all of which have ongoing social and environmental consequences. These projects were part of a broader pattern of development in northern Ontario, largely driven by federal and provincial authorities and private business interests. Treaty No. 9, which was signed in 1906 (see **Section 5.5**), was drafted by federal and provincial authorities with industrial development of northern Ontario in mind, including the development of mines, paper mills, and hydroelectric dams (MacFarlane and Kitay, 2016: 387-388; Tsuji and Tsuji, 2021: 384). In the years following Treaty No. 9, damming and hydroelectric projects were initiated on the Moose River Watershed in northeastern Ontario, including the Mattagami and Abitibi Rivers, beginning in 1911 (Manore, 1999: 1, 44-47). Due to the remoteness of northwestern Ontario in relation to the industrialized south, major industrial projects were slower to be initiated, but were nonetheless expanding by the 1920s, including in the Albany Watershed.

The first major dam project in the Albany Watershed was a series of dams constructed on the Albany River at the east end of Lake St. Joseph, respectively known as the Cedars Channel Dams and the Rat Rapids Dams (Government of Ontario, 2020). These dams were constructed between 1934 and 1935 to generate power for newly opened gold mines at Pickle Lake. The Indigenous community at Mishkeegogamang (formerly Osnaburgh) was not consulted in the damming project and was severely affected by the rising lake levels of

Lake St. Joseph, which washed away a significant portion of the Osnaburgh reserve, including homes, gardens, and gravesites, in addition to flooding the council house and many acres of timber (Mishkeegogamang, 2010). The damming of the Albany increased turbidity and erosion and reduced the flow of water downstream. The reduced flow into the Albany River was worsened in 1957 when water from Lake St. Joseph was diverted west via the Root River to Lac Seul and the English River Watershed. By 1957 the Rat Rapids power generating station was decommissioned and the dams on the east end of Lake St. Joseph now serve exclusively as sluice dams to divert water west and moderate flows east down the Albany (Mishkeegogamang, 2010; Ontario Power Generation, 2013).

The second major damming project in the Albany River Watershed was the Long Lake diversion dam, which was constructed between 1937 and 1940. This project dammed the upper Kenogami River, a tributary of the Albany River, on the north side of Long Lake. At the same time, a channel and control dam were constructed at the south end of Long Lake to divert the backed-up water south into the Aguasabon River, which flows into Lake Superior (Annin, 2018:127-128). The Long Lake diversion was built as a means of powering a pulp mill proposed by American paper companies looking to harvest trees in the area (Annin, 2018:130). Like the dams on the Albany River at Lake St Joseph, the Long Lake diversion reduced flows downstream to the Kenogami and Albany Rivers and resulted in sedimentation and debris build up in Long Lake, and extensive flooding and erosion of the Long Lake No. 58 First Nation reserve, including a large part of the community's cemetery. Ontario Power Generation later sought to control erosion by laying rock along the shoreline. However, the rock used was mining waste that was later found to be contaminated with arsenic. After long negotiations between Long Lake First Nation and Ontario Power Generation, a three-year collaborative remediation program was concluded in 2016 (Peet and Day, 1980: 41; Annin, 2018:136).

The largest diversion from the Albany Watershed was the Ogoki River diversion, associated with the Waboose Dam, which was constructed between 1940 and 1943. Plans for the Ogoki diversion were longstanding, with an initial proposal in 1925 suggesting either the capture of much of the Albany River drainage system to form a sixth Great Lake or to divert that drainage to fuel generators to the south. In either scenario, the redirection was to occur from the Ogoki River into Lake Nipigon. The latter option was eventually chosen as it was more feasible (Wightman, 1997:247). The diversion of the Ogoki River was the largest water diversion ever conducted in the Great Lakes area. To serve as the backstop, the Waboose Dam was constructed in the upper reaches of the Ogoki River near what is now Mojikit Lake. The construction of the dam created the Ogoki Reservoir, as well as Short Lake and Mojikit Lake, which had formerly been rivers. A channel was dug to connect the Ogoki Reservoir with the Little Jackfish River, where the diverted water flowed through a control dam downstream into Lake Nipigon and ultimately Lake Superior. This increased the water levels for hydroelectric power generation downstream in the Great Lakes (Rayburn, 1997).

Despite earlier plans for the Ogoki diversion, in 1940 the main motive behind the project was to enhance Canada's hydroelectric power capacity to resolve the energy crisis and help fuel Allied efforts during the Second World War. The goal was to channel the water downstream from Lake Superior all the way to Niagara Falls, where Ontario's biggest generating facilities were located (Annin, 2018:131). The project was enacted with urgency as a wartime decision without consideration for long term social or environmental impacts (Annin, 2018:138). Together, the Long Lake and Ogoki River diversions were responsible for increasing water levels across all the Great Lakes (Annin, 2018:128).

Indigenous peoples who live in the Albany Watershed were negatively affected by these three damming projects and were not consulted when they were built. The dam projects have had wide ranging negative effects. Speaking to these effects, during the preparation of this report, one member of Marten Falls First Nation noted that:

> *"River diversions occurred across the land. This had impacts on fisheries beyond those created by sedimentation. Travel became difficult due to exposed rocks where motors were hit and damaged. Slower travel was required. When the water was reduced and then released, high flows washed away camp sites. Low water contained the fish and also prevented their travel."*

As noted above, apart from the loss of land to flooding, the dam projects made seasonal changes in water levels much more extreme and destructive, with dry downstream conditions in the summer, alternating with extreme runoff events. Spring runoff, rather than being distributed and held in the many channels, lakes, and wetlands that characterize most of the Albany River Watershed, is instead contained in reservoirs and lakes. When water levels are high, dam sluices are opened to release excess water, which then flows downstream in rapid, high-volume floods, which flushes the downstream areas resulting in ecological instability, as neither aquatic nor terrestrial species can become fully established in riverbed areas (Day, Bridger, Peet, and Friesen, 1982: 298-99). Due to the age of the dams, no baseline data exists for how much distributed water was retained in channels, lakes, and wetlands through the summer months prior to construction. However, current hydrometric data reflects extreme seasonal peaks in the Albany River, likely worsened by the effects of damming within the watershed (Government of Canada, 2024a). In the reservoirs, the larger water bodies are prone to developing heavier waves, which in turn, increase shoreline erosion. The resulting erosion has led to both a loss of land, and increased turbidity and degraded water quality in reservoirs, which has negatively impacted fish habitat and food sources (Annin 2018: 136-7). In addition, scientists have confirmed that the diversions resulted in a rise in mercury absorption from flooded soils, which has contaminated local fish populations above acceptable levels for consumption, in addition to contaminating the water itself, severely impacting local communities who rely on the Albany River to survive (Annin, 2018:138). Unable to drink the water from the local rivers, Marten Falls First Nation has been under a boil water advisory since 2005 (Government of Canada, 2021). Despite the construction of a water

treatment system 2019, due to a lack of funding for operations and needed maintenance, the system shut down in September of 2021, resulting in a state of emergency being declared in Marten Falls (Matawa First Nations, 2021). To date, the boil water advisory for Marten Falls First Nation has not been lifted (Government of Canada, 2024b).

In addition to the above hydrological effects the reduction of downstream flow and physical blockage of the Albany, Ogoki, and Kenogami Rivers has severely impacted species reliant on the river. The dams and reduced flow prevent downstream nutrient transfer and have disrupted spawning and migration routes for numerous species of fish. Particularly on the shallower Ogoki River, outcrops of bedrock that were once rapids, in some cases now block the river into long stagnant stretches more akin to lake habitat, rather than the river habitat that existed before. However, as noted above, flow releases from the Waboose Dam flushes out these areas preventing stability of water ecosystems, so neither river species, lake species, nor land species can become fully established in the downstream areas (Day, Bridger, Peet, and Friesen, 1982: 298-99). In consequence, fish populations including sturgeon, walleye, and whitefish, that have traditionally served as a key food source for Indigenous communities, have been severely reduced.

The long term environmental effects of the dams on the Albany Watershed are still not fully understood, neither in the watershed itself, nor downstream in James Bay. While it is now well known that the fragmentation of river habitat correlates with a sharp decline in fish populations, consequences also include longer term genetic change from the mixing or reduction of fish gene pools (McDermid, Nienhuis, Al-Shamli, Haxton, and Wilson, 2014). In the case of the Albany Watershed diversions, other than decreased numbers, the true impacts to species are unclear, especially as no studies were carried out prior to, or immediately after the construction of the dams. However, a 2021 study indicated that walleye from Ogoki Watershed are genetically distinct from those of the Nipigon Watershed, and that these genetic subgroups have intermingled in Lake Nipigon. The reproductive capacity of the walleye does not seem to have been impacted by this mixing, but the true long term consequences of the reduced gene pool of the fragmented Ogoki River, and the mixed gene pool of the Nipigon system are unknown (Wilson and Haxton, 2021:890). Changes in genetic resilience, and the possibility of a transfer of fish diseases between watersheds remain understudied. The diversions also still pose a risk of invasive species travelling north to new water bodies, which historically seems to have only been prevented by that fact that dams were already in place along the diversion routes prior to invasive species like lamprey and carp being introduced into the Great Lakes (Day, Bridger, Peet, and Friesen, 1982: 304).

The severe environmental effects of the dams have, in turn, had significant socio-economic costs for local Indigenous communities. In addition to water flow changes, the collapse of local fisheries, flooding and erosion, and environmental contamination, the damming projects also disrupted historic transportation routes and impacted the recreational and tourism potential of the area (Day, Bridger, Peet, and Friesen, 1982: 300).

Along Lake St Joseph and Long Lake, and more severely in the Ogoki Reservoir, trees were not cut down prior to the closure of the dams and subsequent flooding. The resulting amount of submerged timber has hampered access to the lakes and poses a hazard to water navigation that will take hundreds of years to naturally decompose (Day, Bridger, Peet, and Friesen, 1982: 304). Furthermore, Indigenous communities were not consulted on the damming projects and receive none of the benefits of hydroelectric generation. For example, Marten Falls First Nation is still reliant on more costly diesel-generated power, rather than the hydro power produced using the Ogoki River (Hydro One, 2022).

Speaking of further potential water diversions from northern Ontario to the south in 1973, Marten Falls member Harry Achneepineskum noted: “it is a well-known fact that such industrial water developments when propelled by commerce, money and power, have no respect to the living” (Achneepineskum, 1973: 408). The historical injustice of the damming projects has been increasingly recognized, and many Ojibway First Nations on the upper Albany River have settled hydroelectric development grievances, including Marten Falls First Nation, who won a settlement in 2004 (Long, 2010:99-100). At the Great Lakes Compact in 2005, Chief Eli Moonias of Marten Falls First Nation conveyed that the Ogoki diversion significantly impacted whitefish and sturgeon populations in the Albany River downstream from Waboose Dam, and he requested compensation for the economic impact the diversion of water had on his people (Annin, 2018:135). Chief Veronica Waboose of Long Lake No. 58 First Nation recounted that the Long Lake diversion washed away many acres of their reserve lands, including a large portion of a cemetery that was once on a hill and is now an island. As noted above, Ontario Power Generation worked with Long Lake No. 58 First Nation officials to remediate shoreline erosion caused by the diversion in a project completed in late 2016. Chief Waboose contends that the next step for her community is securing more land so they can live like other Canadians (Annin, 2018:136). The Mishkeegogamang First Nation maintains that the damming and diversions are an ongoing historic land issue, particularly in connection to fishing and the destruction of wild rice habitat (Mishkeegogamang, 2010).

5.4 Post-Contact Historical Context

5.4.1 Early European Exploration

The first arrival of Europeans into northern Ontario and Lake Superior began in the early 1600s (Stuart, 2003). During the summer of 1610 two events heralded the beginnings of Indigenous and settler relations in the region. These were the passage of Etienne Brulé through the interior by canoe as far as northern Georgian Bay and the arrival of Henry Hudson in James Bay. While Hudson did not land on the western shore of James Bay, his arrival confirmed direct water access to the region from Europe was possible. Brulé’s trip was the catalyst for continued forays into the interior of the continent and was a key event that sparked what would become the fur trade. The Albany River was one of the first

interior waterways west of James Bay to be explored by Europeans, beginning with the French between 1657 and 1751. The British formally initiated trading in 1668, establishing Fort Rupert on the Rupert River. Moose Fort (Factory) and Fort Albany followed in 1673 and 1675, respectively. The French established Fort Kaministiquia in 1717, which replaced an earlier trading post built in 1679 and later became Fort William in 1807 (now the location of the City of Thunder Bay).

The Hudson's Bay Company was incorporated in 1670 with an official trading monopoly of the Hudson Bay Watershed. In 1720, with the establishment of the Hudson's Bay Company's first inland post, Henley House, a series of strategically positioned rival North West Trading Company and Hudson's Bay Company posts emerged along the riverbanks of the Albany River and vied for superiority in controlling the fur trade. Gloucester House at Washi Lake was the furthest inland post of the Hudson's Bay trading company on the Albany River and was in operation from 1777 to 1818 (Newton and Mountain, 1980). The Hudson's Bay Company also erected Marten Falls in 1782 as a temporary depot, with plans for further expansion. The Hudson's Bay Company competed with the North West Company until 1821, when North West Company was forcibly merged with the Hudson's Bay Company, giving the Hudson's Bay Company a true monopoly on the fur trade for the rest of the 19th century.

In the early 1900s, the Revillon Frères, also known as the Revillon Trading Company, established a fur trading post on the Pagwa River to challenge the dominance of the Hudson's Bay Company in the region. The Revillon Frères was a French fur trading company owned by Victor Revillon which started operations in Canada in 1899, and continued operations until it was ultimately bought out by the Hudson's Bay Company in 1936 (Innis, 1930:367; Nipigon Museum, 2012)

5.4.2 Henley House

The Hudson's Bay Company first established a sub-post on the north shore of the Albany River in 1720 as a response to competition from French fur traders (Innis, 1930:145). The first of the Hudson's Bay Company's interior posts, Henley House was fortified and established as a post to deter the encroaching French traders in 1741 and was re-established in 1759 after being attacked in 1755 (Long, 2010:479). After being demolished a second time, Henley House was rebuilt again in 1784 as a storage depot for the Hudson's Bay Company's Gloucester House (Long, 2010:479). Henley House was originally built on a gravelly island that was eroded by river activity over time. As a result, Henley House was moved further south in the winter of 1796-97 to the junction of the Kenogami, Nagagami, and Kabinakagami Rivers. As such, the location of Henley House was east of the Local Study Area in the District of Kenora, shown on **Figure A-1** as the O*ld Henley House*.

By 1818, Henley House was overshadowed in importance to the Hudson's Bay Company by Marten Falls post, although it remained operational until 1857 (Long, 2010:479). Archaeological surveys in the 1970s and 1980s resulted in the identification of the fort, designated at Henley House site (EhIb-3; Julig 1984). It is located on the north shore of the Albany River at the mouth of the Henley River and represents the first interior fort built by the Hudson's Bay Company (Julig 1988; Voorhis 1930). This location is a place known in Cree and Ojibway as Mamamattawa or "meeting of waters" (Hudson's Bay Company Archives B86/a/51 fo. 25, 19 -22 August 1796; Hudson's Bay Company Archives B86/a/52 fo. 6, 2 October 1796).

5.4.3 Gloucester House

Gloucester House, the furthest inland post of the Hudson's Bay trading company on the Albany River, is located on the northern shore of Washi Lake, just west of the Local Study Area (shown on **Figure A-1** as *Old Gloster House*) in the District of Kenora. It was established in 1777 by John Kipling when he and seven men ventured inland from Fort Albany to Washi Lake (Hudson's Bay Company Archives B78/a/2:4). A temporary log tent was erected, followed by a building of squared logs with a roof of birch rind (Hudson's Bay Company Archives B78/a/3:8). These efforts began an era of the construction of 27 structures, five palisades, bake ovens and charcoal kilns on the one-and-a-half-acre plot between the years of 1777 and 1818 (Newton & Mountain, 1980). Gloucester House was the site of a large boat building programme that would also operate shuttles of goods and people between Gloucester House and Marten Falls (Newton & Mountain, 1980). By 1795, the significance of Gloucester House declined, and orders were dispatched to abandon the site and relocate to Ernest House (Marten Falls) (Hudson's Bay Company Archives B78/a/22:16d). Gloucester House was primarily abandoned until 1812, when it again functioned to supply an outpost at Attawapiskat Lake to the north (Newton & Mountain, 1980). The Hudson's Bay Company permanently abandoned the Gloucester House site on Washi Lake after 1818. In 1976, the Historical Planning and Research Branch of the Ontario Ministry of Culture and Recreation (now Ministry of Citizenship and Multiculturalism) relocated to an unknown location the remains of the Gloucester House, including two sets of structural remains and over 200 historic artifacts (Golder, 2015).

A series of events including fluctuations in the trade market, changing environmental conditions, and the ongoing North West Trading Company and Hudson's Bay Company competition, determined the pattern of fort establishment along the Albany River and influenced the intermittent occupancy and operation of each of the companies' posts (Vyvyan, 1980). By 1821, with the amalgamation of the two companies, the river became the exclusive territory of the Hudson's Bay Company.

5.4.4 Marten (Martin's) Falls House

Marten Falls was believed to have been named after Humphrey Marten, the manager of York Factory post, the foremost Hudson's Bay Company trading post on Hudson Bay at the mouth of Hayes River (Handfield, 2020:437; Long, 2010:193). There is debate between sources about when the Marten Falls post was established. At the earliest, the Marten Falls post was erected in 1782 as a temporary depot, with plans for further expansion to serve as a permanent post (Innis, 1930:157; Newton and Mountain, 1980). According to a July 25, 1905, entry in the diary of Daniel George MacMartin, one of the Treaty No. 9 commissioners and an experienced miner, Marten Falls post was established by the Hudson's Bay Company in 1784 on the Albany River, about 115 miles upstream from Henley House (Long, 2010:114-5). Ernest Voorhis in his seminal book *Historic Forts and Trading Posts*, written for the Department of the Interior, claims that the post was not established until 1794 (Voorhis, 1930:109).

There is also debate about the long-term use of the post. Some sources claim that it was renamed Ernest House around 1795, then closed either in 1799 or 1809, before being re-opened again as Martin's Falls in 1818 due to an increase in fur trading activity in the region (Long, 2010:193; Handfield, 2020:437-438). The post is shown on **Figure A-1** as *Martin's Falls,* approximately 105 kilometres (65 miles) from the current location of the community. When the post was closed by the Hudson's Bay Company in 1924 and relocated to Ogoki Post (the current location of the community), the Martin's Falls name was also periodically conflated with Marten Falls First Nation when referencing the post.

The varied dates of opening, closing, and re-opening of the post reflect the conditions of the Hudson's Bay Company operation in the region. The post was first thought to be temporary, was maintained for some time, closed, reopened, relocated, renamed, and understandably confused by the 20th century. Changes in the company's intentions for the site, seasonal and long-term fluctuations in the fur trade, and changes in local management all affected how sources viewed the post, and when they claimed it was established, closed, or otherwise changed.

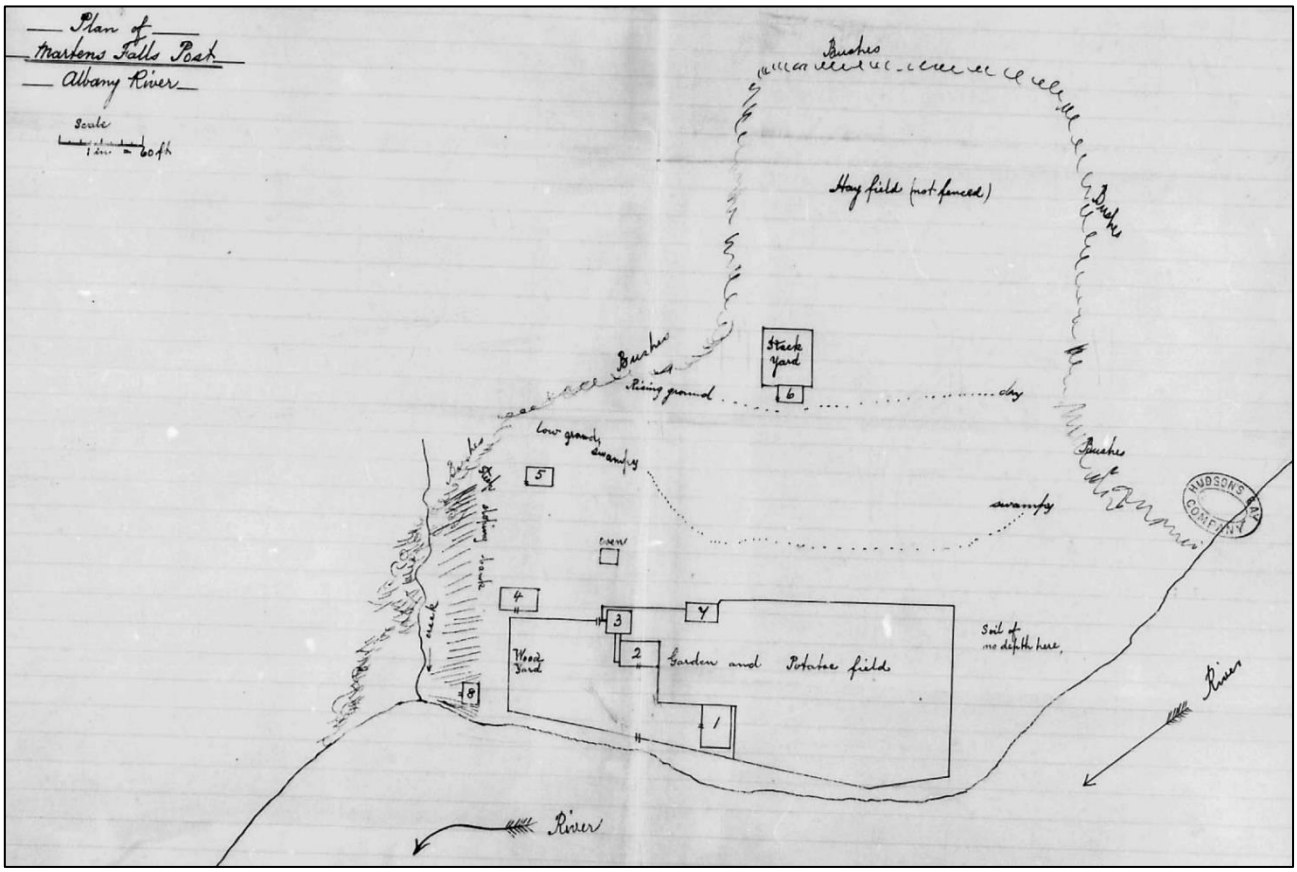
Over time, Marten Falls had several notable Hudson Bay managers whose perspectives varied when it came to the land surrounding the trading post and its Indigenous inhabitants. For instance, Jacob Corrigal, manager of Marten Falls post in the early 1820s, noted that the reason for the small returns of one Indigenous hunter was due to the fact that he had a large family, and his first priority was fishing to provide for them, which Corrigal viewed as honourable. Other post managers were more prejudiced towards local Indigenous peoples. In his journal, William MacKay, a manager at Martin's Falls ca. 1869-1871, initially exhibited contempt for the Indigenous hunters with whom he interacted, though his views changed over the years (Arthur, 1985:64).

George Barnston, a fur trader with the North West Company (later with the Hudson's Bay Company after 1821) was stationed at Marten Falls from 1834 to 1840. During this time, he studied the natural environment, collected insect specimens, and ultimately wrote a paper in 1840 detailing his observations on seasonal impacts to flora and fauna at the

trading post (Handfield, 2020:439). “Barnston’s Track across the Country to Martins Falls” is labelled on an 1834 Hudson’s Bay Company map, as well as “Cross Roads [sic] of Indians” which identifies two Indigenous trails in the area **(Figure A-1**). In 1878-1879 correspondence with Robert Bell, John Clark, who was a Hudson’s Bay Company clerk at Marten Falls from 1878-1881, wrote that “M. [Marten] Falls is the poorest place for Country produce that I’ve been stationed at since I entered the Service now almost 20 years.” This was Clark’s final posting before he retired to his native Scotland.

Despite Clark’s negative impression of Marten Falls’ agricultural yields, turnips, hay, and potatoes were all cultivated at Marten Falls Hudson’s Bay Company post, and cattle thrived in the location (Handfield, 2020:439). An 1895 Plan of Marten Falls post on the north side of the Albany River (**Image 1**), shows the trading post before it was relocated to the current community of Marten Falls at Ogoki. The image reveals that the post featured several buildings, including a store, dwelling house, kitchen, byre (cow shed), two hen houses, a shed, and a potato vault. It was estimated that 5 acres were cleared around the post. The cleared land included a garden and potato field, a wood yard, a stack yard, and a hay field to the north. It was surrounded by bushes and bounded by the Albany River to the south (Hudson’s Bay Company Archives B123/e/16 fo. 1d, 2d).

Image 1: Plan of Martens Falls Post, Albany River (1895)



Source: Hudson’s Bay Company Archives, B123/e/16 fo. 1d, 2d

The remains of the Marten Falls post (EjIp-1) were located and subject to limited AA in 1975 by the Historical Planning and Research Branch of the Ontario Ministry of Culture and Recreation (Golder, 2015). The location of the former Marten Falls post was east of the Local Study Area, in the District of Kenora.

5.4.5 Pagwa Post

With the completion of the National Transcontinental Railway from Quebec City to Winnipeg in 1915, the Revillon Trading Company sent a surveyor to determine the navigability of the Pagwachuan River from Pagwa to Fort Albany. The distance from the Pagwa Post to the English River Post (Mammamattawa) was about 137 kilometres (85 miles) to the south. The fur trade manager, Jean Romeo "Bob" Gauthier, built a combined house and store north of the railway and on the east side of the river, which formed the Pagwa Post. His duties included overseeing scow construction and river transport (Nipigon Museum, 2012). Supplies from Fort Albany were landed at Marten Falls on flat-bottomed river boats (Long, 2010:193). For instance, a map from the Hudson's Bay Company Archives dated March 1917 shows the Scow[1] Route from Pagwa to Albany. The hand-written caption notes that supplies for Marten Falls post are landed by Revillon Frères at "The Forks". Pagwa Post is located southeast of the Local Study Area (**Figure A-2**).

5.4.6 District Organization and History

The Local Study Area includes portions of the Districts of Kenora, Cochrane and Thunder Bay, Ontario. In Segment 1 – Ogoki Crossing, Alternative 1 extends northerly from Route Alternative Node B in the District of Thunder Bay, crossing into the western periphery of the District of Cochrane and continuing northerly to Route Alternative Node E in the District of Kenora. After converging from Route Alternative Nodes E to F, Alternatives 1 and 4 diverge from Nodes F to G, crossing the Albany River, which is the demarcation line between the Districts of Thunder Bay and Kenora. The remainder of the Local Study Area (from Route Alternative Nodes H to J) is contained within the District of Kenora, north of the Albany River (AECOM, Route Selection Methodology Memorandum, April 3, 2023).

5.4.6.1 District of Kenora

Kenora was formerly in the Severn district of the Hudson's Bay Company lands, which was later part of a vast tract of land known as the District of Keewatin (Bell, 1903:5). The portion of the Local Study Area north of the Albany River is contained within the District of Kenora. The name Kenora was made up after the first two letters of three communities on the shore of Lake of the Woods: Keewatin, Norman, and Rat Portage. After a boundary

1. A scow is a flat-bottomed barge used to transport cargo.

dispute with Manitoba along the western boundary of the district, the disputed area was retained by Ontario in 1878 (Mika & Mika, 1981).

Kenora is the largest district in Ontario in terms of geographical land mass. Situated in the northwest reaches of the province, it contains the most northerly boundary of the Province of Ontario on the shore of Hudson Bay. Kenora is bounded by the districts of Rainy River to the south, as well as Thunder Bay and Cochrane to the south and east, and the Province of Manitoba to the west. It is a resource rich area that comprises numerous lakes and extensive forests. The district was well travelled by fur traders of the Hudson's Bay Company and North West Companies, who were fur trading rivals until their amalgamation in 1821 (Mika & Mika, 1981).

The construction of the Canadian Pacific Railway from 1879-1884 resulted in European settlement of Kenora District, which had a population of 4,564 by 1881. The introduction of the Canadian Pacific Railway made it so that Hudson's Bay Company posts that were previously supplied by boat along the Albany-English River system came to instead be provisioned by rail (Wightman, 1997:64). The railway also opened the area for the lumber industry and the first sawmill was built in 1880. The discovery of gold in Kenora District led to a brief gold rush in the 1890s, where prospectors arrived by rail in the thousands to pan for gold in hopes of striking it rich (Mika & Mika, 1981). By the dawn of the 20th century, Keewatin was the largest Euro-Canadian village in Kenora District, with sawmilling and grain milling as its foremost industries and the promise of a future pulp and paper plant on the horizon (Wightman, 1997:151). As a result of this industrial growth, the population of Kenora District had reached 15,490 by the 1911 Census (Mika & Mika, 1981).

The land north of the Albany River in the Kenora District was known as the Patricia Portion, which became part of Ontario under the Ontario Boundaries Extension Act in 1912. In 1929-30, as part of the adhesions to Treaty No. 9, an additional part of the District of Kenora (Patricia Portion) was annexed (Long, 1978). Owing to the expansion of its northern boundaries and a rise in settlement, the population of Kenora District grew to nearly 22,000 by the 1931 Census (Mika & Mika, 1981). In 1933, a provincial committee recommended that much of the Patricia Portion of Ontario north of the Albany River be set out for the exclusive benefit of Indigenous people (Finch, 2020:184). Over time, European settlement of Kenora District continued further north as new mining and lumbering areas were opened. The discovery of uranium, iron, and other base metals resulted in the expansion of mining operations in the district (Mika & Mika, 1981). Despite these operations, the Patricia Portion remains remote and comprised predominantly of First Nations communities. Today, Kenora District encompasses 395,432 square kilometres and has a population of approximately 66,000 (Statistics Canada, 2023).

5.4.6.2 District of Thunder Bay

The District of Thunder Bay covers a significant expanse of territory in northern Ontario. It is bounded to the south by Lake Superior and the State of Minnesota, to the southwest by Rainy River District, to the north and west by Kenora District, and to the east by Algoma and Cochrane Districts. A portion of the Local Study Area south of the Albany River and west of the District of Cochrane is contained within the District of Thunder Bay. French explorers Radisson and des Groseilliers navigated the north shore of Lake Superior in 1659 and the first trading post in Thunder Bay District was established in 1679, which was known as Fort William under the North West Company by 1807, now the site of the City of Thunder Bay. To the north of Fort William, a small settlement took shape around a military staging area that became known as “The Station” by 1857 and was later named Port Arthur. Silver mines were discovered near Port Arthur in 1868, which crystallized its status as the second most important population centre in the region (Mika & Mika, 1983).

Improvements to the transportation network by the end of the 19th century, including the introduction of the Canadian Pacific Railway, brought a number of settlers to the Thunder Bay area (Mika & Mika, 1983). As a result, Thunder Bay was established as a territorial district in 1871 but it did not become a judicial district until 1914 (Rayburn, 1997). The paper industry commenced in the Thunder Bay area with the establishment of the Great Lakes Paper Co. Ltd. in 1924. Mining for iron ore began in Thunder Bay District in 1939 to fulfill the wartime need for steel (Mika & Mika, 1983).

The population centres and major transportation routes in Thunder Bay District are predominantly concentrated around the northern shore of Lake Superior. For instance, the City of Thunder Bay, which was formed from the amalgamation of the cities of Port Arthur and Fort William, along with the municipalities of Neebing and McIntyre, on January 1, 1970. Most of the communities in Thunder Bay District are located along Highway 11, though secondary highways off Highway 11 provide access to more remote northerly communities. The northern portion of the district is known for its scenic beauty and countless lakes and streams (Mika & Mika, 1983). Today, Thunder Bay District encompasses approximately 102,895 square kilometres and has a population of 146,862 (Statistics Canada, 2023).

5.4.6.3 District of Cochrane

The Cochrane District was created in 1921 from parts of the districts of Timiskaming and Thunder Bay. It was named after Frank Cochrane, who served as the Ontario Minister of Lands, Forests, and Mines and as Minister of Education in the early 1900s. It is bounded by James Bay and the Albany River to the north, to the east by the province of Quebec, to the south by the Districts of Timiskaming, Sudbury and Algoma, and by the District of Thunder Bay to the west (Mika & Mika, 1977). The portion of the Local Study Area south of the Albany River and east of the District of Thunder Bay is contained within the District of Cochrane. The first Europeans in the Cochrane District were fur traders for the Hudson’s

Bay Company, who established a network of trails and trading posts, the first of which was a fur trading post at Moose Factory (Mika & Mika, 1977).

Initial discussions surrounding the construction of a railway from North Bay to James Bay began in 1884, and the line of the Temiskaming and Northern Ontario Railway (later the Ontario Northland Railway) between North Bay and New Liskeard was completed in 1900, and extended north to Moosonee in 1932. As a result of railway access, mining and timber for pulp and paper mills emerged as the primary industries of Cochrane District. Gold was the central focus of mining ventures, especially in the vicinity of Porcupine Lake, where several mines were established (Mika & Mika, 1977).

In addition to the railway, one of the foremost transportation arteries in Cochrane District is Highway 11, which travels westerly through the district and ultimately turns south to connect with Highway 17 at Nipigon. Smaller secondary highways connect Highway 11 with remote northern communities (Mika & Mika, 1977). The foremost populations centres are located in the southern portion of the district, including Timmins, Cochrane, and Kapuskasing. Today, Cochrane District spans approximately 139,784 square kilometres and has a population of 77,963 (Statistics Canada, 2023).

5.5 Treaty No. 9 (1905-1906 and 1929-1930)

The Local Study Area is located in the area of Treaty No. 9 (also known as the James Bay Treaty) and Treaty 9 Adhesions made in 1929-1930 (**Figure A-3**). Treaty No. 9 covers land in northern Ontario that lies north of the Robinson-Superior and Robinson-Huron Treaties of 1850, up to the Quebec border to the east, the territory covered by Treaty 3 to the west, and Hudson Bay and James Bay to the north (**Figure A-3**). It was written without Indigenous input, and their understanding of the treaty was questionable since many signatories were unable to read or write in English (Morrison, 1986). Furthermore, the Treaty Commissioners presented Indigenous signatories with an incomplete draft of the Treaty No. 9 package, which was later back-dated by government officials (Tsuji and Tsuji, 2021: 381, 388). As revealed by the diaries of the treaty commissioners, misleading oral promises were made to Indigenous leaders to allay their concerns about signing the treaty. Their understanding was that signing it would help them preserve their traditional lifeways (Government of Ontario, 2023). Treaty No. 9 was first signed in 1905 between various Northern Anishinaabe (Ojibway), Cree (including the Omushkegowuk) and other Indigenous Nations (Algonquin) and the Crown. Treaty No. 9 commissioners Duncan Campbell Scott, Samuel Stewart, and Daniel George MacMartin travelled to the northern reaches of Ontario, north of the 50th parallel, in the summer of 1905 (Long, 2010:391). They visited the Hudson's Bay Company posts at Osnaburgh, Fort Hope, Marten Falls, English River, Fort Albany, and Moose Factory, before ending their treaty signing trip for the year at New Post, just south of the 50th parallel (Long, 2010:391-392).

By 1902, Revillon Frères was competing with the Hudson's Bay Company at most of their trading posts in far northern Ontario. As such, when the Hudson's Bay Company hosted treaty commissioners for the signing of Treaty No. 9 at their trading posts, they had control over the geographical scope of the treaty, which gave them an economic advantage over their competitors (Long, 2010:393). Indeed, the Hudson's Bay Company had a pivotal role in negotiating Treaty No. 9 and without their involvement, the government would have taken significantly longer to navigate the treaty (Calverley, 2006:31). Almost every original Treaty No. 9 reserve location was selected close to a Hudson's Bay Company post since the company sought to benefit economically and politically from the treaty. Additionally, Indigenous groups located near Hudson's Bay Company posts had developed close economic and social ties with these posts during the 19th century due to the fur trade (Calverley, 2006:32).

Treaty No. 9 included stipulations that Indigenous signatories be allowed to "pursue their usual vocations of hunting, trapping and fishing throughout the tract… subject to such regulations as may from time to time be made by the government of the country, acting under the authority of His Majesty, and saving and excepting such tracts as may be required or taken up from time to time for settlement, mining, lumbering, trading or other purposes" (Long, 1978:23). However, as with the location of reserves, the pursuit of Indigenous interests was subordinated to the interests of business and the state. For instance, the Treaty No. 9 Commissioners ensured that no reserve lands were located on potential sites for water-power generation, thus opening to door to the development of dams on the Albany and Moose River Watersheds without consultation of local Indigenous communities (Tsuji and Tsuji, 2021: 388; see **Section 5.3.3**)

5.5.1 Treaty No. 9 – The Formation of Marten Falls Reserve

In 1905, the Marten Falls post was host to one of the many negotiations and signing events associated with the passing of Treaty No. 9 (Long, 2010; Vyvyan, 1980). The treaty commissioners viewed Marten Falls as an unimportant Hudson's Bay Company post and commented that the hunting grounds were inferior to those at Osnaburgh or Fort Hope (Long, 2010:198). At the time of the signing, MacMartin described the Marten Falls Hudson's Bay Company post as situated on a high clay bank about 25 feet above the foot of the rapids, referred to as falls (**Image 2**). He noted the fertile soil and a well-cultivated garden at the post featuring potatoes and onions. There was an old ship cannonade set up outside (the post manager) Mr. Iserhoff's home (Long, 2010:197).

Image 2: Marten Falls, Albany River, July 15, 1905

Source: Duncan Campbell Scott fonds, C 275-3-0-2 (S 7534) Archives of Ontario, I0010586

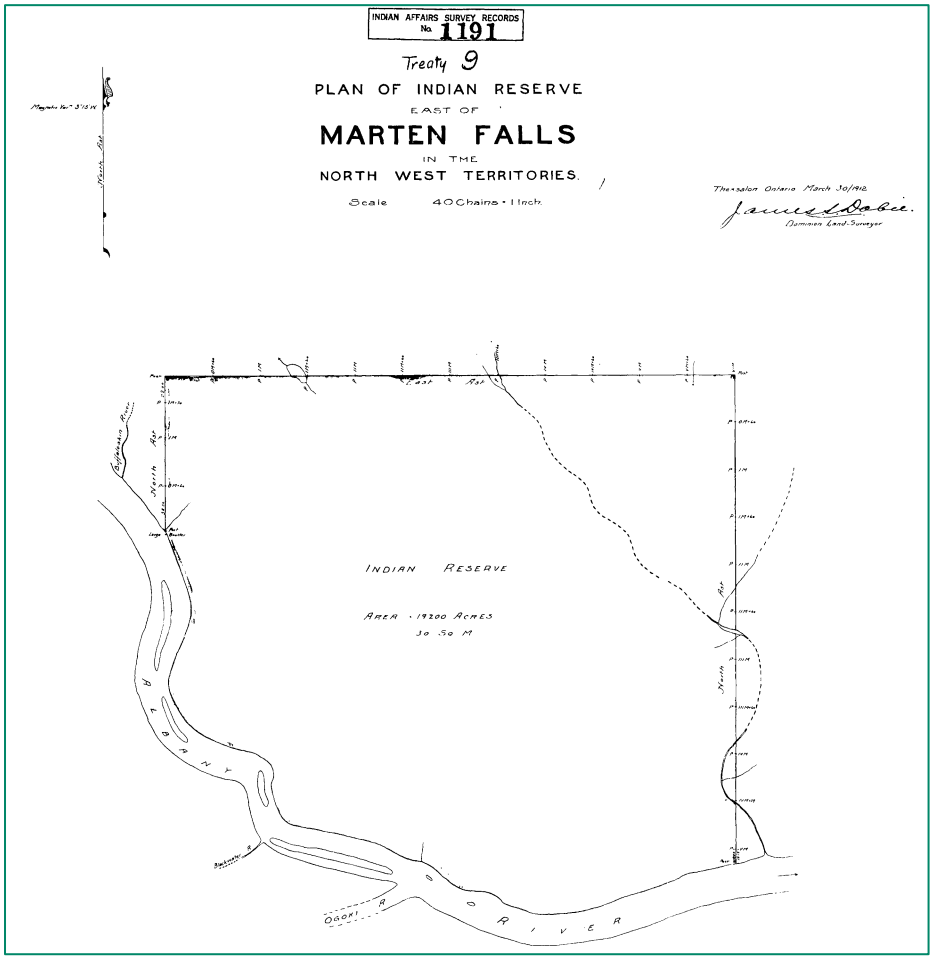
The Marten Falls band, now Marten Falls First Nation, was recognized by the 1905 treaty commissioners (Long, 2010:388). Under the terms of Treaty No. 9, the local band elected William Whitehead as their chief as well as two councillors: William Coaster and Long Tom Oatsames (Long, 2010:198). The reserve sites were chosen during treaty negotiations and reserve descriptions were noted in the Treaty No. 9 report, but the government surveyor and the local Hudson's Bay Company post manager later confirmed the boundaries (Calverley, 2006:47-49). Surveyors even had the latitude to change the site of the reserve locations based on feedback from the local Indigenous bands and their own judgment, as was the case with Marten Falls.

On July 24, 1911, Ontario Land Surveyor James S. Dobie began the journey by canoe from Fort Hope to the Hudson's Bay Company post at Marten Falls, arriving two days later (Dobie, 1911:18). He held a conference with the Chief and councillors after looking over the site of the proposed reserve. Dobie found that the Indigenous officials were anxious to have the reserve located on the Albany River, opposite the mouth of the Ogoki River. They claimed that the territory described in the Treaty [Treaty No. 9] was so wet that it was useless for agricultural purposes and that there was no timber of any value on the land. Dobie states that his own observations confirmed the accuracy of their claims but adds that there is a valuable water source at Marten Falls which may some day be of great importance. He notes that there is a considerable stream on the north side of the Albany River, which empties into the rapids. Because of this configuration, Dobie acknowledges that it would be a difficult matter to develop this power without flooding the stream and in turn, a portion of the reserve. As such, he instead surveyed the reserve to the east down the Albany River at the request of the Indigenous officials. The west boundary of the reserve intersects the Albany River below the mouth of the Buffaloskin River (Dobie, 1911:19-20). When Mr. Iserhoff, the Hudson's Bay Company officer in charge at the

Marten Falls post returned from his trip, Dobie explained the change in the location of the reserve to him and Dobie writes that he entirely agreed that it was a desirable change (Dobie, 1911:21). The survey was completed on the evening of Saturday, August 5, 1911 (**Image 3**). Dobie notes that the land is sufficient by rolling to afford drainage and remarks that proper drainage would render a large part of the reserve fit for cultivation (Dobie, 1911:27). He also identifies a hill that was a jack pine ridge near the northeast corner of the reserve (Dobie, 1911:27-28). He describes the reserve at Marten Falls as:

> *"largely level or slightly rolling swampy land sparsely lumbered with small spruce. Close to the Albany River the land is clay and loam of good quality and for a short distance back from the river, is well timbered with large spruce, poplar, balsam, and tamarac. Further back the land becomes very wet and is covered with a heavy growth of moss, which retains the moisture and keeps the ground cold so that the growth of the timber is stunted."*

Image 3: Treaty 9 Plan of Marten Falls Reserve (Dobie, 1911)



Source: Crown-Indigenous Relations and Northern Affairs Canada

The *Ontario Boundaries Extension Act* (1912) resulted in the Patricia Portion (land north of the Albany River) becoming part of Ontario. This was met with concern from Indigenous peoples living in the area, who began to petition the government for a treaty shortly thereafter in an effort to protect their lands from Euro-Canadian development (Government of Ontario, 2023). In 1913, one year after the boundaries of Ontario reached their current state, a government memorandum stated that there were no plans to build a railway through the district or extend the boundaries of Treaty 9, since no extensive mining operations or European settlements were located north of the Albany River (Long, 1978:15-16). However, the federal government changed their tune by the early 1920s and began to set their sights on resource development in the region. Beginning in 1923, mining activities north of the Albany River were the impetus for formal adhesions to Treaty No. 9, made in 1929-30, which resulted in an extension to the James Bay Treaty and communities north of the Albany River being added as signatories (Attawapiskat, for example).

The community that coalesced around Marten Falls trading post existed for over 250 years before the post was closed in 1924. The community was then relocated to their current location on the reserve, as shown in the Treaty No. 9 survey conducted by Dobie in 1911. The relocation of the Marten Falls post 105 kilometres (65 miles) downriver to Ogoki in 1924 was a strategic move by the Hudson's Bay Company to compete with Revillon Frères at Pagwa Post (Long, 2010:194).

5.6 Government Policy & Indigenous Communities After Treaty No. 9

Dr. Peter H. Bryce, Chief Medical Officer of the Department of Indian Affairs, published an exposé in 1922 titled *The Story of a National Crime: Being a Record of the Health Conditions of the Indians of Canada from 1904 to 1921*, which highlighted unhealthy conditions in residential schools and advocated for more self-reliance among northern Indigenous groups, urging them to take up agriculture and steer clear of congregating at Hudson's Bay Company posts or villages in the summer months. Bryce's report angered the Department of Indian Affairs and was downplayed (Long, 2010:90). Ultimately, the government enacted legislation in the following decades that enforced a sedentary lifestyle and government dependence for local Indigenous groups, which was in opposition to Bryce's recommendations. By the onset of the Great Depression, colonial activity such as rail development and resource exploitation increasingly impacted traditional lifeways of the Indigenous inhabitants of northern Ontario. The mobility of Indigenous populations had ceased by 1930 due to the establishment of permanent reserves and the introduction of wage employment in these communities (Wightman, 1997:209).

The 1960s was a decade of change for Indigenous peoples in northern Canada. In response to protests over residential schools, the Department of Indian Affairs built schools near the Hudson's Bay Company posts at Fort Hope, Lansdowne House, and Webequie in 1962. Until this point, members of these communities still lived primarily

nomadic lifestyles except in summer when they camped near trading posts, but The Department of Indian Affairs mandated school attendance at the threat of penalties such as ending family-allowance payments. As a result, permanent settlements were established by the schools (Driben & Trudeau, 1983-26-7). The creation of villages led to changes in the political systems of band communities, since permanent, sedentary communities required a different organizational structure, including committees that were established to liaison with federal and provincial officials (Driben & Trudeau, 1983:26-7).

The 1969 Statement of the Government of Canada on Indian Policy, colloquially known as the 'White Paper', was a government policy that attempted to revoke prior legislation on Indigenous peoples in Canada, including treaties and the *Indian Act*, to assimilate them into Canada (Lagace & Sinclair, 2020). It was met with widespread criticism from Indigenous groups, such as the Indian Chiefs of Alberta who famously issued 'The Red Paper' in response. They argued that the *Indian Act* should not be repealed until all outstanding land claims were settled (Driben & Trudeau, 1983:31). Although the backlash resulted in the withdrawal of the White Paper in 1970, three key parts of the policy were carried out: a commissioner was appointed to settle Indigenous claims, large sums of money were allocated for Indigenous economic development, and several government departments began providing services to Indigenous people for the first time (Driben & Trudeau, 1983:33).

Skills development and training programs were offered in the village of Fort Hope in the 1960s and 1970s, with the goal of preparing inhabitants to leave the reserve and get a job in the city (Driben & Trudeau, 1983:34). However, they ended up becoming employment opportunities in and of themselves (Driben & Trudeau, 1983:46). By 1975, White Paper job training and community development programs were one of the most important sources of disposable income in Fort Hope (Driben & Trudeau, 1983:45). Job creation programs were controlled by the government instead of by individuals in the local Indigenous communities; therefore, the lack of ownership led to government mismanagement and neglect (Driben & Trudeau, 1983:77).

Government welfare programs of 1960s, including those enacted as part of the 1969 White Paper, challenged traditional lifeways of Indigenous groups in Ontario's far north (Driben & Trudeau, 1983:9). The social service initiatives and policies of the White Paper intended to promote economic independence ended up having the opposite effect in northern Indigenous communities and instead promoted government dependency and control (Driben & Trudeau, 1983:36). They reflected the paternalistic viewpoint of government agencies at the time, who did not consult with Indigenous groups to establish programs that best served their interests (Driben & Trudeau, 1983:10). Since that time, the 1996 Report of the Royal Commission on Aboriginal Peoples and the United Nations Declaration on the Rights of Indigenous Peoples have underscored that Indigenous peoples have the right to self-determination, which includes exercising the right to autonomy or self-government (Royal Commission on Aboriginal Peoples, 1996; Office of the United Nations High Commissioner for Human Rights, 2013).

5.7 Trapping & Traplines

Fish and game were found in different locations depending on the time of year, which is why the establishment of large, permanent settlements was not a hallmark of early Indigenous societies. Instead, seasonal campsites were essential to maintaining a transitory way of life (Driben & Trudeau, 1983:14). Initially, the Cree were the foremost trading partners of the Hudson's Bay Company, whereas French fur traders encouraged the Ojibway to partner with them in the 18th century in exchange for new technologies. As a result, many Ojibway moved north to pursue trapping and trading. Ojibway travelled in small, mobile groups while hunting or trapping, which allowed them to move from trading post to trading post (Driben & Trudeau, 1983:17).

The amalgamation of the North West Company and Hudson's Bay Company in 1821 reduced competition between fur traders and Indigenous groups lost the economic benefit of travelling from one trading post to another to obtain a better deal (Driben & Trudeau, 1983:18). With this merger, the Hudson's Bay Company attained a monopoly over the fur trade industry, which resulted in a decline of autonomy for Indigenous trappers (Finch, 2020: 178-9). Around this time, large game animals began to disappear in northern Ontario and food shortages made local bands reticent to venture far from the Hudson's Bay Company posts, where supplies were readily available. By the turn of the 20th century the large game animals had returned, but the European demand for furs had subsided (Driben & Trudeau, 1983:18).

Ontario annexed lands north of the Albany River in 1912. Before then, there were only a few federal game laws that applied to the area, which was largely self-governed (Finch, 2020: 181). Provincial game laws did not originally apply to Indigenous people, which changed with the introduction of the *Ontario Game and Fisheries Amendment Act* (1916), although this act did not designate trapline areas (Finch, 2020: 182-3). Traplines refer to the territories in which trappers use to obtain furs for commercial sale, with Indigenous traplines generally supporting trappers from one or more related families (Finch, 2020: 178).

In 1946-1947, new game regulations, including the Registered Trapline System, were issued, and subsequently introduced to northern Ontario in 1948. The Registered Trapline System was a land tenure system designed to enforce control of wildlife populations and the ecosystems they inhabit (Finch, 2020: 189-190). Trapline areas were created based on watersheds, which traditional trapping territories tended to follow; therefore, this model was intended to result in the least impacts to traditional Indigenous lifeways (Finch, 2020: 183). However, the system was met with resistance from Indigenous populations due to its lack of flexibility and the economic challenges it posed during a transitionary period, when more options for wage labour and social assistance were starting to become available (Finch, 2020: 189-190).

Since the Registered Trapline System was introduced, Indigenous harvesting was reduced by factors like the introduction of new wildlife laws, increased wage labour opportunities, and ecological impacts (Finch, 2020: 186-7). Due to the challenges of the trapline system, Indigenous trappers began to ignore the trapline boundaries and under-report their fur yields to game wardens by the 1960s (Finch, 2020: 187-8). With the opening of local schools in 1962, men were faced with the choice of remaining with their families in permanent settlements and searching for a different source of income or working the traplines away from their families. In response, many chose to remain in the settlements to reunite their families in the wake of the residential school system (Driben & Trudeau, 1983:27). This resulted in the decline of trapping and an increase in government dependence, since there was not much work available in the settlements (Driben & Trudeau, 1983:28).

The traditional fur economy of far northern Ontario suffered another serious impact as the result of the European reaction to the use of the leg hold trap by the end of the 20th century (Wightman, 1997:408). In June 1999, Canada ratified the 1997 Agreement on International Humane Trapping Standards, which enacted animal welfare standards for traps and mandated trap certification for use on certain Agreement on International Humane Trapping Standards listed species. It also prohibited the use of the steel-jawed leg hold restraining traps for use in capturing species such as beaver, muskrat, raccoon, coyote, and wolf. The objective of this agreement was to meet European Union regulations on humane trapping and thereby maintain access to the European fur market for Canadian trappers (Environment and Climate Change Canada, 2022). Ultimately, trap certification and further restrictions surrounding the use of traps on species that were historically harvested by Indigenous peoples added more bureaucratic red tape to a fur trade industry that was already in decline.

Three provincial tribal organizations representing Treaties 3, 5, and 9 took control of their trapline licensing from the Ontario Fur Managers Federation, who were left licensing only non-Indigenous trappers. In 2005, Nishnawbe Aski Nation (which represents Mattawa First Nations) entered into an agreement to oversee fur management in its territory, including licensing and trapline registration (Finch, 2020: 188). While the Registered Trapline System still exists (**Figure A-4**), it is in a state of flux. Trapper licensing and land management is now cooperatively controlled by government regulators and Indigenous organizations, while discussions are ongoing when it comes to changing the legislative framework behind the Registered Trapline System (Finch, 2020: 190).

5.8 Mining & Lumber

The fur trade in northern Ontario began to decline by the late 19th and early 20th centuries, but this decline corresponded with an increase in other extractive activities. Due to the introduction of railways, including the Canadian Pacific Railway in the 1880s and the Temiskaming and Northern Ontario Railway in 1902, prospectors and government

surveyors eager to extract resources from the previously isolated region had increasing access to northern Ontario (Calverley, 2006:31). Most of the reconnaissance for mineral deposits in Ontario was conducted by provincial explorer E.B. Borron until the province created its own Bureau of Mines in 1892 (Wightman, 1997:104-105). In 1899, Ontario ordered a resource evaluation of all lands north of the Canadian Pacific Railway to the provincial boundaries. This study highlighted untapped potential in lumber and mining resources (Wightman, 1997:105).

Federally, Robert Bell of the Geological Survey of Canada led field studies exploring for mineral resources in northern Ontario up to the shores of James Bay (Wightman, 1997:105). An 1886 Geological Survey report on the exploration of a portion of the Attawapiskat and Albany Rivers by Robert Bell formed a chapter in the *Report of the Bureau of Mines, 1912. Vol. XXI, Part II. Reports on the District of Patricia Recently Added to the Province of Ontario. Compiled and Edited with an Introduction by Willett O. Miller, Provincial Geologist* ("The Miller Report"). During his exploration, Robert Bell noted the presence of Indigenous trails, noting the following location for the first trail:

> *"Below Nolin's island, at the junction of the Boulder river, the Attawapiskat flows eastward and is interrupted by three rapids in the first four miles. Its course then forms a semi-circle to the southward, four miles in diameter, and has marshy lagoons on either side. From the most south-easterly of these, a trail leads directly to Martin's falls on the Albany. An intelligent Indian, who had just come from that trading post, informed me that the trail keeps the same bearing all the way, and on plotting it upon the map of my surveys of the two rivers, the position of the post is found to be directly in the line of this trail. The distance is about sixty miles, and the Indians report the country as level and covered with sphagnum. The trail is said to be crossed by five streams flowing into the Attawapiskat and only one into the Albany."*
>
> *(Miller Report, 1912:71-73)*

Bell subsequently referred to a 30 mile stretch of the Attawapiskat River east of the confluence of the south branch of the Attawapiskat River and the north branch flowing out of Attawapiskat Lake. Based on this stretch of the river, Bell noted a second Indigenous trail leading to the Marten Falls trading post:

> *"In the last eight miles of the above thirty miles stretch the river divides itself among numerous alluvial islands, one group of which (ten or twelve in number) is about two miles in breadth. Another Indian trail to Martin's falls leaves the river at the termination of this stretch. The distance is about fifty miles and the country traversed is described as a sphagnum swamp similar to that crossed by the trail to the same post which has been mentioned as leaving the Attawapiskat higher up."*
>
> *(Miller Report, 1912:73)*

Though the above observations note the start and end points of the two trails, their exact routes are unknown. Given the marshy and rugged terrain in the area, it stands to reason that the path of these trails would not follow a straight line. William McInnes, when conducting his survey of the Winisk River alongside four Indigenous guides, reached it by using the route northwards from Eabemet Lake that was previously taken by Robert Bell in 1886 (Bell, 1904:5). McInnes also used Bell's prior surveys of the Albany and Attawapiskat rivers for his 1903 Geological Survey of Canada map (**Figure A-5**).

5.9 The Métis in Northern Ontario

As early as the late 1650s, intermarriage between French fur traders and Indigenous women in the Upper Great Lakes Region began to occur. These marriages helped maintain trade relationships by developing family ties between the traders and their customers, with families of mixed ancestry acting as liaisons for European and Indigenous economic cooperation (Gale, 2005:3-4). Such connections were a precursor to the establishment of Métis communities over the subsequent centuries

"As occurred in other parts of west-central North America (also known as the historic Northwest), distinct Métis communities emerged in various areas surrounding the Upper Great Lakes and along the waterways and fur trade routes of what is now northern Ontario beginning in the late 1700s. These communities, along with other Métis communities that emerged in other parts of the historic Northwest, developed their own shared customs, traditions, and collective identities rooted in their special Aboriginal relationship to the land, and a distinctive culture and way of life." (Peterson, 1978; Peterson & Brown, 1985:39; Royal Commission on Aboriginal Peoples, 1996: 242-243).

The commercial alliance that was the fur trade birthed a Métis society whose distinctiveness was apparent to outsiders (Peterson & Brown, 1985:39). The terms "half-breed" and "Métis" started to appear in travel literature following the War of 1812 (Peterson & Brown, 1985:39). Subsequently, a "unique hybridization" of Indigenous and European cultures became recognizable to observers by the 1820s-1830s (Peterson & Brown, 1985:39). By this time, substantial populations of people living at Hudson's Bay Company posts born from the union of European fur traders and Indigenous women (Long, 1985:139). The Hudson's Bay Company depended heavily on the Métis, who made up nearly seventy percent of its labour force in the Lake Superior area (Gale, 2005:12).

As well as making up most of the labour force, Métis held important roles within the Hudson's Bay Company. For instance, a Métis individual named George McPherson served as manager at Marten Falls (ca. 1842) and was in charge of Osnaburgh post from 1843-1851, later serving as postmaster from 1851-1856 (Arthur, 1985: 66). The Goodwins were another example of a Metis family (Indigenous and English) who worked for the Hudson's Bay Company. A member of the family named Tom Goodwin was sent to Marten Falls in 1853 as temporary help. Notably, Tom Goodwin was not referred to as an "Indian"

or “Métis” by the manager of the post at the time, despite his heritage (Arthur, 1985: 70). In fact, Hudson’s Bay Company post managers rarely distinguished between Indigenous and Métis workers in their journals (Arthur, 1985: 69). Sir George Simpson, governor of the Hudson’s Bay Company, clarified their definition of “Indian” in 1856, as referring to those raised in and continuing to live in the forest, as opposed to those brought up in Hudson’s Bay Company posts who should be instead noted as “whites or half-breeds and not Indians” (Arthur, 1985: 70). As such, the concept of “Indian” identity in the view of the Hudson’s Bay Company was based on cultural as opposed to racial traits (Arthur, 1985: 71).

Another notable Métis was a missionary named Thomas Vincent who first visited Marten Falls in 1858 and toured all the trading posts along the Albany River for the next forty years. He was the grandson of two Hudson’s Bay Company officers and two Indigenous women, yet managers of the Hudson’s Bay Company posts did not write of him as Indigenous or Métis, and instead focused on his role as a missionary of the Anglican church (Arthur, 1985: 65).

Due to the dearth of French language speakers in the area, the term “Métis” was not always used in northern Ontario to describe peoples of mixed Indigenous-European ancestry (Long, 2010:395-6). E.B. Borron, Ontario’s Stipendiary Magistrate and provincial explorer, noted in his report for 1879-1880 that “a large proportion of the natives appeared to have more or less European blood in their veins” then in a later report noted that “The European element is almost entirely Scotch, English and Scandinavian. There are very few French Métis” (Long, 1985:144).

In the 1800s, these Métis communities in northern Ontario asserted their collective identity, rights, and interests through political action and advocacy, including the 1849 Mica Bay Incident, Métis petitions from Moose Factory in 1893 and 1905, and the negotiation of a collective Métis adhesion to Treaty 3. These historic Métis events in Ontario have long been recognized, including by the Royal Commission on Aboriginal Peoples." (Royal Commission on Aboriginal Peoples, 1996: 242-243). As part of that assertion of identity, the Métis attempted to be included in the initial signing of Treaty No. 9; however, the treaty commissioners were not given any instructions for handling “half-breed” claims (Calverley, 2006:33; Long, 1985:146). The postmaster at Marten Falls in 1905 (the time of the signing of Treaty No. 9) was Sam Iserhoff, who was born in Quebec and of Cree-European descent (Long, 2010:194). George Linklater, the postmaster at Attawapiskat, was also of Scottish-Cree heritage and signed Treaty No. 9 (Long, 1985:147). Of the 375 Indigenous peoples included in Treaty No. 9 signing at Fort Albany, over 30 were Métis and yet obtained “Indian Status” (Long, 1985:146).

In *R. v. Powley*, 2003, the Supreme Court of Canada determined that the term “Métis” does not apply to all individuals with mixed Indigenous and European heritage but instead refers to distinctive peoples of mixed ancestry with their own customs and a unique group

identity. The Powley decision established criteria for what constitutes Métis rights and for who may exercise those rights under the Powley test. Ultimately, the Powley decision raised awareness to the presence of Métis communities in Ontario and laid the groundwork for discussions on Métis self-determination.

5.10 Historical Map Review

A June 1834 map obtained from the archives of the Hudson's Bay Company **(Figure A-1**) illustrates several posts and trails that were present in the Local Study Area at that time. The "Martin's Falls" Hudson's Bay Company post is shown in its original location on the east bank of the Albany River, approximately 105 kilometres west of its present location. The "Old Gloster House" is shown further west along the Albany River on the northern shore of Washi Lake, which is labelled as Wakkacebeton Lake. The "Oukakee" (Ogoki) River is shown as small tributary of the Albany River. Extending north from the Albany are two "Cross Roads of Indians", or Indigenous trails. The westernmost of these trails extends north from the Albany River to an area labelled as "Goose Stands" on the Attawapiskat River. The eastern trail leads north to an area labelled as Anawashquasinnuk. Tickmeg Creek is shown at the southern end of the Local Study Area.

The 1903 Geographic Survey of Canada Map (**Figure A-5**) identifies many details present at the turn of the 20th century. "Martin Fall" and the associated Hudson's Bay Company post continue to be showing in their former location on the east bank of the Albany River. Three portage routes are identified on the map, located on the Albany River southwest of the Marten Falls Hudson's Bay Company post. On the north bank of the Albany River, northeast of the Marten Falls Hudson's Bay Company post is noted "First Exposure of Limestone". Further east, the Ogoki River and Blackwater River are labelled. A later Hudson's Bay Company Map from 1917 **(Figure A-2**) continues to show Marten Falls post at its original location but does not show the trails marked on the earlier map.

By the early 1990s the Local Study Area had assumed its present form, and few changes are noted between the 1993 Ministry of Natural Resources Map (**Figure A-6**) and the present-day.

5.11 Summary

The background research conducted for this report indicates the Study Area is a landscape associated with traditional Indigenous land use and historic economic activity related to the fur trade. The Albany River is part of a well-known travelled route from Lake St. Joseph to James Bay. Indigenous land use of the area and travel routes through the Study Area likely persisted for millennia prior to fur trade. Three portage routes are historically mapped through the Study Area. Smaller fur trading posts were established on the upper reaches of the Albany River until 1821, when the Hudson's Bay Company and the Northwest Company merged. In the early 1900s, the Revillon Frères established a fur

trading post on the Pagwa River to compete with the Hudson's Bay Company. They transported goods by way of the Albany River through the Study Area and supplies for Marten Falls post were landed by Revillon Frères at "The Forks." Traditional Indigenous travel routes were used in the initial period of Euro-Canadian geological exploration. The Ogoki River, a tributary of the Albany River, was partially diverted during the Second World War, which resulted in lasting ecological impacts to the Albany River Watershed and to those who depend on it for life sustaining resources. Cultural heritage areas in the watershed, including spiritual and sacred areas as well as places of habitation, in addition to locations related to traditional cultural practices such as burial, harvesting, and resource use, were historically located and continue to be located within the Study Area.

6. Study Area Existing Conditions

Existing conditions refers to the present-day conditions of the environment potentially impacted by the Project. Existing conditions serve as a reference against which changes due the Project are measured. The existing conditions of the Local Study Area are described in this section based on a combination of information obtained through engagement and consultation (including Indigenous Knowledge), desktop assessment, and a ground-level field investigation of the Marten Falls First Nation community (see **Section 3.2**).

6.1 Physical Description of the Cultural Heritage Local Study Area

The Cultural Heritage Local Study Area as defined in **Section 2.2.2** traverses the boundary between the Ontario Shield and Hudson Bay Lowlands Ecozones. These zones are defined as part of an Ecological Land Classification system employed by the Government of Ontario to provide broad-scale ecological context for natural asset management and planning activities within the province. At the broadest levels, this system organizes the provincial land base by ecozones, which are divided into ecoregions. ecoregions are further divided into ecodistricts, with each region and district labelled with a unique alphanumeric identifier (Crins et al., 2009). Ecozones and ecoregions are defined by major climatic and bedrock geology zonation, while ecodistricts are defined by physiographic units, dominant landforms, and geological features (Wester et al., 2018). As it traverses between the Ontario Shield and Hudson Bay Lowlands ecozones, the Local Study Area passes through three ecodistricts within two ecoregions. These units represent a general change in the landscape between the south and north ends of the Local Study Area. Figure 8-13 of the Environmental Assessment / Impact Statement shows the locations of the relevant ecozones, ecoregions, and ecodistricts in relation to the Local Study Area. A description of the proposed path of the Community Access Road through this landscape, as it appears in the overall Environmental Assessment / Impact Statement (Section 8.2.4.1: Landscape Ecology) is reproduced below.

> *The Community Access Road intersects two of Ontario's ecozones: the Ontario Shield and the Hudson Bay Lowlands (Crins et al., 2009). Approximately 85 percent of the existing conditions Local Study Area occurs in the Ontario Shield ecozone, and 15 percent occurs within the Hudson Bay Lowlands. However, much of the existing conditions Local Study Area contained within the Ontario Shield ecozone has similar geomorphological characteristics to the Hudson Bay Lowlands. The details of the two ecozones are summar zed below:*
>
> *The Project study areas cross two of Ontario's ecozones: the Ontario Shield and the Hudson Bay Lowlands (Crins et al., 2009). About 85 percent of the Local*

Study Area is in the Ontario Shield ecozone, while 15 percent is in the Hudson Bay Lowlands. However, much of the Ontario Shield area shares similar land features with the Hudson Bay Lowlands. Below is a summary of the characteristics of these two ecozones.

Ontario Shield ecozone is divided into nine ecoregions. Most of the Local Study Area is in Ecoregion 2W (Big Trout Lake [Oji-Cree translation, Kitchenuhmaykoosib Inninuwug]). Within this, it intersects Ecodistricts 2W-2 and 2W-3. The southern part of 2W-2 (Kasabonika Lake) is mainly conifer forests with organic deposits over calcareous material. The southern end of 2W-3 (Wunnumin Lake) has exposed bedrock with a thin layer of mineral material and is also dominated by conifer forests (Crins et al., 2009; Wester et al., 2018).

Hudson Bay Lowlands Ecozone is divided into six ecoregions. The Local Study Area crosses part of the western corner of Ecoregion 2E (James Bay Ecoregion). Within this, it enters Ecodistrict 2E-1 (Albany River) and touches the northwestern border of 2E-4 (Lower Kenogami River). Ecodistrict 2E-1 is mostly flat with fen and bog complexes and some conifer forests. Ecodistrict 2E-4 is characterized by uniform peatlands with little topographic variation (Wester et al., 2018).

The transition between the forests and wetlands of the Ontario Shield to the sparsely treed wetland complexes of the Hudson Bay Lowlands is further documented in the *Vegetation Technical Support Document* completed as part of the Project (Appendix J of the Environmental Assessment / Impact Statement). Figure 5-2 of the vegetation report depicts the prevalence of wetland, upland and riparian ecosystems within the Local Study Area, and Figure 5-3 of the vegetation report further illustrates the prevalence of specific vegetation communities and land types, including: coniferous forest, deciduous forest, mixed forest, bedrock outcrops, bogs, fens, swamps, marshes, sparsely treed early successional lands, and anthropogenic affected lands. Overall, the south end of the Local Study Area (primarily in ecodistrict 2W-2) is much more heavily forested, with various types of forest and wetlands, bedrock outcrops, and limited anthropogenic affected lands. The central portion of the Local Study Area (ecodistrict 2W-3) sees decreased forest cover, an increase in wetlands, and tracts of sparsely treed early successional lands. The north and eastern end of the Local Study Area (ecodistrict 2E-1 and 2E-4) shows even less tree cover, with flatter wetland topography. Representative photographs are included below. More comprehensive photographic coverage of the ecological conditions throughout the Local Study Area can be found in *the Vegetation Technical Support Document* and the *Surface Water Technical Support Document* that have been prepared as part of the Environmental Assessment / Impact Statement.

Photograph 3: Aerial View of the Ogoki River (AECOM, 2019)

Photograph 4: View of Albany River showing forest coverage of Local Study Area (AECOM, 2019)

Photograph 5: Sparse tree coverage and muskeg towards northern end of Local Study Area (AECOM, 2019)

6.2 Indigenous Communities with an Interest in the Local Study Area

A total of 23 Indigenous communities were consulted for the Project based on their constitutionally protected Aboriginal and / or Treaty Rights and their location neighbouring the Local Study Area. For the full list and map of neighbouring Indigenous communities, see Section 11.2.2 of the Environmental Assessment / Impact Statement. Among these, the Study Area is within the traditional territories of members of the Matawa First Nations Management Tribal Council.

6.2.1 Matawa First Nations Management

Matawa First Nations Management is a Tribal Council composed of nine member First Nations, eight of which were signatories to Treaty 9 and one of which was signatory to the Robinson-Superior Treaty. Matawa First Nations include Webequie First Nation, Nibinamik First Nation, Neskantaga First Nation, Marten Falls First Nation, Long Lake #58 First Nation, Ginoogaming First Nation, Eabametoong (Fort Hope) First Nation, Constance Lake First Nation, and Aroland First Nation (Jacasum, 2006; Matawa First Nations, 2025). Among these Nations, the Local Study Area is located within the shared traditional territories of Marten Falls First Nation, Neskantaga First Nation, Ginoogaming First Nation, Constance Lake First Nation, and Aroland First Nation.

6.2.1.1 Marten Falls First Nation

Marten Falls First Nation is an Oji-Cree community in northern Ontario. Our current understanding is that the traditional territory of Marten Falls First Nation generally extends from the Current River and Ogoki Lake in the south, to Kagianagami Lake in the west, Jasper Lake and Muketei River to the north, and the Albany Forks to the east. The Local Study Area is located entirely within this territory. Located centrally within these traditional lands, the Marten Falls Indian Reserve 65, also referred to as Ogoki Post, is a remote Indigenous community accessible year-round only by air or for 6-8 weeks (or less) in the winter by an ice road (Marten Falls First Nation, 2014). Both the existing ice road and the proposed Community Access Road, connect the reserve with existing road infrastructure neat the south edge of the Community's traditional territory.

The Marten Falls First Nation community has a present population of approximately 300 individuals living on the Reserve and contains approximately 100 houses and other permanent structures. Major structures and features within the community include the Marten Falls First Nation Band Office, Nishnawbe Aski Police Service detachment station (presently under construction), the community school, and Pow-Wow Grounds which are located within the Local Study Area. All roads within the community are gravel-surfaced. At present, there is no permanent road connection to areas outside of the community. Access to the community by ground transportation is only available during the winter months with the construction of a temporary winter road, which connects to the provincial highway system. All other transportation into or out of the community is accomplished by air or water travel.

The Ogoki Post airport is located approximately 3.7 kilometres northwest of the Marten Falls First Nation community and is connected to the community by a gravel road. The airport consists of a single gravel-surfaced runway and a large metal-clad service building and passenger waiting room. A boat launch is located in the southeast area of the community, and a dock is located to the west, both providing access to the Albany River.

6.2.1.2 Neskantaga First Nation

Neskantaga First Nation is an Anisininew (Oji-Cree) community in northern Ontario. Our current understanding is that the traditional lands of Neskantaga First Nation generally correspond with the Attawapiskat River watershed, extending from the Bertram Lake area in the west, downstream to James Bay in the east. A portion of these traditional lands extend to the north beyond the boundaries of the Attawapiskat Watershed, encompassing portions of the headwaters of the Winisk and Ekwan Rivers to the east and north of Winisk River Provincial Park. The northern extent of the Local Study Area for Route Alternative 1, Segment H-I minimally overlaps the bounds of this territory to an approximate depth of several hundred metres. Located centrally within these traditional lands, the Neskantaga First Nation Indian Reserve is a remote Indigenous community in northern Ontario only accessible year-round by air. The community is situated on the west shore of Attawapiskat Lake.

The Neskantaga First Nation community has a present population of approximately 506 members, of which 357 members live on the Reserve. The Reserve itself contains

approximately 100 houses and other permanent structures. Major structures and features within the community include the Band Office, the community school, and nursing station. All roads within the community are gravel-surfaced. At present, there is no permanent road connection to areas outside of the community. Access to the community by ground transportation is only available during the winter months with the construction of temporary winter roads, which connect to neighbouring Indigenous Communities including Webequie First Nation, Nibinamik First Nation, and Eabametoong (Fort Hope) First Nation, as well as to the provincial highway system via the all weather road at Pickle Lake. All other transportation into or out of the community is accomplished by air or water travel (Dillon, 2025a).

The Lansdowne House Airport is located approximately 5 kilometres east of the Neskantaga First Nation community and is connected to the community by a gravel road. The airport consists of a single gravel-surfaced runway and two large metal-clad service buildings and passenger waiting room. Boat launches are located in the north and east ends of the community, both providing access to Attawapiskat Lake.

6.2.1.3 Ginoogaming First Nation

Our current understanding is that the traditional lands of Ginoogaming First Nation generally extend from Lake Superior, White River, and Herbage Lake in the south, to Loganberry Lake in the west, the Albany River to the north, and Five Mile Creek to the east. The southern half and some portions of the north end of the Local Study Area overlap this territory. Located in the south central portion of these traditional lands, the Ginoogaming First Nation Indian Reserve is situated on the east short of Long Lake, with the community itself situated south of the mouth of the Making Ground River.

The Ginoogaming First Nation community has a present population of approximately 990 members, of which 200 members live on the Reserve. The Reserve itself contains approximately 80 houses and other permanent structures. Major structures and features within the community include the Ginoogaming First Nation Band Office, the community training centre, and the pow-wow grounds. All roads within the community are gravel-surfaced. The community is accessible year-round by various means, including road via Highway 11, air via float plane or the Geraldton Airport, rail through Via Rail Longlac, and water connections via Long Lake (Dillon, 2025b).

6.2.1.4 Constance Lake First Nation

Our current understanding is that the traditional lands of Constance Lake First Nation generally extend from Oba Lake in the south, to Sands Lake in the west, the Noluskatsi River to the north, and the Abitibi River to the east. The southern portions of the Local Study Area overlap this territory. Located in the south-central portion of these traditional lands, the Constance Lake Indian Reserve 92 is an Indigenous community in northern Ontario with lands situated around and extending to the north and east of Constance Lake. The community itself is situated on the east shore of Constance Lake and is bisected by Highway 663.

The Constance Lake First Nation community has a present population of approximately 1,823 members, of which 865 members live on the Reserve. The Reserve itself contains approximately 220 houses and other permanent structures. Major structures and features within the community include the Constance Lake First Nation Band Office, the community education centre, police station, health centre, fire department, and public works yard. Within the south end of the reserve, just beyond the community, is the Calstock lumber mill, operated by Lecours Lumber Company Limited. The majority of roads within the community are asphalt-surfaced. The community is accessible year-round by various means, including road via Highway 11, and air and rail connections at the nearby community of Hearst (Dillon, 2025c).

6.2.1.5 Aroland First Nation

Our current understanding is that the traditional lands of Aroland First Nation generally extend from the Lake Superior in the south, to The Little Savanne River, the west shore of Lake Nipigon, and Whitewater Lake in the west, Eabamet Lake and the Albany River to the north and the Albany Forks and Constance Lake to the east. Located centrally within these traditional lands, Aroland First Nation is an Indigenous community with lands than generally wrap around the west end of Esnagami Lake. The community itself is situated on the north side of Highway 643 between Clover Lake and Wawong Lake

“Although the Aroland community settlement is not yet formally a Reserve, it is anticipated to be designated as such soon and, due to an agreement with the Crown, is recognized as a Reserve under the *Indian Act*.” (Shared Value Solutions, 2024: 8). The Aroland First Nation Reserve land is located approximately 50 kilometres south of the Local Study Area. We understand conversations are ongoing between Marten Falls First Nation and Aroland First Nation on their traditional territories, both of which encompass large portions of the Local Study Area. The Aroland Lake First Nation community has a present population of approximately 756 members, of which 400 members live on the Reserve. The Reserve itself contains approximately 125 houses and other permanent structures. Major structures and features within the community include the Aroland First Nation Band Office and community centre. All roads within the community are gravel-surfaced. The community is accessible year-round by road via Highway 643, and air and rail connections at the nearby community of Nakina (Dillon, 2025d).

6.3 Cultural Heritage Resources

6.3.1 Categorization of Cultural Heritage Data

During the preparation of this report, community engagement and reporting on Indigenous Knowledge was crucial to identifying potential cultural heritage resources in and around the Local Study Area. As noted in **Section 3**, Indigenous Knowledge refers to Indigenous systems of knowledge as well as cultural practices related to the production of knowledge

based on traditional belief systems, relationships to the environment, and community practices. It is the accumulated and living knowledge built upon the historic experiences of Peoples living on the land and adapting to social, economic, environmental, spiritual and political change (Chiefs of Ontario, n.d.). It includes knowledge about the natural environment (such as locations of caribou seasonal use and calving areas), the relationships between environmental changes and species or ecosystems, and how potential effects to the environment can be avoided or reduced. Given the sensitive nature of Indigenous Knowledge, the Indigenous Knowledge data provided by Indigenous Communities for this this Project is confidential and will not be made available to the public.

Categories (such as harvesting, cultural, habitation, travel) are generally identified and used to organize information in Indigenous Knowledge studies. These categories are used by the Marten Falls First Nation Project Team when digitizing and organizing all the data collected into a geodatabase and make reporting easier for communities. The use of categories also makes the integration of information into the assessment processes easier.

The Marten Falls First Nation Project Team has identified a set of general categories and subcategories in the development of this Project which were used to organize Indigenous Knowledge and information on Indigenous land and resource use. These nine categories are as follows:

- **Animal Harvesting – Hunting & Trapping**: These are sites where participants have hunted, trapped, and / or snared game. Commercial guiding of hunters is also included in this category.
- **Fish Harvesting (Fish and Fish Habitat):** These are sites where participants have engaged in fishing activities for both personal and commercial use.
- **Plant Harvesting (Vegetation):** These sites are places where participants have harvested plants or other natural materials for food, medicine, and/or other uses.
- **Cultural Sites (Spiritual / Ceremonial / Sacred Sites):** These are important cultural sites where participants have knowledge of sites used by their ancestors (or current MFFN members) to practice ceremony and spiritual activities.
- **Traditional Names / Place Names**: These are sites with traditional Anishinaabemowin names, and which reflect the stories, history, and importance of these locations.
- **Habitation**: These are sites where participants currently reside, spent their childhood, or places they stayed when on the land, including cabins, temporary structures, and / or camping locations.
- **Travel Routes**: These are access routes and / or trails that participants have used or have knowledge of to access land or water.

- **Points of Interest**: These are sites that may have cultural importance because of their historic or current use, including burial sites, historic family or village sites, historically significant sites, historical trails, and places used recreationally.
- **Fish and Wildlife Use Areas**: These are habitats where animals spawn, hibernate, feed, and live more generally.

The above categories were used to organize Indigenous Knowledge contributed by members of the Marten Falls First Nation during interviews conducted by Suslop Inc. between March 2023 and May 2023 (Suslop Inc., 2023). Similar categories have been used to organize the Indigenous Knowledge Reports from other Indigenous communities with interests in the Cultural Heritage Local Study Area (see **Section 3**, **Section 6.2**). These categories and relevant Indigenous Knowledge data have subsequently informed the development of this Cultural Heritage Report and in the development of cultural heritage themes. However, it should be noted that the nine categories identified by The Marten Falls First Nation Project Team were not used verbatim. Rather, data from the above nine categories were organized into four, more general themes pertaining to cultural heritage, including:

- Harvest Areas- includes Animal Harvesting, Fish Harvesting and Plant Harvesting;
- Cultural, Spiritual, and Sacred Areas- includes Cultural Sites, certain Points of Interest;
- Habitation Areas- includes Habitation, certain Points of Interest.
- Travel Routes- including Travel Routes, certain Points of Interest.

The organization of cultural heritage data into these four themes was based primarily on the Indigenous Knowledge data's relevance to the longstanding cultures, histories, and lifestyles of Indigenous communities in northern Ontario. Additional data points were identified by AECOM's Cultural Heritage Team based on background research, including a review of historical maps, and data provided in the community engagement session between Marten Falls community members and AECOM's Cultural Heritage Team in July 2023.

Certain data were included or excluded based on their association with longstanding cultural practices. To illustrate the above organization of the four cultural heritage categories, Indigenous Knowledge data for animal, plant, and fish harvesting, all concern cultural heritage practices related to harvesting, so they are all included under the Harvest Areas category. Similarly, data for Cultural Sites and certain Points of Interest (such as burials, historic sites), both relate to the community culture, so they were put together as Cultural, Spiritual, and Sacred Areas. Likewise with Travel Routes, winter roads relate to traditional land travel by trails or dog sleds and demonstrate continued use, so they were included together as traditional paths in the Travel Routes category. In contrast, helicopter landing areas do not relate to traditional travel routes, so they were excluded as cultural heritage data in this report. Natural features which exist independent of human activities were also

excluded from the dataset used for this report. For example, landscape elements and wildlife use areas unrelated to harvesting were not included in the present report.

Altogether, the cultural heritage data include practices and traditions that predate European colonialism and continue in the present (Suslop, 2023: 33-34). That continuity, despite the effects of colonialism, speaks to the connections between Indigenous Communities and the land, and highlights the cultural heritage focus of this report. These data fall within and adjacent to the Local Study Area, indicating that there are sites with longstanding cultural heritage value within the Local Study Area and within the vicinity of Marten Falls First Nation Community Access Road route alternatives.

6.3.2 Strengths and Limitations of Cultural Heritage Data

As outlined in **Section 2.1**, the objectives of this report are to describe the existing environment of the Local Study Area, including the identification of cultural heritage resources, to gather sufficient information to predict Project-related effects to those resources, and to identify impact management measures based on the anticipated effects of the Project. The presence of Indigenous Knowledge data and general areas of cultural heritage interest within and adjacent to the Local Study Area suggests the presence of sites with cultural heritage value that may be impacted by the Project.

The Indigenous Knowledge, including cultural heritage data, reviewed for this report was provided in multiple formats, including individually plotted data points and general areas of cultural heritage interest (**Table 3-1**). The format of this data has both strengths and weaknesses in regard to the objectives of the report. For example, individually plotted data points can be assessed against the proposed footprint of the Project (the Construction Disturbance Area defined in **Section 2.2.2**) to gain a more precise understanding of the potential impacts of the Project. The consideration of individual data points can strongly support the identification of the preferred route as well as the preliminary impact assessment. At the same time, the use of individual data points also poses several challenges in realizing the objectives of this report.

First, the consideration of individual data points cannot fully account for Indigenous land use and Indigenous Knowledge in the Local Study Area, which are based on much more profound relationships with the land. Those relationships are almost ubiquitous in the traditional territory of the Marten Falls First Nation, and while mapped Indigenous Knowledge data points provide important spatial references, they represent only one way of expressing relationships with the land.

Second, just as relationships with the land are difficult to quantify in discrete data points, the assessment of impacts to Indigenous Knowledge data points is also difficult to do, as direct and indirect impacts cannot be easily separated, especially concerning Harvest Areas which rely on unbroken areas of wildlife habitat. Impacts to connected land and

water habitats are liable to carry beyond the Construction Disturbance Area, and even beyond the Local Study Area. Furthermore, the interconnection of Habitat Areas may affect potential impacts to Habitation Areas. While some habitation sites are static (cabins or historical sites, for example), others, like campsites, are general, and are fundamentally linked to traditional cycles of hunting and harvesting. The connection of Habitation Areas with land use and harvesting activities means that potential impacts may also extend to habitation data points beyond the Construction Disturbance Area of the Preferred Route.

A similar challenge presents itself for Cultural, Spiritual, and Sacred Areas, as well as for Travel Routes. While certain data points are static and may be directly impacted by the project (portage sites or burials, for example), others are more broadly connected to the land. For example, sacred places which may not be directly overlapped by the Project, may nonetheless be affected by changes to the surrounding landscape. Similarly, impacts to traditional travel routes such as the Albany and Ogoki Rivers may extend beyond the Construction Disturbance Area and have impacts in, or beyond, the Local Study Area. In all cases, direct and indirect impacts may not be distinguishable and they may not stay inside the Construction Disturbance Area.

These challenges are shared by the four cultural heritage themes in this report (Harvest Areas, Cultural, Spiritual, and Sacred Areas, Habitation Areas, and Travel Routes as defined in **Section 6.3.1**) and reflect the fundamental connection between cultural heritage data and the broader landscape. For this reason, while data from some Indigenous communities was reported and mapped as individual data points, data from others was conveyed as broader areas of cultural heritage interest. From a cultural heritage perspective, both individual data points and areas of cultural heritage interest cannot be understood in isolation, and must be understood in their appropriate context, which includes both historical context and the surrounding landscape.

In consequence, this report recommends that the cultural heritage data relevant to the Local Study Area is best understood in terms of cultural heritage landscapes. In defining cultural heritage landscapes this report refers to four formal documents, including the Provincial Planning Statement (2024) (see **Section 4.3**), the 2010 Standards and Guidelines issued under section 25.2 of the *Ontario Heritage Act*, the Parks Canada Standards and Guidelines for the Conservation of Historic Places in Canada (2010), and the United Nations Educational, Scientific and Cultural Organization's Operational Guidelines for the Implementation of the World Heritage Convention (2008, Updated 2023). These, and other documents relating to cultural heritage landscapes share a "common language and approach" regarding the conservation of cultural landscapes, and each emphasize important features of cultural heritage landscapes. (Parks Canada, 2010). The Ontario Standards and Guidelines describe cultural heritage landscapes as:

> *a defined geographical area that human activity has modified and that has cultural heritage value. Such an area involves one or more groupings of*

> *individual heritage features, such as structures, spaces, archaeological sites, and natural elements, which together form a significant type of heritage form distinct from that of its constituent elements or parts.*

The Parks Canada document further emphasizes the importance of evidence of land use, land patterns, spatial organization, visual relationships, circulation patterns and routes, vegetation, and built features as central components of a cultural heritage landscape (Parks Canda, 2010).

The United Nations Educational, Scientific and Cultural Organization document, while more general, provides a useful categorization of cultural heritage landscapes, distinguishing between clearly defined landscapes and organically evolved landscapes that have changed over time. The United Nations Educational, Scientific and Cultural Organization document further distinguishes evolved landscapes between a relict landscape in which an evolutionary process came to an end in the past, and a continuing [evolved] landscape which:

> *retains an active social role in contemporary society closely associated with the traditional way of life, and in which the evolutionary process is still in progress. At the same time it exhibits significant material evidence of its evolution over time.*

The above standards define cultural heritage landscapes according to formal federal, provincial, and international standards, and clearly apply to the Local Study Area. Analysis of Indigenous Knowledge data points and areas of cultural heritage interest demonstrates the interconnection of individual data points with a broader context that meets the definition of a cultural heritage landscape as defined by Ontario Standards and Guidelines, in addition to demonstrating the continuing use of the land in keeping with the United Nations Educational, Scientific, and Cultural Organization definition of a continuing or evolved cultural heritage landscape.

In summary, Indigenous communities have a long, and ongoing relationship with the land. That relationship has been represented in different ways during the preparation of Indigenous Knowledge reports for the Project. The resulting data includes individual data points and broader areas of cultural heritage interest, which have different strengths for the objectives of this report. All the data, however, reflect the ongoing relationship between Indigenous communities and the land, and demonstrate the need for ongoing collaboration with those communities throughout the development of the Project.

6.3.3 Description of Cultural Heritage Resources

The discussion in the preceding section demonstrates that although potential impacts to the Local Study Area may be effectively assessed with the use of individually mapped cultural heritage / Indigenous Knowledge data points, such data points are best

understood as contributing to broader cultural heritage landscapes. This section identifies and describes potential cultural heritage landscapes relevant to the Local Study Area.

As described in **Section 6.1**, the Local Study Area traverses the boundary between the Ontario Shield and the Hudson Bay Lowlands Ecozones. This transitional landscape is the backdrop of the cultural heritage landscape identified in this report. Within this area, the cultural heritage data points derived from Indigenous Knowledge and background research that have been analysed for this report are generally concentrated along waterways. This pattern reflects the longstanding traditional Indigenous use of waterways as travel routes to traverse the landscape. Such traditional use is reflected not only in the concentration of individual data points, but also in the areas of cultural heritage interest identified in Indigenous Knowledge reports, and in the increased archaeological potential of areas along water (see Section 2.1 of Appendix R: of the Environmental Assessment / Impact Statement: Archaeological Assessments AECOM, 2020). Given the historic and traditional importance of waterways to Indigenous Communities and the concentration of cultural heritage data points and areas of cultural heritage interest along waterways, this report recommends that the cultural heritage landscape relevant to the Local Study Area be organized according to waterways, which have, for millennia, shaped human interactions with the land.

In considering potential cultural heritage landscapes based on waterways, this report refers to the Surface Water Technical Support Document, which has been prepared as Appendix F of the Environmental Assessment / Impact Statement. The surface water report employs a Regional Study Area composed of three tertiary watersheds as defined by the federal “Drainage Area” reporting framework, which represent third level subdivisions of Canada into suitably sized areas based on drainage for administrative purposes (Ontario Ministry of Natural Resources and Forestry, 2020). Like the ecozones and regions described in **Section 6.1**, watersheds are also denoted with an alphanumeric identifier as follows:

1. First Character – “4” represents the southwestern Hudson Bay primary watershed;
2. Second Character – “G” represents the Upper Albany secondary watershed; and
3. Third Character – “D” through “F” represents the tertiary watershed identifiers.

The three tertiary watersheds used in the surface water Regional Study Area were selected as they are all overlapped by the Local Study Area. The use of tertiary rather than quaternary watersheds was intended to account for any indirect Project impacts that may carry beyond the Local Study Area. The resulting surface water Regional Study Area encompasses some 2,546,430 hectares within the Upper Albany River Secondary Watershed, within the Southwestern Hudson Bay Primary Watershed. The three tertiary watersheds that compose the surface water Regional Study Area are the Upper Albany – Makokibatan Tertiary Watershed (4GD), the Lower Ogoki Tertiary Watershed (4GE), and the Upper Albany - Muswabik Tertiary Watershed (4GF).

Like the Local Study Area, this section of the Upper Albany Secondary Watershed traverses the geographic / ecological boundary between the Ontario Shield and the Hudson Bay Lowlands. Although the cultural importance of the Albany, or Ogoki River are not limited to traversing this transitional zone, it does underscore the local importance of rivers as travel routes between different ecological zones, each of which have different physical attributes and different available resources on a seasonal basis. The availability of different resources, at different times, in different ecological areas, is strongly associated with Indigenous traditional practices and movement within traditional territories. It is no coincidence that the traditional territory of Marten Falls First Nation and the traditional territories of other Anisininew / Oji-Cree First Nations in northern Ontario also span this geographical / ecological divide.[2] The Albany River and its associated tributaries, reflect this ongoing history and use, and encompass the cultural heritage and Indigenous Knowledge data points and areas of interest analysed during the preparation of this report.

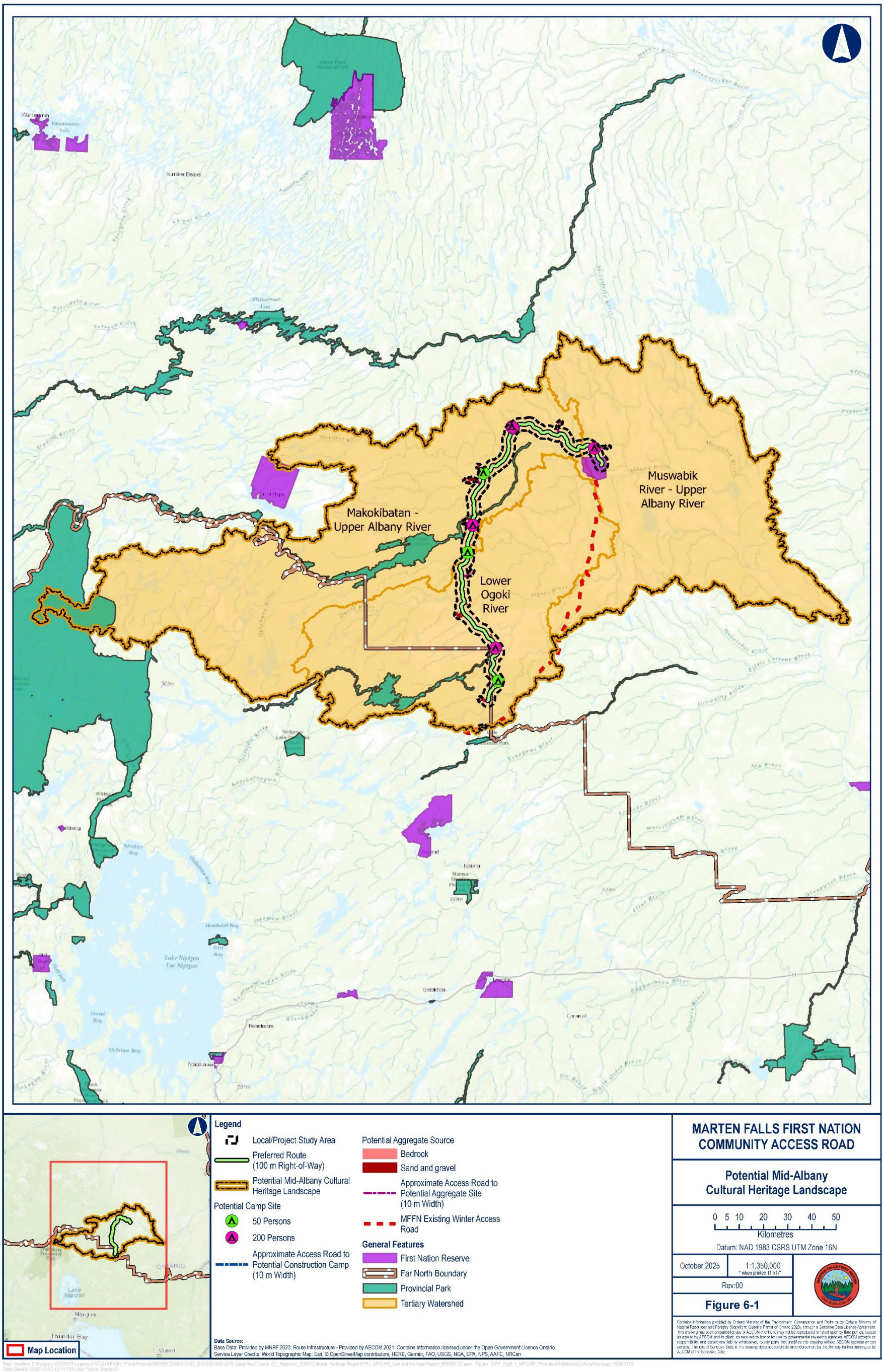
Based on the preceding discussion of the physical composition of the Local Study Area (**Section 6.1**), the nature and distribution of cultural heritage and Indigenous Knowledge data points and areas of interest within the Local Study Area (**Sections 6.3.1** and **6.3.2**), the fundamental connections between Indigenous Knowledge and the land, and the strong association between cultural landscapes and waterways in and around the Local Study Area, this report recommends that the Local Study Area transects one large potential cultural heritage landscape, based on three tertiary watersheds that are overlapped by the Local Study Area, including the Albany – Makokibatan Tertiary Watershed (4GD), the Lower Ogoki Tertiary Watershed (4GE), and the Upper Albany - Muswabik Tertiary Watershed (4GF). It is recommended that the boundaries of these tertiary watersheds be considered as the boundaries of a potential cultural heritage landscape. That landscape includes the transition between the Ontario Shield and the Hudson Bay Lowlands and is situated at the downstream (east) end of the Upper Albany Secondary Watershed. As such, the potential cultural heritage landscape can be characterized as the Mid-Albany Cultural Heritage Landscape,[3] the bounds of which are illustrated in **Figure 6-1**. Other adjacent tertiary watersheds may also possess cultural heritage value as cultural heritage landscapes, but this grouping of three was specified as it encompasses the Local Study Area and associated cultural heritage data analysed during the preparation of this report. Any cultural heritage or Indigenous Knowledge data points or areas of interest falling within Local Study Area should be considered as potential heritage attributes of this potential cultural heritage landscape, as outlined in **Table 6-1**, below.

2. Including Aroland First Nation, Constance Lake First Nation, Ginoogaming First Nation, Kasabonika Lake First Nation, Kitchenuhmaykoosib Ininuwug First Nation, Neskantaga First Nation, Wapekeka First Nation, Webequie First Nation, and Wunnumin Lake First Nation. The boundaries of traditional territories used in this observation are as reported during the collection of Aboriginal Treaty Rights and Interest Data for the Project.
3. The term “Mid-Albany Cultural Heritage Landscape” was coined by AECOM for the purposes of this report and does not refer to any known or previously identified cultural heritage landscapes.

Table 6-1: Inventory of Built Heritage Resources and / or Cultural Heritage Landscapes within and adjacent to the Local Study Area

Resource Type	Location	Heritage Recognition	Description of Known or Potential Cultural Heritage Value or Interest	Image
Mid-Albany Cultural Heritage Landscape	Located in the lower (downstream) portion of the Upper Albany Secondary Watershed, encompassing the Upper-Albany Makokibatan, Upper-Albany Muswabik, and Lower Ogoki Tertiary Watersheds	No formal heritage recognition, but landscape identified as significant by Indigenous communities during the background research and consultation for the Project.	• Characterized by forests and wetlands of the Ontario Shield to the west, and sparsely treed wetland complexes of the Hudson Bay Lowlands to the east. • Encompasses a large number of Indigenous Knowledge sites and areas including Harvest Areas, Cultural, Spiritual, and Sacred Areas, Habitation Areas, and Travel Routes represented by 143 individually plotted data points identified within the Local Study Area. • The majority of the Local Study Area is provincially owned crown land. • Includes two provincial parks within the Local Study Area, including the Albany River Provincial Park, and the Ogoki River Provincial Park. • Strong contextual value in supporting the character of the area and its physical, functional, visual, and historical links to its surroundings • Strong associative value due to direct associations with themes, beliefs, and activities related to ongoing Indigenous land use, and the potential to yield information that contributes to an understanding of Indigenous communities and cultures in northern Ontario.	 See also: **Figure 6-1**, **Figure B-1**

Figure 6-1: Potential Cultural Heritage Landscapes within the Local Study Area



7. Identification of a Preferred Route

7.1 Overview

The Environmental Assessment / Impact Statement process for the Marten Falls First Nation Community Access Road is a five-step process which began in 2021. As part of the Environmental Assessment / Impact Statement process a Terms of Reference was developed, which outlines how the Environmental Assessment / Impact Statement would be prepared, including what studies would be conducted, the process to identify and assess effects of a proposed project and how people would be consulted.

A key step in the Terms of Reference process was to identify alternative routes for the proposed Community Access Road to be studied further in the Environmental Assessment / Impact Statement. Alternative routes were identified by Marten Falls First Nation using information gathered through studies, consultation and comments received on the Draft Terms of Reference. Marten Falls First Nation made a community decision to continue to assess and evaluate Alternative 1 and Alternative 4. As part of the Environmental Assessment / Impact Statement process, an assessment and evaluation are being undertaken to compare the Alternatives 1 and 4 against a set of criteria specific to the Community Access Road. These criteria represent important features and are used to predict whether the proposed Community Access Road may result in effects on the environment or people through its construction and operation. Cultural heritage is one of these identified criteria.

The Route Selection phase of the Environmental Assessment / Impact Statement occurred in fall of 2023. As part of the Route Selection phase, a Residual Effects analysis has been included in this Cultural Heritage Report to assist in determining the potential effects, both direct and indirect, that Alternatives 1 and 4 may have on identified built heritage resources and / or cultural heritage landscapes, and to assist in the selection of a Preferred Route.

The overall assessment metric for this Cultural Heritage Residual Effects Analysis is the number of built heritage resources / cultural heritage landscapes within the Local Study Area for each alternative. This approach has limitations as the potential cultural heritage landscape identified in **Section 6.3.3** encompasses all the potential routes, and so by this metric there is no effective difference between any of the route alternatives. Yet the potential cultural heritage landscape contains many individually plotted cultural heritage data points that can be considered potential heritage attributes of the cultural heritage landscape. In consequence, this Cultural Heritage Residual Effects Analysis looks at how many data points might be impacted by each Route Alternative to make recommendations on which route would have the least impact from a cultural heritage perspective. The data included in the identification of the Preferred Route was collected through the Indigenous Knowledge Data Collection Program (**Section 3.1**).

7.2 Results Maps

This Cultural Heritage Residual Effects Analysis uses heat maps to visualize the potential impacts of each Route Alternative to Indigenous Knowledge and cultural heritage data points within the Local Study Area. As noted in **Section 6.3.3**, these data points may be understood as potential heritage attributes of the potential Mid-Albany Cultural Heritage Landscape. The heat maps approach shows concentrations of Indigenous Knowledge and cultural heritage data within the landscape and provides a greater level of detail of the potential impacts of the route alternatives to the potential Mid-Albany Cultural Heritage Landscape. At the same time, the heat maps protect Indigenous Knowledge data by generalizing the location of data points and upholding the confidentiality of the data, as discussed in **Section 3.1**.

The heat maps build on the Indigenous Knowledge categories listed in **Section 6.3.1**. Heat maps depict concentrations of data points where numerical values in ranges of five (such as 1-5, 6-10, 11-15, 16-20, 21-25) are represented as colours. To generate these maps, a 5 kilometre square grid was applied across the Local Study Area, and colour coded to illustrate data point concentrations and areas of interest in proximity to the route alternatives for the Project. Heat maps can be displayed in a variety of colour schemes. For this report, grey indicates that there are no data points within a grid square, whereas progressively darker shading represents a greater number of data points in a given grid square. It is important to note that the absence of data points in a grid square does not mean that area does not have cultural heritage significance. As discussed in **Section 6.3.2**, individual data points cannot fully capture Indigenous relationships with the land and may not accurately convey impacts. However, because the entire Local Study Area is within a potential cultural heritage landscape, the heat maps approach is still useful in evaluating some potential impacts of the route alternatives per the objectives of this report (**Section 2.1**).

The heat maps illustrate the cultural heritage data collected for this Cultural Heritage Report and are presented in **Appendix B**. They were created to aid in the Preferred Route selection as part of the Environmental Assessment / Impact Statement process. They show a two-dimensional visual summary of the data points of each of the four cultural heritage themes within, and adjacent to, the Local Study Area (**Figure B-1**), and individual maps created for each category, including Harvest Areas (**Figure B-2**), Cultural Spiritual, and Sacred Areas (**Figure B-3**), and Habitation Areas (**Figure B-4**). A map showing historic Travel Routes, which includes Indigenous trails noted in historical documents, was also created (**Figure B-5**).

7.3 Preferred Route Selection

Table 7-1 to **Table 7-3** below identify and evaluate the Residual Effects to identified built heritage resources / cultural heritage landscapes for route alternatives 1 and 4 using the heat maps described in **Section 6.3** above. For route selection, it should be noted that these potential impacts are based on the maximum potential impacts as depicted on the heat maps, rather than a precise reckoning of Indigenous Knowledge data points. The heat maps provide a visual representation of data point concentrations and areas of interest in proximity to the Local Study Area to assist with the identification of a Preferred Route. After the Preferred Route was selected, a more precise accounting of potential impacts to Indigenous Knowledge data points was conducted (see **Section 8**). Each alternative has been divided into three segments as follows:

- Segment 1: Alternatives 1, Alternative 4 East, Alternative 4 West – Ogoki Crossing
- Segment 2: Alternatives 1 and 4 – Albany Crossing
- Segment 3: Alternatives 1 and 4 – North of the Albany River

Table 7-1 to **Table 7-3** below, use the “residual effects analysis” approach. The severity of effect for each alternative was calculated by conducting a visual assessment of the heat maps described in **Section 6.3**, noting the value range of each grid block along each route alternative. This means that the results include the maximum potential impacts as depicted on the heat maps and may include data points within or adjacent to the Local Study Area. The effects rankings for each route segment in **Table 7-1** to **Table 7-3** are based on the following:

- Negligible - no data points were present in the segment;
- Low - when between 1 and 10 data points were present in the segment;
- Moderate - when between 11 and 20 data points were present in the segment; and,
- High - when data points in the segment exceeded 21.

Each alternative and / or segment has been ranked as “Most Preferred”, “Moderately Preferred”, or “Least Preferred”, based on the rankings for each cultural heritage theme. Following the assessment of each cultural heritage theme, the preferred alternative for each section was determined based on the rankings. A summary of the potential effects and rationale for the selected route alternatives for each segment has been provided in **Table 7-1** to **Table 7-3**, below.

Table 7-1: Residual Effects Assessment – Segment 1

FACTOR	INDICATOR	MEASURES	ALTERNATIVE 1	ALTERNATIVE 4 EAST	ALTERNATIVE 4 WEST
CATEGORY – CULTURAL ENVIRONMENT					
CULTURAL HERITAGE					
Mid-Albany Cultural Heritage Landscape	Harvest Areas	Number of potential heritage attributes (Indigenous Knowledge data points, **Section 6.3**) identified.	Residual Effects for this alternative include the potential impact of up to twenty-five (25) identified Animal, Fish, and Plant Harvest Areas. HIGH RESIDUAL EFFECT **Most Preferred**	Residual Effects for this alternative include the potential impact of up to forty (40) identified Animal, Fish, and Plant Harvest Areas. HIGH RESIDUAL EFFECT **Moderately Preferred**	Residual Effects for this alternative include the potential impact of up to forty-five (45) identified Animal, Fish, and Plant Harvest Areas. HIGH RESIDUAL EFFECT **Least Preferred**
	Cultural, Spiritual, and Sacred Areas		Residual Effects for this alternative include the potential impact of up to ten (10) identified Cultural, Spiritual, and Sacred Areas. LOW RESIDUAL EFFECT **Most Preferred**	Residual Effects for this alternative include the potential impact of up to ten (10) identified Cultural, Spiritual, and Sacred Areas. LOW RESIDUAL EFFECT **Most Preferred**	Residual Effects for this alternative include the potential impact of up to fifteen (15) identified Cultural, Spiritual, and Sacred Areas. MODERATE RESIDUAL EFFECT **Least Preferred**
	Habitation Areas		Residual Effects for this alternative include the potential impact of up to twenty (20) identified Habitation Areas. MODERATE RESIDUAL EFFECT **Most Preferred**	Residual Effects for this alternative include the potential impact of up to twenty-five (25) identified Habitation Areas. HIGH RESIDUAL EFFECT **Moderately Preferred**	Residual Effects for this alternative include the potential impact of up to thirty (30) identified Habitation Areas. HIGH RESIDUAL EFFECT **Least Preferred**
	Travel Routes		This alternative is not anticipated to impact any identified Historical Indigenous Trails or Portage Routes. NEGLIGIBLE RESIDUAL EFFECT **No discernable difference between alternatives**	This alternative is not anticipated to impact any identified Historical Indigenous Trails or Portage Routes. NEGLIGIBLE RESIDUAL EFFECT **No discernable difference between alternatives**	This alternative is not anticipated to impact any identified Historical Indigenous Trails or Portage Routes. NEGLIGIBLE RESIDUAL EFFECT **No discernable difference between alternatives**

Summary: Although all Alternatives have the potential to impact a potential cultural heritage landscape, **Segment 1, Alternative 1** is preferred overall due to its lower Residual Effects on potential heritage attributes of the cultural heritage landscape.

Table 7-2: Residual Effects Assessment – Segment 2

FACTOR	INDICATOR	MEASURES	ALTERNATIVE 1	ALTERNATIVE 4
CATEGORY – CULTURAL ENVIRONMENT				
CULTURAL HERITAGE				
Mid-Albany Cultural Heritage Landscape	Harvest Areas	Number of potential heritage attributes (Indigenous Knowledge data points, **Section 6.3**) identified.	Residual Effects for this alternative include the potential impact of up to thirty-five (35) identified Animal, Fish, and Plant Harvest Areas. HIGH RESIDUAL EFFECT **No discernable difference between alternatives**	Residual Effects for this alternative include the potential impact of up to thirty-five (35) identified Animal, Fish, and Plant Harvest Areas. HIGH RESIDUAL EFFECT **No discernable difference between alternatives**
	Cultural, Spiritual, and Sacred Areas		Residual Effects for this alternative include the potential impact of up to twenty-five (25) identified Cultural, Spiritual, and Sacred Areas. HIGH RESIDUAL EFFECT **Least preferred**	Residual Effects for this alternative include the potential impact of up to twenty (20) identified Cultural, Spiritual, and Sacred Areas MODERATE RESIDUAL EFFECT **Most preferred**
	Habitation Areas		Residual Effects for this alternative include the potential impact of up to twenty (20) identified Habitation Areas MODERATE RESIDUAL EFFECT **Least preferred**	Residual Effects for this alternative include the potential impact of up to ten (10) identified Habitation Areas LOW RESIDUAL EFFECT **Most Preferred**
	Travel Routes		Residual Effects for this alternative include the potential impact of one (1) identified historical Indigenous Trail and one (1) historical portage route. LOW RESIDUAL EFFECT **No discernable difference between alternatives**	Residual Effects for this alternative include the potential impact of one (1) identified historical Indigenous Trail and one (1) historical portage route. LOW RESIDUAL EFFECT **No discernable difference between alternatives**

Summary: Although both alternatives have the potential to impact a potential cultural heritage landscape, Segment 2, Alternative 4 is preferred overall due to its lower Residual Effects to potential heritage attributes of the cultural heritage landscape.

Table 7-3: Residual Effects Assessment – Segment 3

FACTOR	INDICATOR	MEASURES	ALTERNATIVE 1	ALTERNATIVE 4
CATEGORY – CULTURAL ENVIRONMENT				
CULTURAL HERITAGE				
Mid-Albany Cultural Heritage Landscape	Harvest Areas	Number of potential heritage attributes (Indigenous Knowledge data points, **Section 6.3**) identified.	Residual Effects for this alternative include the potential impact of up to seventy (70) identified Animal, Fish, and Plant Harvest Areas. HIGH RESIDUAL EFFECT **Least preferred**	Residual Effects for this alternative include the potential impact of up to forty (40) identified Animal, Fish, and Plant Harvest Areas. HIGH RESIDUAL EFFECT **Most preferred**
	Cultural, Spiritual, and Sacred Areas		Residual Effects for this alternative include the potential impact of up to fifteen (15) identified Cultural, Spiritual, and Sacred Areas. MODERATE RESIDUAL EFFECT **No discernable difference between alternatives**	Residual Effects for this alternative include the potential impact of up to fifteen (15) identified Cultural, Spiritual, and Sacred Areas. MODERATE RESIDUAL EFFECT **No discernable difference between alternatives**
	Habitation Areas		Residual Effects for this alternative include the potential impact of up to ten (10) Habitation Areas. LOW RESIDUAL EFFECT **Most preferred**	Residual Effects for this alternative include the potential impact of up to twenty-five (25) Habitation Areas. HIGH RESIDUAL EFFECT **Least preferred**
	Travel Routes		Residual Effects for this alternative include the potential impact of two (2) Historical Indigenous Trails. LOW RESIDUAL EFFECT **No discernable difference between alternatives**	Residual Effects for this alternative include the potential impact of two (2) Historical Indigenous Trails. LOW RESIDUAL EFFECT **No discernable difference between alternatives**

Summary: Based on the potential to impact potential heritage attributes of the potential cultural heritage landscape, there is no overall preference between alternatives.

7.4 Summary of Route Selection

The Residual Effects Assessment undertaken in **Table 7-1** to **Table 7-3**, above, determined that all proposed alternatives have the potential to directly or indirectly impact potential heritage attributes (Indigenous Knowledge data points) of the potential Mid-Albany Cultural Heritage Landscape. Based on this analysis, the following recommendations can be made for cultural heritage:

- For **Segment 1**, **Alternative 1** is preferred overall due to its lower residual effect to potential heritage attributes of the potential Mid-Albany Cultural Heritage Landscape.
- For **Segment 2, Alternative 4** is preferred overall due to its lower residual effect to potential heritage attributes of the potential Mid-Albany Cultural Heritage Landscape.
- For **Segment 3,** the two alternatives had similar potential residual effects, so neither is preferred over the other.

For a full description of all Residual Effects Assessments related to the Community Access Road, including disciplines other than cultural heritage, refer to the Route Selection sections of the Environmental Assessment / Impact Statement Report.

8. Preliminary Impact Assessment of the Proposed Undertaking

To assess the potential effects of an undertaking within the Local Study Area, identified built heritage resources and / or cultural heritage landscapes are considered against a range of possible effects based on the Ministry of Citizenship and Multiculturalism's *Information Bulletin 3: Heritage Impact Assessments for Provincial Heritage Properties* (Ministry of Citizenship and Multiculturalism, 2017). This Cultural Heritage Report identifies direct and indirect adverse impacts and / or positive impacts that the proposed new transportation infrastructure and / or associated construction activities may have to known built heritage resources and / or cultural heritage landscapes that have been identified within the Local Study Area along the Preferred Route.

Direct adverse impacts identified in this report have a permanent and irreversible negative affects on the built heritage resources and / or cultural heritage landscapes. Direct adverse impacts may include but are not limited to:

- removal or demolition – full or partial removal or demolition of a structure(s) on a property, including known or potential heritage attributes that contribute to the known or potential cultural heritage value of the property
- introduction of new physical features – introduction of new physical features or transportation related structures on a property that may have an adverse impact to the known or potential Cultural Heritage Value or Interest and heritage attributes of a property
- land disturbance - such as a change in grade and / or drainage patterns that may adversely affect a known built heritage resources and / or cultural heritage landscapes, including archaeological resources

Indirect adverse impacts identified in this report are generally the result of an activity on or near a built heritage resource and / or cultural heritage landscape that may adversely affect its cultural heritage value but will not result in direct loss or alteration such as:

- shadows – introduction of shadows from new transportation infrastructure on or near a property that may alter the appearance of a known or potential heritage attribute
- vibration – vibration from construction activities (temporary) or introduction and operation of new transportation infrastructure (permanent)
- isolation – construction of new transportation infrastructure on or near a property which isolates a known or potential heritage attribute from its surrounding environment or context
- obstruction of views – changes to or obstruction of significant views by the introduction of new transportation infrastructure on or near a property

Aside from potential impacts from the design and location of the Project, other impacts to known and potential built heritage resources and / or cultural heritage landscapes may be anticipated from activities associated with construction. Within the Local Study Area, construction is anticipated to include the building of the new access road, the spanning of watercourses, the development of quarries, borrow areas, and aggregate source areas, and the establishment of temporary infrastructure including access roads, construction camps, staging areas, and stockpile areas. The execution of these construction activities typically includes:

- Tree and vegetation clearing, soil grubbing (stump removal), slash burning;
- Topsoil stripping;
- Drilling, blasting, blading, loading, hauling, and stockpiling of crushed rock and granular materials;
- Loading, hauling, dumping, spreading, grading, compacting, trimming, and shaping of the roadway and final surfacing with gravel;
- Construction of bridges over watercourses, (including excavation, installation of approach embankments, foundations, substructures, superstructures, traffic protection measures, and erosion control measures;
- Construction of culverts for watercourses, drainage management, and wildlife passage (concrete or steel);
- Construction of retaining walls, embankments, roadside barriers, and berms where needed;
- Construction of temporary labour camps including the grubbing and grading of campsites and the installation of trailers and temporary structures;
- Withdrawal of water from local sources to support camp and construction activities such as dust control and concrete mixing;
- Reconstruction of roadways at either end of the new corridor;
- Installation of signage; and
- Traffic management and construction staging, including equipment and material storage and stockpiling.

A positive impact will conserve or enhance the known or potential Cultural Heritage Value or Interest and / or heritage attributes of a property like the introduction of new public interpretation or commemoration.

Several additional factors are also considered when evaluating potential effects on identified cultural heritage resources. These are outlined in a document set out by the Ministry of Culture and Communications (now Ministry of Citizenship and Multiculturalism) and the Ministry of the Environment entitled *Guideline for Preparing the Cultural Heritage Resource Component of Environmental Assessments* (Ministry of Citizenship and Multiculturalism 1992) and include:

- Magnitude: the amount of physical alteration or destruction which can be expected;

- Severity: the irreversibility or reversibility of an effect;
- Duration: the length of time an adverse effect persists;
- Frequency: the number of times an effect can be expected;
- Range: the spatial distribution, widespread or site specific, of an adverse effect; and
- Diversity: the number of different kinds of activities to affect a heritage resource.

It should be noted that, for the purposes of this report, the additional factors listed above are for informational purposes only and are not included in the Preliminary Impact Assessment of the Preferred Route. As outlined in the Cultural Heritage Study Plan for the Project, additional evaluation of the potential impacts of the Project will be undertaken once the detail design is complete, and the impacts of the Project are known. In the interim, the present report focuses on identifying the general potential impacts of the Project. To that end, a Preliminary Impact Assessment of the Preferred Route has been conducted as a part of this Cultural Heritage Report to propose appropriate impact management measures and recommendations for minimizing and avoiding negative effects on built heritage resources and cultural heritage landscapes, and the identification of further reporting requirements such as Cultural Heritage Evaluation Reports and / or Heritage Impact Assessments, if necessary (see **Section 9.2**).

The Preferred Route was identified by the Marten Falls First Nation Project Team and takes into consideration the findings of **Section 7** of this report as well as the recommendations of other reports conducted as part of the Environmental Assessment / Impact Statement process. Hereafter, the Preferred Route refers to **Segment 1 - Alternative 1**, **Segment 2 - Alternative 4**, and **Segment 3 - Alternative 4**. A heat map of the Preferred Route with all cultural heritage categories is included in **Appendix C** as **Figure C-1**. Individual category maps were also created for the Preferred Route, including Harvest Areas (**Figure C-2**), Cultural Spiritual, and Sacred Areas (**Figure C-3**), and Habitation Areas (**Figure C-4**).

The Preliminary Impact Assessment included in this Cultural Heritage Report encompasses the Local Study Area around the Preferred Route. Hereafter the Local Study Area refers only to the Local Study Area along the Preferred Route. The Preliminary Impact Assessment takes into consideration the precise numbers and locations of Indigenous Knowledge and cultural heritage data points and areas along the Preferred Route. Each data point was assessed for the likelihood of direct or indirect impacts from the Project.

The following table (**Table 8-1**) summarizes direct and indirect impacts to the potential Mid-Albany Cultural Heritage Landscape and its potential heritage attributes within the Local Study Area along the Preferred Route. These potential heritage attributes include identified Indigenous Knowledge areas, data points, and routes, in addition to provincial

parks and the overall landscape. To assist in this process, data points were numbered and mapped along the Preferred Route. The data point map set for Marten Falls is located in supplemental documentation (**Figure S1**). Mapped data from other Indigenous communities, including data points, areas, trails, or other features, are considered in the analysis below, but are not included in the supplementary mapping for reasons of confidentiality and by request of those communities. **Table 8-1** summarizes potential impacts within the Local Study Area.

Table 8-1: Preliminary Impact Assessment of the Local Study Area and the Construction Disturbance Area of the Preferred Route

Potential Cultural Heritage Landscape	Potential Heritage Attribute Type	General Location and Description of Potential Heritage Attributes within the Local Study Area	Summary of Potential Heritage Attributes	Discussion of Impacts	Proposed Mitigation and Next Steps
Mid-Albany Cultural Heritage Landscape	Harvest Areas	**Lower Ogoki Tertiary Watershed** • Marten Falls First Nation General Plant Gathering, Hunting, Fishing, and Commercial Trapping Areas • 10 Marten Falls First Nation Animal Harvest Sites • 1 Marten Falls First Nation Fish Harvest Sites • Aroland First Nation General Plant Gathering, Hunting, Fishing, and Commercial Trapping Areas **Upper Albany – Makokibatan Tertiary Watershed** • Marten Falls First Nation General Plant Gathering, Hunting, Fishing, and Commercial Trapping Areas • 25 Marten Falls First Nation Animal Harvest Sites • 1 Aroland First Nation Animal Harvest Site • 9 Marten Falls First Nation Fish Harvest Sites • Aroland First Nation General Plant Gathering, Hunting, Fishing, and Commercial Trapping Areas • Kashechewan First Nation General Fishing Area **Upper Albany – Muswabik Tertiary Watershed** • Marten Falls First Nation General Plant Gathering, Hunting, Fishing, and Commercial Trapping Areas • 2 Marten Falls First Nation Animal Harvest Sites • 2 Marten Falls First Nation Plant Harvest Sites • Aroland First Nation General Plant Gathering, Hunting, Fishing, and Commercial Trapping Areas • Kashechewan First Nation General Fishing Area	• 9 General Harvest Areas • 50 Specific Harvest Areas	**Direct impacts are anticipated.** • The Construction Disturbance Area of the Preferred Route is anticipated to directly overlap all 9 General Harvest Areas in addition to 14 specifically plotted Harvest Areas • Construction related activities and / or the long-term use of the roadway may result in displacement of traplines and the fragmentation and / or degradation of terrestrial habitat. This would negatively affect the distribution of furbearing animals, birds, and ungulates, thus affecting the viability of traplines and hunting areas. • Construction related activities and / or the long-term use of the roadway may result in the blockage or channelization of water courses, changes to banks or riverbeds, and increased sedimentation as a result of excavation and / or dust. This would negatively affect the quality, connectivity, and quantity of aquatic habitat and the viability of fishing areas. **Indirect impacts are anticipated** • Construction related activities and the long-term use of the roadway may impact aquatic and terrestrial habitat beyond the immediate Construction Disturbance Area of the Preferred Route. There is considerable potential for indirect impacts to habitat, within and beyond the Local Study Area that will negatively affect the availability of furbearing animals, ungulates, and birds and negatively affecting hunting, trapping, and fishing areas that are within the Local Study Area, but not directly overlapped by the Construction Disturbance Area of the Preferred Route. • The construction of the roadway will provide new access to the region that may indirectly adversely affect Harvest Areas through habitat changes and / or greater land use by non-local people.	**Mitigation:** • Where possible, avoid direct impact to potential heritage attributes of the cultural heritage landscape during the design and implementation of the Project. Refinements of the Preferred Route during the design, and land-use within the 100 m Construction Disturbance Area during construction should be planned to avoid impacting known Harvest Areas, Habitation Areas, Cultural, Spiritual, and Sacred Areas, Travel Routes, and Provincial Parks. If avoidance of potential heritage attributes is not feasible, then further assessment of the impacts and mitigation is required. **Next Steps:** • A Cultural Heritage Evaluation Report should be completed by a Qualified Person(s) to determine the Cultural Heritage Value or Interest of the potential cultural heritage landscape. • If the Project continues to impact the area and it is determined that the potential cultural heritage landscape meets Ontario Regulation 9/06 or Ontario Regulation 10/06, then further assessment of impacts and mitigation is required by completing a Heritage Impact Assessment.
	Habitation Areas	**Lower Ogoki Tertiary Watershed** • 10 Marten Falls First Nation Habitation Areas **Upper Albany – Makokibatan Tertiary Watershed** • 22 Marten Falls First Nation Habitation Areas • 1 Aroland First Nation Habitation Area **Upper Albany – Muswabik Tertiary Watershed** • Marten Falls First Nation Reserve	• 34 Habitation Areas	**Direct impacts are anticipated.** • The Construction Disturbance Area of the Preferred Route is anticipated to directly overlap 5 Habitation Areas in addition to the Marten Falls First Nation Reserve. • Potential direct impacts may include the demolition or removal of campground areas and / or temporary or permanent changes in land access at or around Habitation Areas. **Indirect impacts are anticipated** • Indirect impacts beyond the Construction Disturbance Area of the Preferred Route may include temporary or permanent changes in access to Habitation Areas, including either inhibiting access or opening access to non-local people.	
	Cultural, Spiritual, and Sacred Areas	**Lower Ogoki Tertiary Watershed** • 1 Aroland First Nation Cultural Area **Upper Albany – Makokibatan Tertiary Watershed** • 6 Marten Falls First Nation Cultural Areas • 2 Aroland First Nation Cultural Areas **Upper Albany – Muswabik Tertiary Watershed** • 6 Marten Falls First Nation Cultural Areas	• 15 Cultural, Spiritual, and Sacred Areas and associated context	**Direct impacts are anticipated.** • The Construction Disturbance Area of the Preferred Route is anticipated to directly overlap 6 Cultural, Spiritual, and Sacred Areas. • Potential direct impacts may include the demolition or removal of cultural sites, and temporary or permanent changes in access to culturally significant areas, either impeding local access or opening greater access to non-local people. **Indirect impacts are anticipated** • Indirect impacts beyond the Construction Disturbance Area of the Preferred Route may include temporary or permanent changes to the surrounding landscape that alter the context of culturally important areas.	
	Travel Routes	**Lower Ogoki Tertiary Watershed** • Marten Falls First Nation Winter Road • Painter Lake Road • 2 Aroland First Nation Access Trails • 2 Marten Falls First Nation Portage Routes • 3 Marten Falls First Nation Trails • Ogoki River • Dusey River **Upper Albany – Makokibatan Tertiary Watershed** • 11 Marten Falls First Nation Trails • 1 Marten Falls First Nation Portage Route • Albany River • Patiigohsing River **Upper Albany – Muswabik Tertiary Watershed** • 8 Marten Falls First Nation Trails	• 29 Land Routes • 4 Water Routes	**Direct impacts are anticipated.** • The Construction Disturbance Area of the Preferred Route is anticipated to intersect 27 Travel Routes including 23 land and 4 water routes. • Potential direct impacts to land routes may include the destruction of trail segments, the temporary or permanent obstruction of trails, and long-term changes in rights of way and / or trail access. • Potential direct impacts to water routes may include new transportation infrastructure such as bridges, culverts, and embankments that change the configuration of riverbanks and partially or fully obstruct waterway navigability and / or portage sites on a temporary or permanent basis. **Indirect impacts are anticipated** • Indirect impacts to land routes may include changes in access to trails, either impeding local access or opening greater access to non-local people. • Indirect impacts to water routes may include temporary or permanent changes to prevailing currents, and / or long-term changes in patterns of debris deposition and sedimentation, thus altering the navigability of waterways.	

Potential Cultural Heritage Landscape	Potential Heritage Attribute Type	General Location and Description of Potential Heritage Attributes within the Local Study Area	Summary of Potential Heritage Attributes	Discussion of Impacts	Proposed Mitigation and Next Steps
	Provincial Parks	**Lower Ogoki Tertiary Watershed** • Ogoki River Provincial Park **Upper Albany – Makokibatan Tertiary Watershed** • Albany River Provincial Park	• 2 Provincial Parks	**Direct impacts are anticipated.** • The Construction Disturbance Area of the Preferred Route is anticipated to transect the Albany River Provincial Park. • The Albany River Provincial Park is noted for its varied topography, remoteness, and water routes. The Project may result in direct impacts including, but not limited to, changes to the local topography including the destruction, removal, or alteration of landforms and / or grades, and the addition of a bridge over the Albany River, affecting the scenic quality and / or the navigability of the waterway. **Indirect impacts are anticipated.** • The Construction Disturbance Area of the Preferred Route is anticipated to pass within approximately 1 kilometre of the Ogoki River Provincial Park. • The Ogoki River Provincial Park is noted for its natural features, water routes, recreational opportunities, remoteness, and scenic qualities. Indirect impacts may include alterations to the landscape within and around the parks, thus altering the scenic context. • Additionally, the Project may result in temporary or permanent changes in access to both parks, opening both to greater use by non-local people.	

8.1 Key Findings

The Preliminary Impact Assessment identified that the Local Study Area overlaps one potential cultural heritage landscape, defined in **Section 6.3.3** as the Mid-Albany Cultural Heritage Landscape. The Construction Disturbance Area of the Preferred Route is anticipated to result in both direct and indirect impacts to the potential cultural heritage landscape. Within the Local Study Area, the Preliminary Impact Assessment identified 143 potential heritage attributes of the potential cultural heritage landscape, including:

- 59 Harvest Areas, including 9 general Harvest Areas and 50 specific Harvest Areas.
- 34 Habitation Areas, including 33 specific Habitation Areas in addition to the Marten Falls First Nations Reserve;
- 15 Cultural, Spiritual, and Sacred Areas;
- 33 Travel Routes including 29 land and 4 water routes; and
- 2 Provincial Parks

The Preliminary Impact Assessment further identified that of the 143 potential heritage attributes within the Local Study Area, 63 are anticipated to be directly impacted by the Preferred Route, including:

- 23 Harvest Areas, including 9 general Harvest Areas and 14 specific Harvest Areas;
- 6 Habitation Areas, including the Marten Falls First Nations Reserve;
- 6 Cultural, Spiritual, and Sacred Areas;
- 27 Travel Routes, including 23 land and 4 water routes; and
- 1 Provincial Park

In addition, the Preliminary Impact Assessment notes that there is a high probability that Project impacts may not be confined to the Construction Disturbance Area. It is anticipated that additional direct or indirect impacts to Harvest Areas, Habitation Areas, Cultural, Spiritual and Sacred Areas, Travel Routes, and Provincial Parks that are within the Local Study Area but are not directly overlapped by the Construction Disturbance Area may occur over the life of the Project. The Indigenous Knowledge data points used in this study that are considered potential heritage attributes of the potential cultural heritage landscape may be connected to one another and to the wider landscape. Therefore, the identification of data points anticipated to be directly impacted does not preclude impacts to other points within or near the Local Study Area, nor does an absence of data points mean a lack of heritage significance in a given area (see the discussion in **Section 6.3** for more information).

9. Conclusions and Recommendations

9.1 Conclusions

In conclusion, this Cultural Heritage Report includes a summary history of land use in the Local Study Area, a description of the proposed Project, Residual Effects analyses for route alternatives, and a Preliminary Impact Assessment of the Preferred Route.

Based on the results of background research, data mapping, community engagement, and the Preliminary Impact Assessment, this Cultural Heritage Report demonstrates that the Local Study Area traverses a potential cultural heritage landscape, which is defined as the Mid-Albany Cultural Heritage Landscape. The definition of this potential cultural heritage landscape is based on the physical composition of the Local Study Area (**Section 6.1**), the nature and distribution of cultural heritage and Indigenous Knowledge data points and areas of interest within the Local Study Area (**Section 6.3.1 and Section 6.3.2**), the fundamental connections between Indigenous Knowledge and the land, and the strong association between cultural landscapes and waterways in and around the Local Study Area.

The research conducted for this report identified 143 potential heritage attributes of the potential cultural heritage landscape within the Local Study Area. The Preliminary Impact Assessment in **Section 8** identified that 63 potential heritage attributes are overlapped by the Construction Disturbance Area of the Preferred Route and are anticipated to be directly impacted by the Project. However, it should also be noted that, due to the interconnection of the potential heritage attributes with each other and the surrounding landscape, direct and indirect impacts may not be distinguishable, nor may they be readily confined to the anticipated Project footprint. In consequence, this report has moderate confidence in the precise location of potential impacts and high confidence that potential impacts will extend beyond the Construction Disturbance Area of the Preferred Route over the life of the Project.

9.2 Recommendations

The following recommendations have been developed based on the results of the background research, data mapping, community engagement, the Preliminary Impact Assessment, and professional expertise. A summary of recommendations for the potential Mid-Albany Cultural Heritage Landscape is provided below.

9.2.1 General Mitigation Measures

For the potential Mid-Albany Cultural Heritage Landscape and associated potential heritage attributes within the Local Study Area, general mitigations measures should be developed and observed, including the following:

- Continue to refine the Local Study Area and the Preferred Route to avoid adverse impacts to the potential Mid-Albany Cultural Heritage Landscape and associated potential heritage attributes, wherever possible.
- Construction activities should be suitably planned and undertaken to avoid impacts, including but not limited to:
  - Informing construction crews of the location of the potential Mid-Albany Cultural Heritage Landscape and its associated potential heritage attributes.
    - Confining construction related activities to the proposed right-of-way of the Preferred Route.
  - Establishing a construction monitoring process which includes implementing no-go zones and procedures to avoid impacts to the potential heritage attributes of the potential Mid-Albany Cultural Heritage Landscape.
- Should there be changes to the Project, including but not limited to, new anticipated impacts, and refinement and / or expansion of the Study Area, a Qualified Person(s) should review this Cultural Heritage Report and revise these recommendations as required.

9.2.2 Next Steps

This report has determined that there is potential for direct and indirect adverse impacts to one potential cultural heritage landscape and, prior to initiating any construction activities, it is recommended that:

- Research and evaluate the potential Mid-Albany Cultural Heritage Landscape and its associated potential heritage attributes for Cultural Heritage Value or Interest and level of significance. The research and evaluation should be completed by a Qualified Person(s) and recorded in a Cultural Heritage Evaluation Report. As the Cultural Heritage Evaluation Report is a requirement of the Province of Ontario but is not among the deliverables identified in the Cultural Heritage Study Plan (**Appendix D**), it is recommended that the Cultural Heritage Evaluation Report be delivered as a stand-alone document. The Cultural Heritage Evaluation Report will be provided to the Project Team, the Ministry of Citizenship and Multiculturalism, and will be made available to other

interested parties upon request. The Cultural Heritage Evaluation Report will be completed as early as possible during the Environmental Assessment / Impact Statement process.

- The Cultural Heritage Evaluation Report will use Ontario Regulation 9/06 and Ontario Regulation 10/06 of the *Ontario Heritage Act* to evaluate for Cultural Heritage Value or Interest of the potential cultural heritage landscape in accordance with the *Ontario Heritage Act* and the Ontario Standards and Guidelines for Conservation of Provincial Heritage Properties. Should any portions of the Local Study Area be found to have provincial heritage significance under Ontario Regulation 10/06, additional work may require Minister's Consent, as defined in Section 3 of the *Ontario Heritage Act*.
- If the potential cultural heritage landscape is determined to meet the criteria of either Ontario Regulation 9/06 or Ontario Regulation 10/06 of the *Ontario Heritage Act,* and continues to be adversely impacted by the Project, it is recommended that a Heritage Impact Assessment be prepared to fully assess impacts, including long-term residual effects, and propose mitigation measures to conserve the Cultural Heritage Value or Interest of the cultural heritage landscape. Any Heritage Impact Assessment will be completed as early as possible during the design process and prior to construction activities. The Heritage Impact Assessment will be prepared in accordance with Information Bulletin 3: Heritage Impact Assessments for Provincial Heritage Properties (MCM, 2017).

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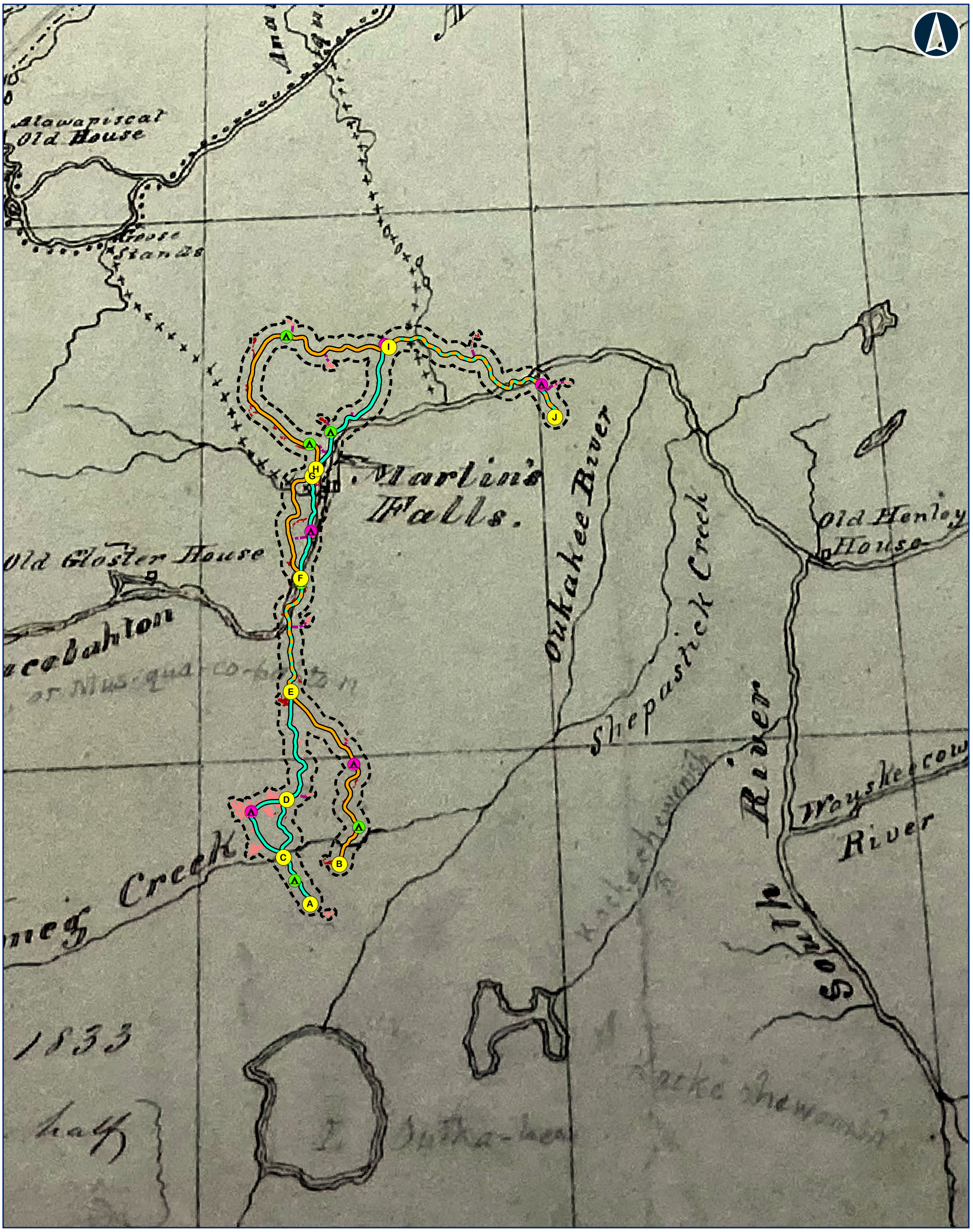
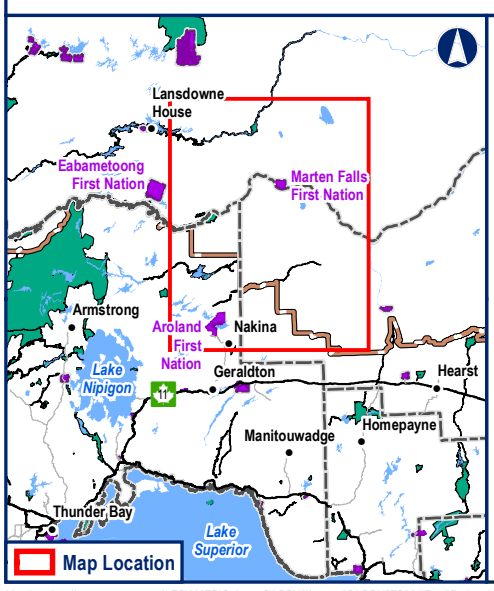
Appendix A:

Historical Maps





Legend

- A — Segment Node
- Project/Local Study Area
- X X X X Indigenous Trail

Construction Disturbance Area

Route Alternatives (100 m Right-of-Way)

- Alternative 1
- Alternative 4

Potential Camp Site

- 50 Persons (108 m x 150 m)
- 200 Persons (108 m x 150 m)
- Approximate Access Road to Potential Construction Camp (10 m Width)

Potential Aggregate Source

- Bedrock
- Sand and gravel
- Approximate Access Road to Potential Aggregate Site (10 m Width)

Data Source:
Base Data: Provided by MNRF 2023; Route Infrastructure - Provided by AECOM 2021. Contains Information licensed under the Open Government Licence Ontario.

MARTEN FALLS FIRST NATION COMMUNITY ACCESS ROAD

Hudson Bay Company Archives June 1834

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Kilometres

Datum: NAD 1983 CSRS UTM Zone 16N

May, 2024 | 1:800,000 * when printed 11"x17"

Rev:00

Figure A-1

Map location: \\na.aecomnet.com\LFS\AMER\Calgary-CACGY3\Legacy\CACGY5FS001\Prod\Projects\60593122\900-CAD_GIS\920-929 (GIS-Graphics)\Design\01_Reports_2023\Cultural Heritage\MXD_FigA-1_HBCA1834_60593122.mxd
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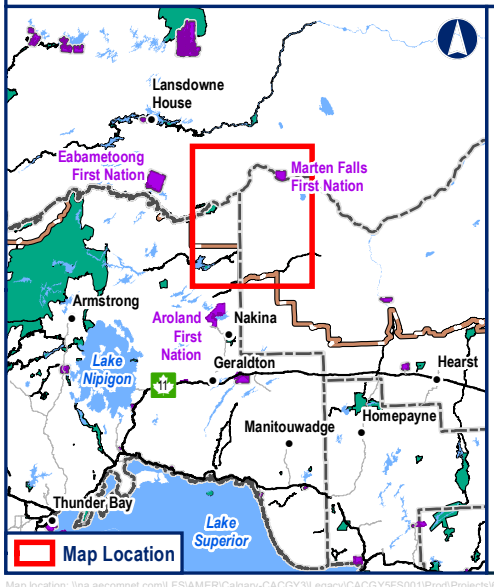

Legend

- Segment Node
- Project/Local Study Area

Construction Disturbance Area

Route Alternatives (100 m Right-of-Way)

- Alternative 1
- Alternative 4

Potential Camp Site

- 50 Persons (108 m x 150 m)
- 200 Persons (108 m x 150 m)
- Approximate Access Road to Potential Construction Camp (10 m Width)

Potential Aggregate Source

- Bedrock
- Sand and gravel
- Approximate Access Road to Potential Aggregate Site (10 m Width)

Notes:
None

Data Source:
Base Data: Provided by MNRF 2023; Route Infrastructure - Provided by AECOM 2021. Contains Information licensed under the Open Government Licence Ontario.

MARTEN FALLS FIRST NATION COMMUNITY ACCESS ROAD

Hudson Bay Company Archives March 1917

0 5 10 20 30 40
Kilometres

Datum: NAD 1983 CSRS UTM Zone 16N

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Rev:00	

Figure A-2

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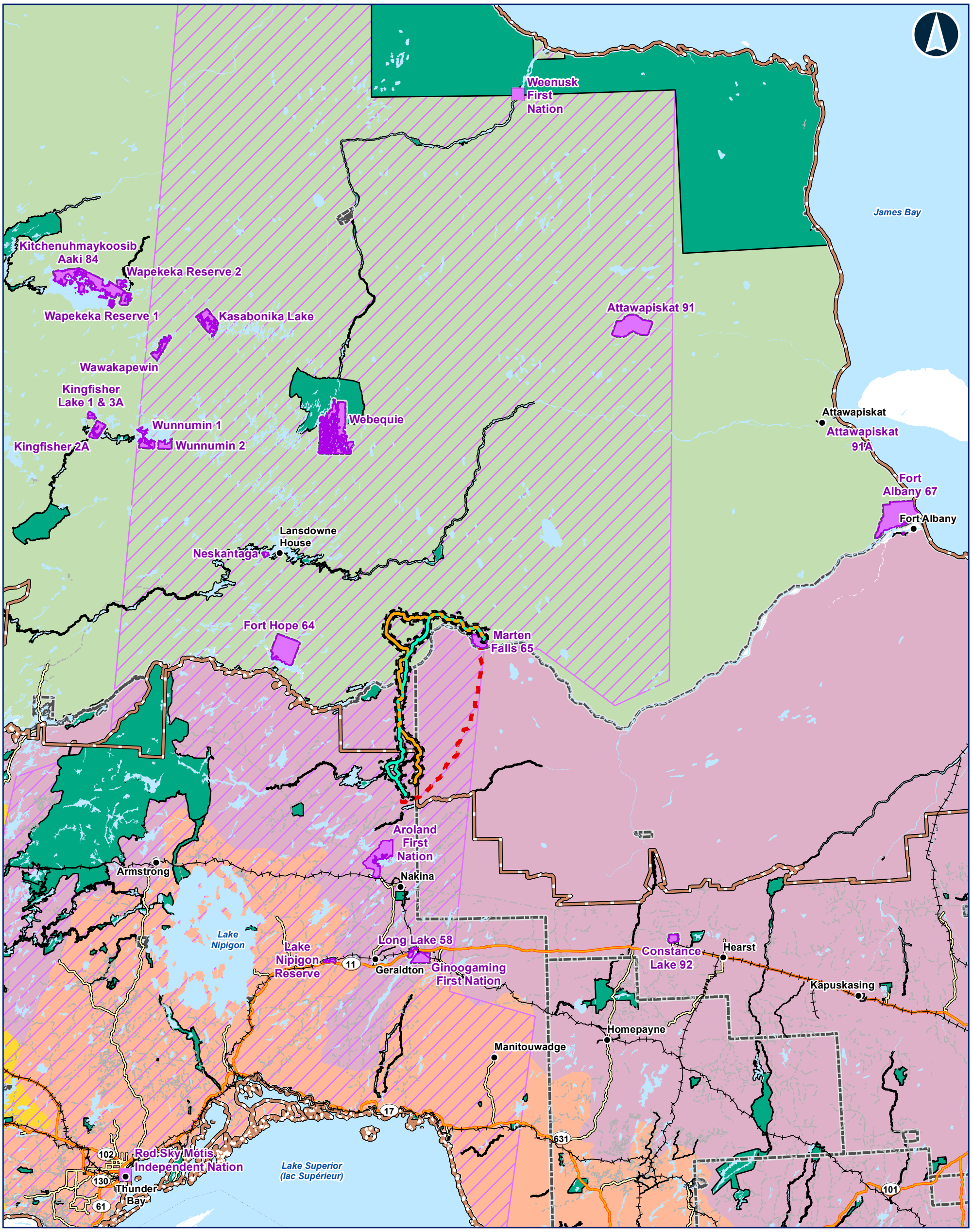

Legend

Project/Local Study Area

Construction Disturbance Area

Route Alternatives
- Alternative 1
- Alternative 4

Neighbouring Indigenous Communities
- First Nation Reserve
- Métis Nation Of Ontario, Region 2

Treaty Boundaries
- Adhesion to Treaty, No. 9, 1929
- Treaty No. 3, 1873
- Treaty No. 60, 1850
- Treaty No. 9, 1905-1906

General Features
- Freeway
- Highway
- Major Road
- Resource / Recreation Road
- Railway
- MFFN Existing Winter Access Road
- Far North Boundary
- District Municipal Boundary
- Provinicial Park
- Waterbody

Data Source:
Base Data: Provided by MNRF 2023; Route Infrastructure - Provided by AECOM 2021. Contains Information licensed under the Open Government Licence Ontario.

MARTEN FALLS FIRST NATION COMMUNITY ACCESS ROAD

Treaty Boundaries

0 10 20 40 60 80
Kilometres

Datum: NAD 1983 CSRS UTM Zone 16N

May, 2024 | 1:2,500,000 * when printed 11"x17"

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Figure A-3

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MARTEN FALLS FIRST NATION COMMUNITY ACCESS ROAD

Trapline Areas

Legend

- Segment Node
- Project/Local Study Area
- Trapline Area

Construction Disturbance Area

Route Alternatives (100 m Right-of-Way)
- Alternative 1
- Alternative 4

Potential Camp Site
- 50 Persons (108 m x 150 m)
- 200 Persons (108 m x 150 m)
- Approximate Access Road to Potential Construction Camp (10 m Width)

Potential Aggregate Source
- Bedrock
- Sand and gravel
- Approximate Access Road to Potential Aggregate Site (10 m Width)

General Features
- Local Road
- Resource / Recreation Road
- MFFN Existing Winter Access
- Watercourse
- Waterbody
- First Nation Reserve
- Far North Boundary
- District Municipal Boundary
- Provinicial Park

Data Source:
Base Data: Provided by MNRF 2023; Route Infrastructure - Provided by AECOM 2021. Contains Information licensed under the Open Government Licence Ontario.

0 5 10 20
Kilometres
Datum: NAD 1983 CSRS UTM Zone 16N

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Figure A-4

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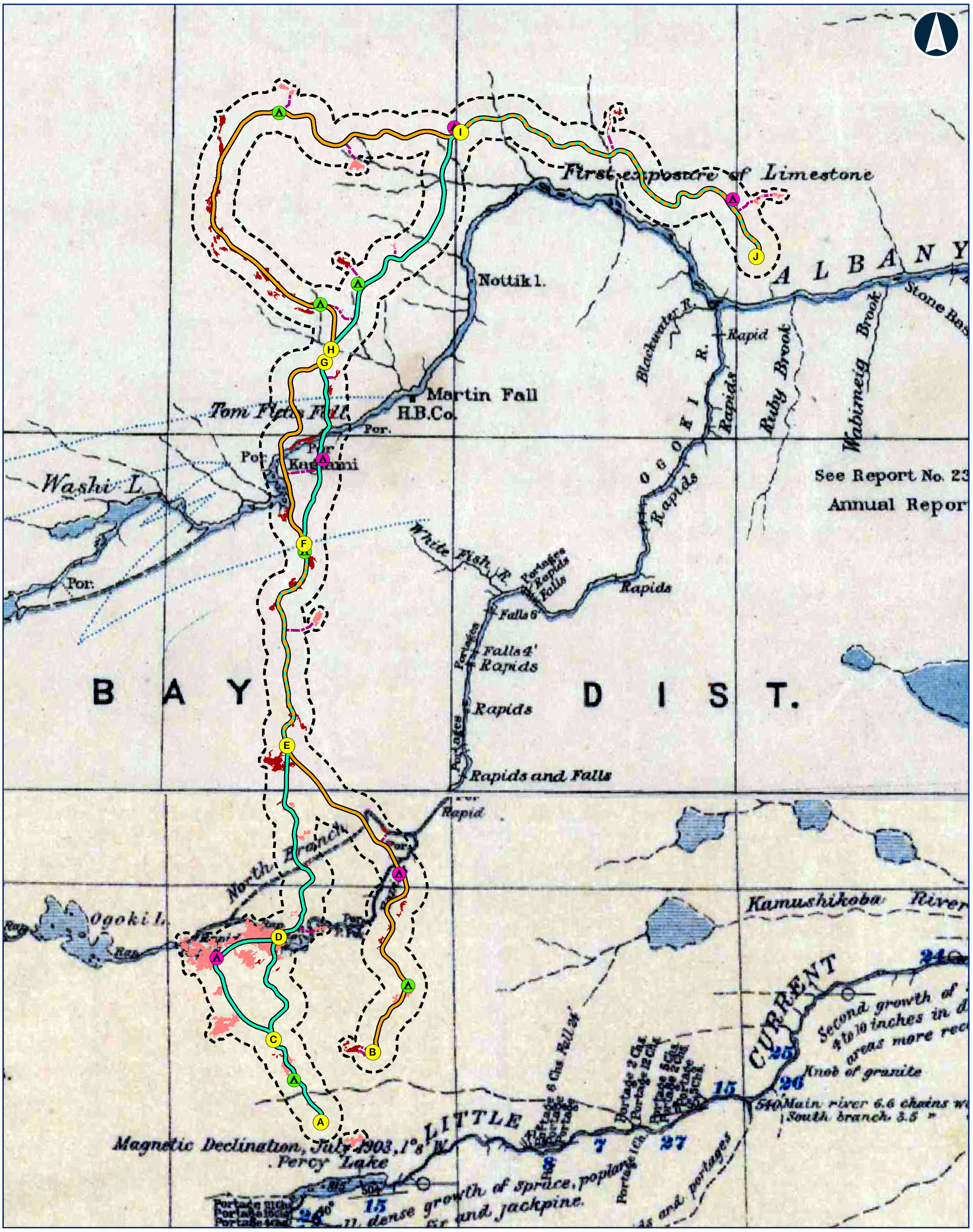

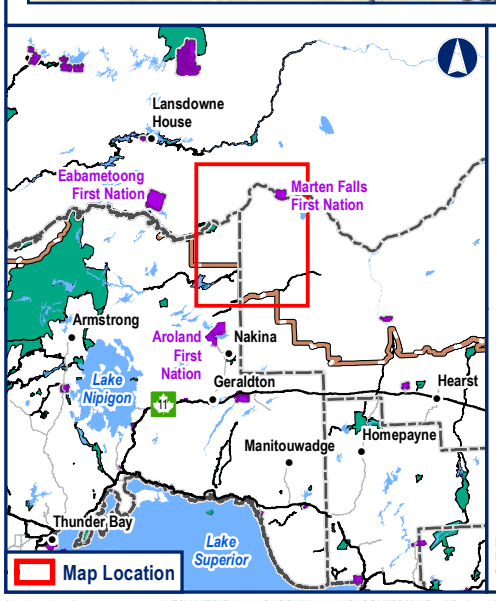

Legend

- A — Segment Node
- Project/Local Study Area

Construction Disturbance Area

Route Alternatives (100 m Right-of-Way)

- Alternative 1
- Alternative 4

Potential Camp Site

- 50 Persons (108 m x 150 m)
- 200 Persons (108 m x 150 m)
- Approximate Access Road to Potential Construction Camp (10 m Width)

Potential Aggregate Source

- Bedrock
- Sand and gravel
- Approximate Access Road to Potential Aggregate Site (10 m Width)

Data Source:
Base Data: Provided by MNRF 2023; Route Infrastructure - Provided by AECOM 2021. Contains Information licensed under the Open Government Licence Ontario.

MARTEN FALLS FIRST NATION COMMUNITY ACCESS ROAD

Geological Survey of Canada 1903

0 5 10 20
Kilometres

Datum: NAD 1983 CSRS UTM Zone 16N

May, 2024 | 1:450,000 * when printed 11"x17"

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Figure A-5

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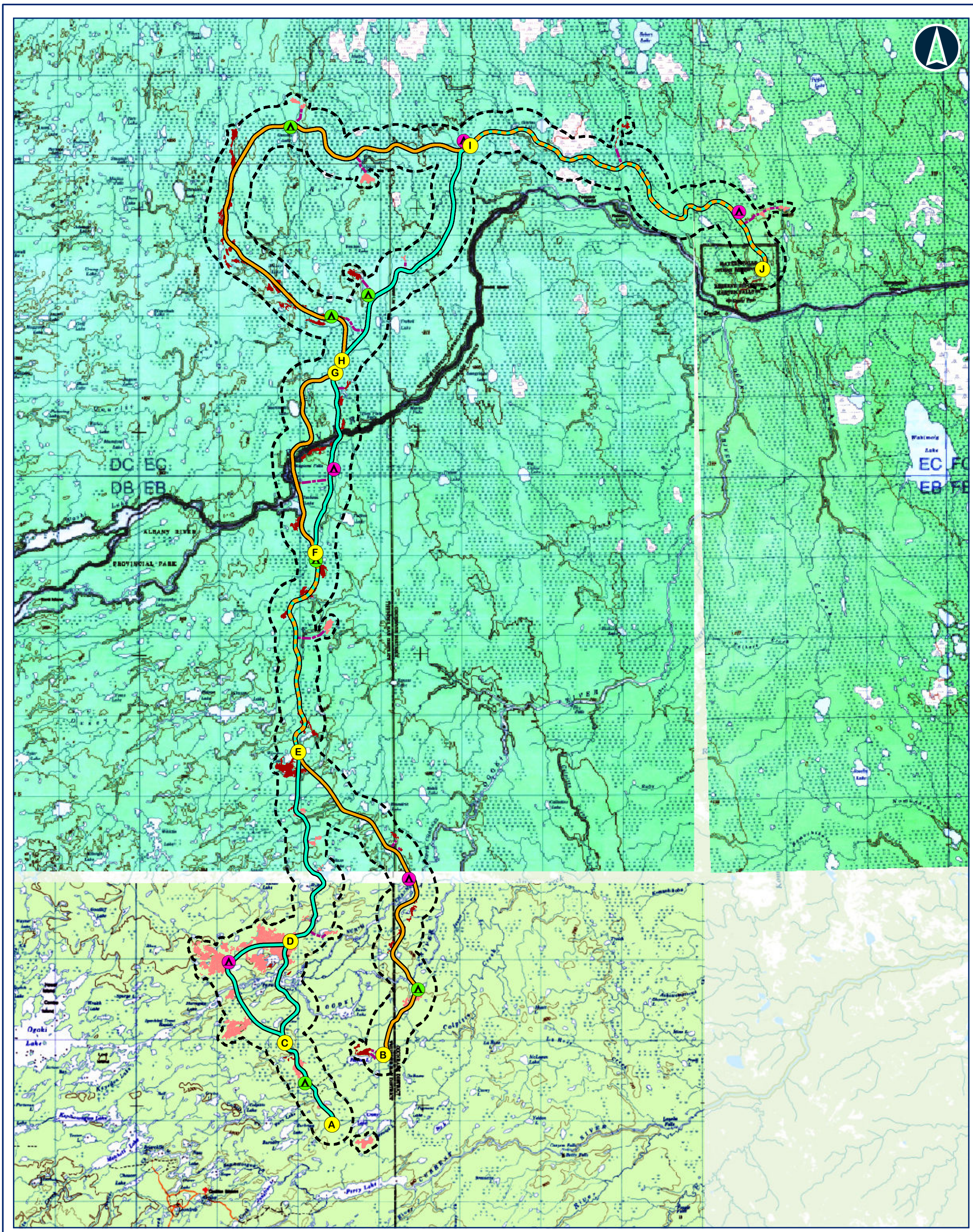

Legend

- Segment Node
- Project/Local Study Area

Construction Disturbance Area

Route Alternatives (100 m Right-of-Way)

- Alternative 1
- Alternative 4

Potential Camp Site

- 50 Persons (108 m x 150 m)
- 200 Persons (108 m x 150 m)
- Approximate Access Road to Potential Construction Camp (10 m Width)

Potential Aggregate Source

- Bedrock
- Sand and gravel
- Approximate Access Road to Potential Aggregate Site (10 m Width)

Data Source:
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MARTEN FALLS FIRST NATION COMMUNITY ACCESS ROAD

MNR Map of Ogoki, Fort Hope 1993

0 5 10 20
Kilometres

Datum: NAD 1983 CSRS UTM Zone 16N

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Rev:00	

Figure A-6

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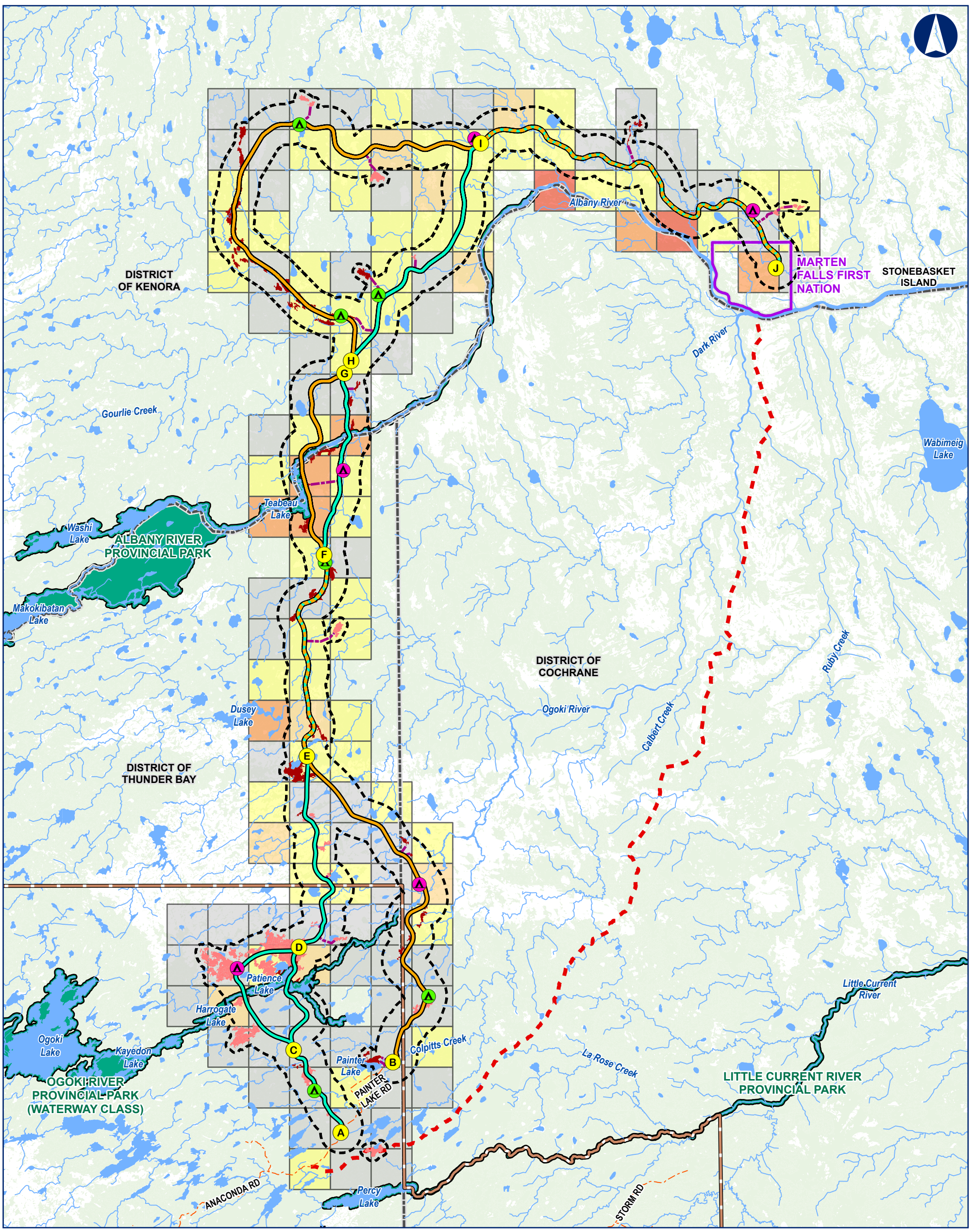
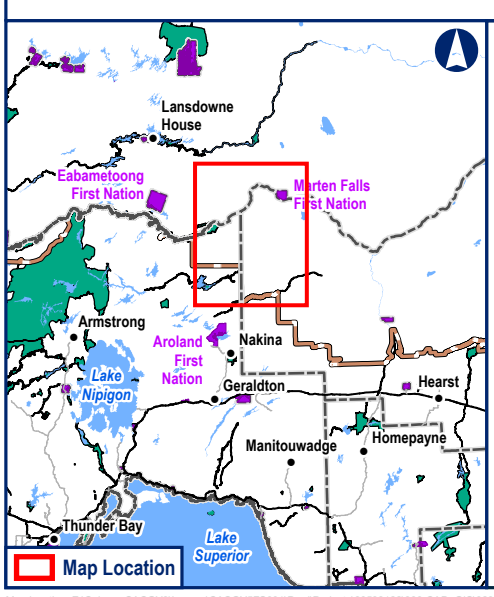
Appendix B:

Figures – Route Selection





Legend

- A — Segment Node
- Local/Project Study Area

Construction Disturbance Area

Route Alternatives (100 m Right-of-Way)
- Alternative 1
- Alternative 4

Potential Camp Site
- 50 Persons (108 m x 150 m)
- 200 Persons (108 m x 150 m)
- Approximate Access Road to Potential Construction Camp (10 m Width)

Potential Aggregate Source
- Bedrock
- Sand and gravel
- Approximate Access Road to Potential Aggregate Site (10 m Width)

Point Count
- 0
- 1 to 5
- 6 to 10
- 11 to 15
- 16 to 20

General Features
- Resource / Recreation Road
- MFFN Existing Winter Access Road
- Watercourse
- Waterbody
- First Nation Reserve
- District Municipal Boundary
- Far North Boundary
- Provincial Park

Data Source:
Base Data: Provided by MNRF 2023; Route Infrastructure - Provided by AECOM 2021. Contains Information licensed under the Open Government Licence Ontario.

MARTEN FALLS FIRST NATION COMMUNITY ACCESS ROAD

Harvest Areas, Cultural, Spiritual & Sacred and Habitation

0 5 10 20
Kilometres

Datum: NAD 1983 CSRS UTM Zone 16N

Oct, 2025 | 1:450,000 * when printed 11"x17"

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Figure B-1

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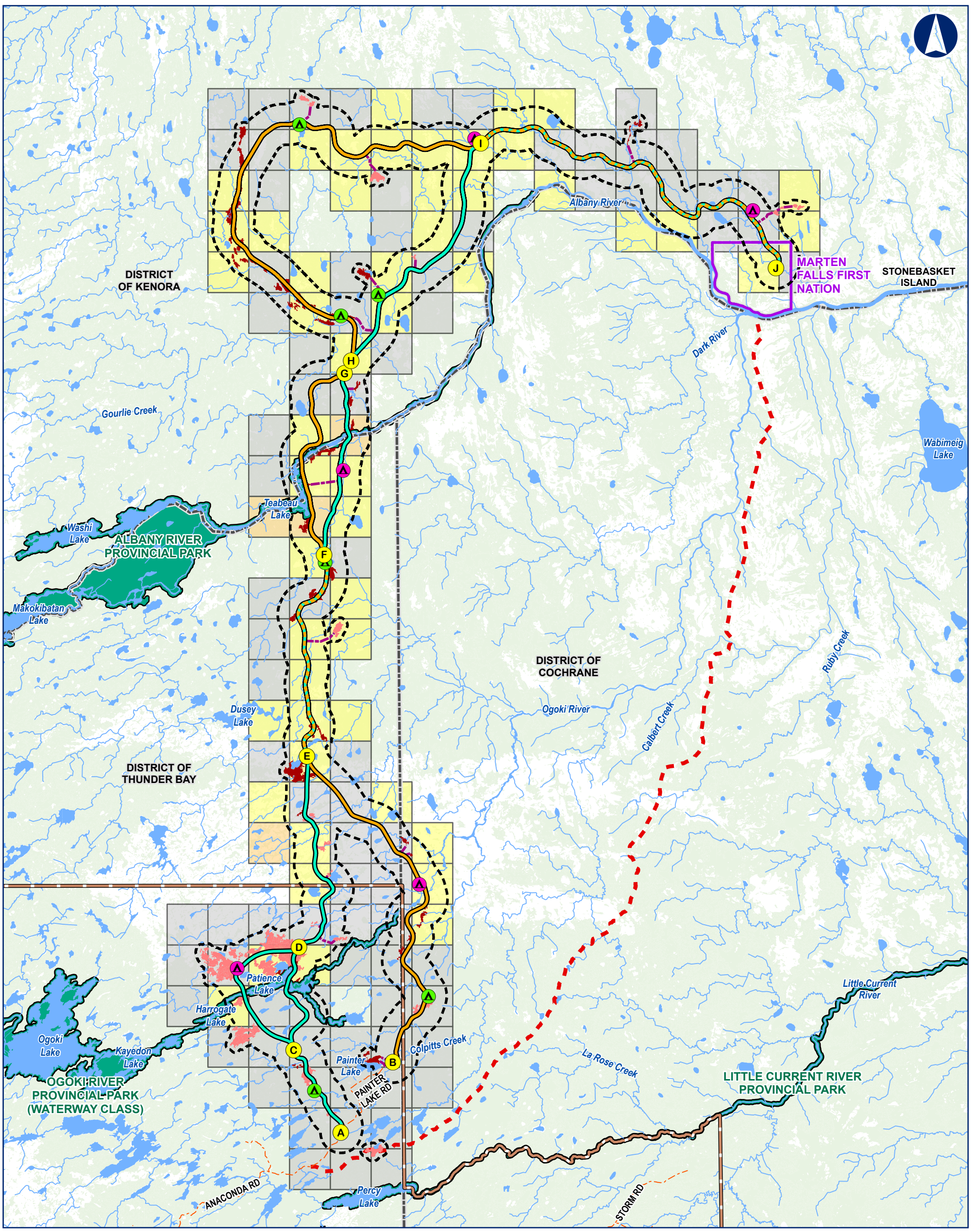

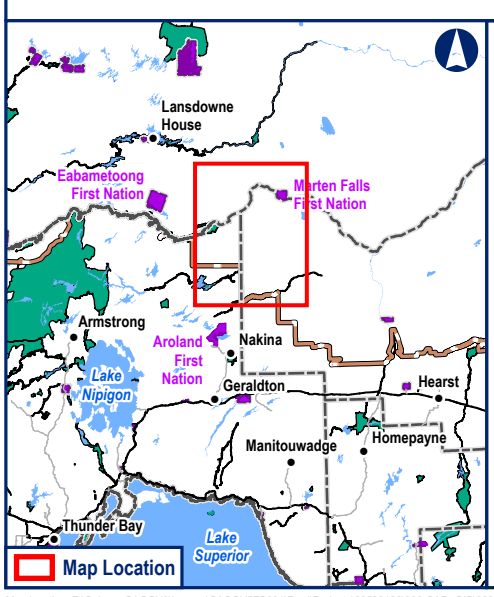

Legend

- A — Segment Node
- Local/Project Study Area

Construction Disturbance Area

Route Alternatives (100 m Right-of-Way)
- Alternative 1
- Alternative 4

Potential Camp Site
- 50 Persons (108 m x 150 m)
- 200 Persons (108 m x 150 m)
- Approximate Access Road to Potential Construction Camp (10 m Width)

Potential Aggregate Source
- Bedrock
- Sand and gravel
- Approximate Access Road to Potential Aggregate Site (10 m Width)

Point Count
- 0
- 1 to 5
- 6 to 10

General Features
- Resource / Recreation Road
- MFFN Existing Winter Access Road
- Watercourse
- Waterbody
- First Nation Reserve
- District Municipal Boundary
- Far North Boundary
- Provincial Park

Data Source:
Base Data: Provided by MNRF 2023; Route Infrastructure - Provided by AECOM 2021. Contains Information licensed under the Open Government Licence Ontario.

MARTEN FALLS FIRST NATION COMMUNITY ACCESS ROAD

Harvest Areas

0 5 10 20
Kilometres
Datum: NAD 1983 CSRS UTM Zone 16N

Oct, 2025 | 1:450,000 * when printed 11"x17"

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Figure B-2

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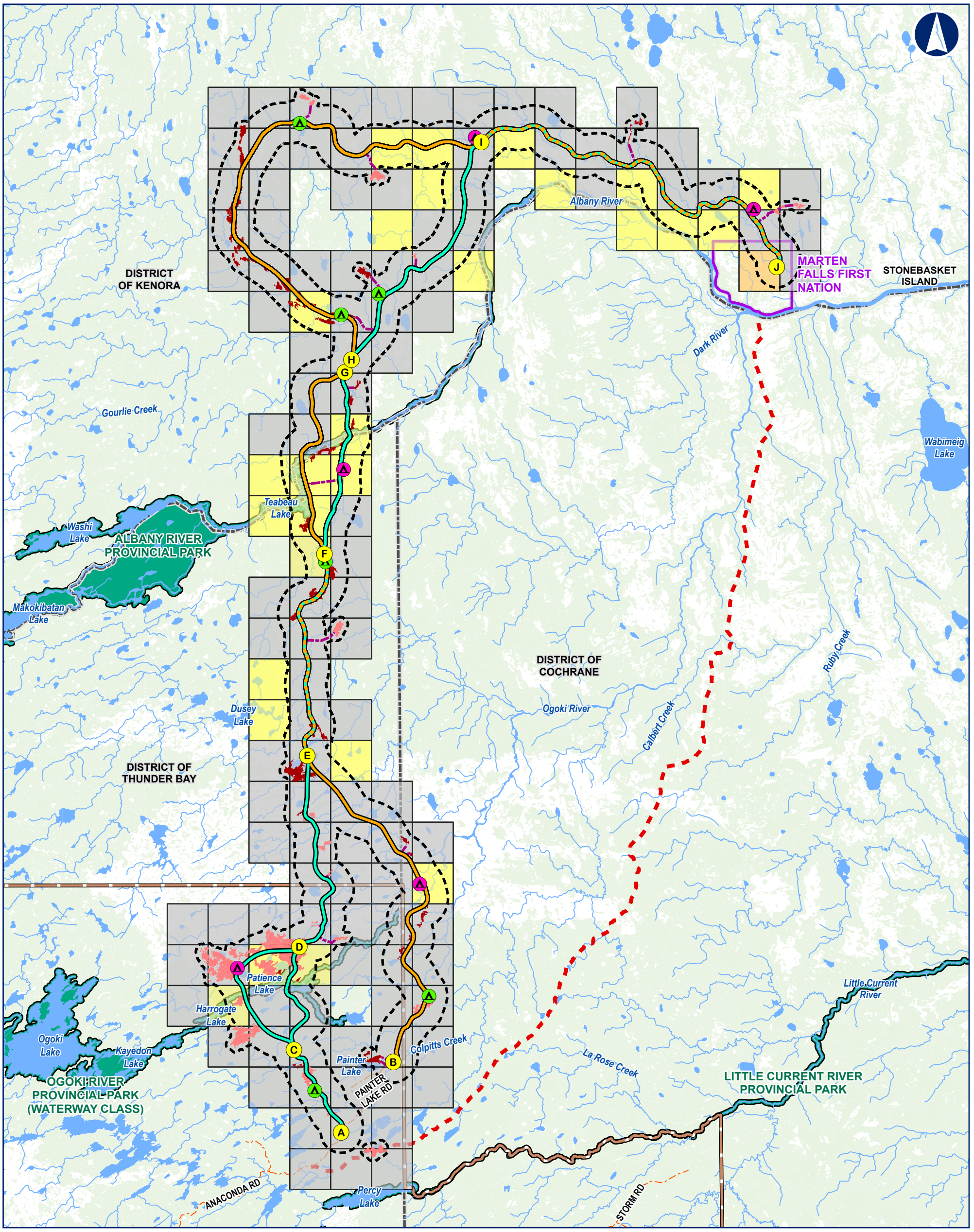

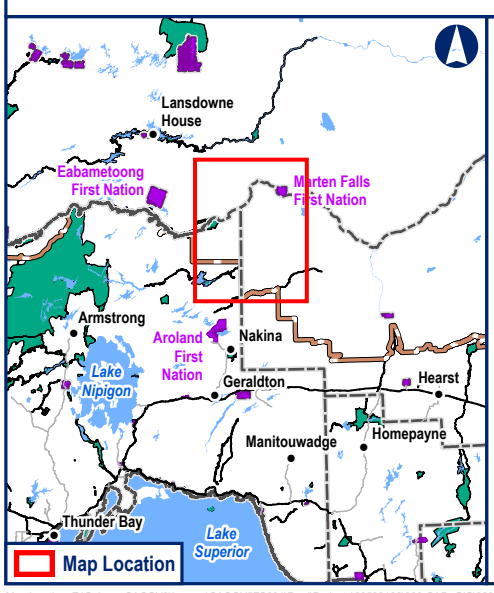

Legend

- Segment Node
- Local/Project Study Area

Construction Disturbance Area

Route Alternatives (100 m Right-of-Way)
- Alternative 1
- Alternative 4

Potential Camp Site
- 50 Persons (108 m x 150 m)
- 200 Persons (108 m x 150 m)
- Approximate Access Road to Potential Construction Camp (10 m Width)

Potential Aggregate Source
- Bedrock
- Sand and gravel
- Approximate Access Road to Potential Aggregate Site (10 m Width)

Point Count
- 0
- 1 to 5
- 6 to 10

General Features
- Resource / Recreation Road
- MFFN Existing Winter Access Road
- Watercourse
- Waterbody
- First Nation Reserve
- District Municipal Boundary
- Far North Boundary
- Provincial Park

Data Source:
Base Data: Provided by MNRF 2023; Route Infrastructure - Provided by AECOM 2021. Contains Information licensed under the Open Government Licence Ontario.

MARTEN FALLS FIRST NATION COMMUNITY ACCESS ROAD

Cultural, Spiritual & Sacred

0 5 10 20
Kilometres

Datum: NAD 1983 CSRS UTM Zone 16N

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Figure B-3

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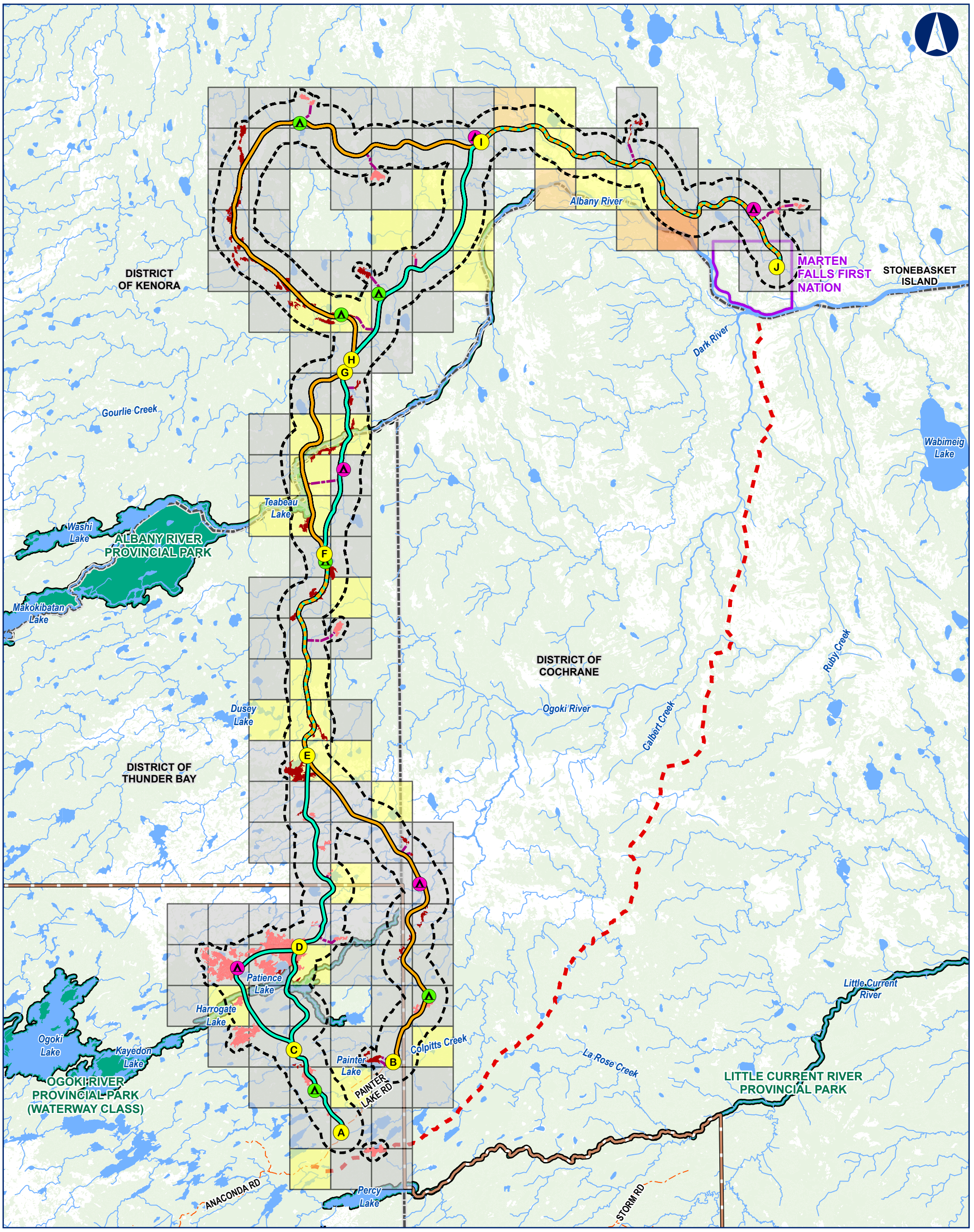

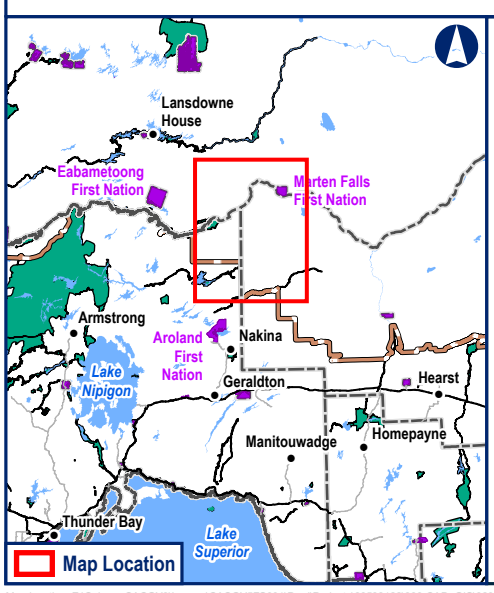

Legend

- Segment Node
- Local/Project Study Area

Construction Disturbance Area

Route Alternatives (100 m Right-of-Way)
- Alternative 1
- Alternative 4

Potential Camp Site
- 50 Persons (108 m x 150 m)
- 200 Persons (108 m x 150 m)
- Approximate Access Road to Potential Construction Camp (10 m Width)

Potential Aggregate Source
- Bedrock
- Sand and gravel
- Approximate Access Road to Potential Aggregate Site (10 m Width)

Point Count
- 0
- 1 to 5
- 6 to 10
- 11 to 15

General Features
- Resource / Recreation Road
- MFFN Existing Winter Access Road
- Watercourse
- Waterbody
- First Nation Reserve
- District Municipal Boundary
- Far North Boundary
- Provincial Park

Data Source:
Base Data: Provided by MNRF 2023; Route Infrastructure - Provided by AECOM 2021. Contains Information licensed under the Open Government Licence Ontario.

MARTEN FALLS FIRST NATION COMMUNITY ACCESS ROAD

Habitation

0 5 10 20
Kilometres
Datum: NAD 1983 CSRS UTM Zone 16N

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Figure B-4

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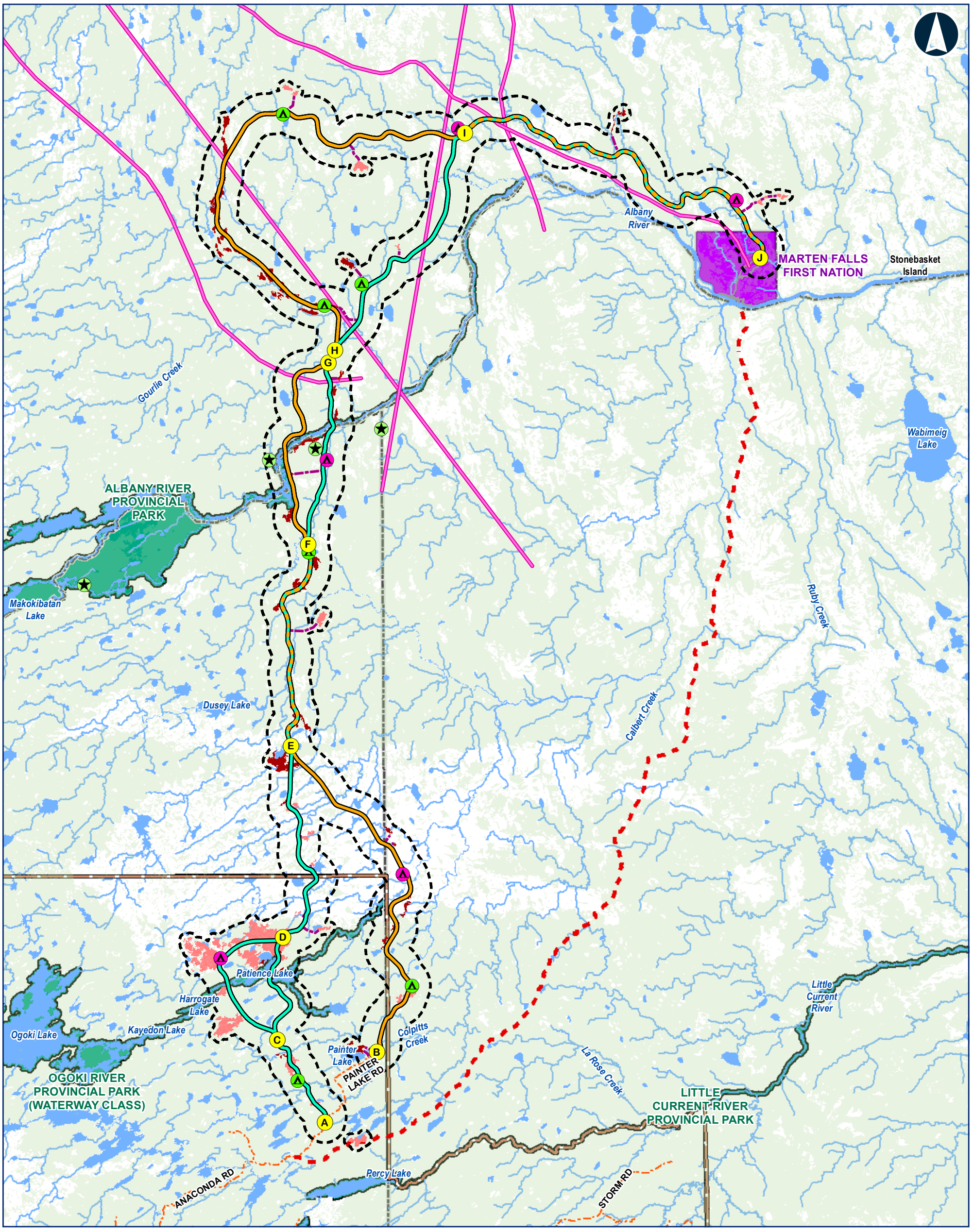

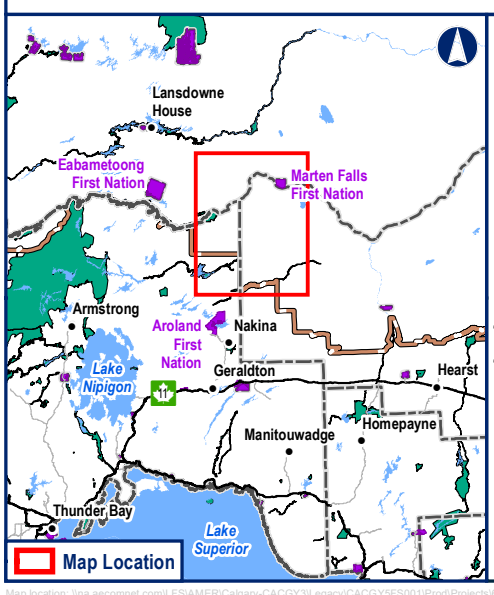

Legend

- Segment Node
- Project/Local Study Area
- Portage Locations (Geological Survey of Canada 1903)
- Approximate Location of Historical Indigenous Trails

Construction Disturbance Area

Route Alternatives (100 m Right-of-Way)
- Alternative 1
- Alternative 4

Potential Camp Site
- 50 Persons (108 m x 150 m)
- 200 Persons (108 m x 150 m)
- Approximate Access Road to Potential Construction Camp (10 m Width)

Potential Aggregate Source
- Bedrock
- Sand and gravel
- Approximate Access Road to Potential Aggregate Site (10 m Width)

General Features
- Local Road
- Resource / Recreation Road
- MFFN Existing Winter Access Road
- Watercourse
- Waterbody
- Far North Boundary
- First Nation Reserve
- District Municipal Boundary
- Provinicial Park

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MARTEN FALLS FIRST NATION COMMUNITY ACCESS ROAD

Historical Indigenous Trails

0 5 10 20
Kilometres

Datum: NAD 1983 CSRS UTM Zone 16N

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Figure B-5

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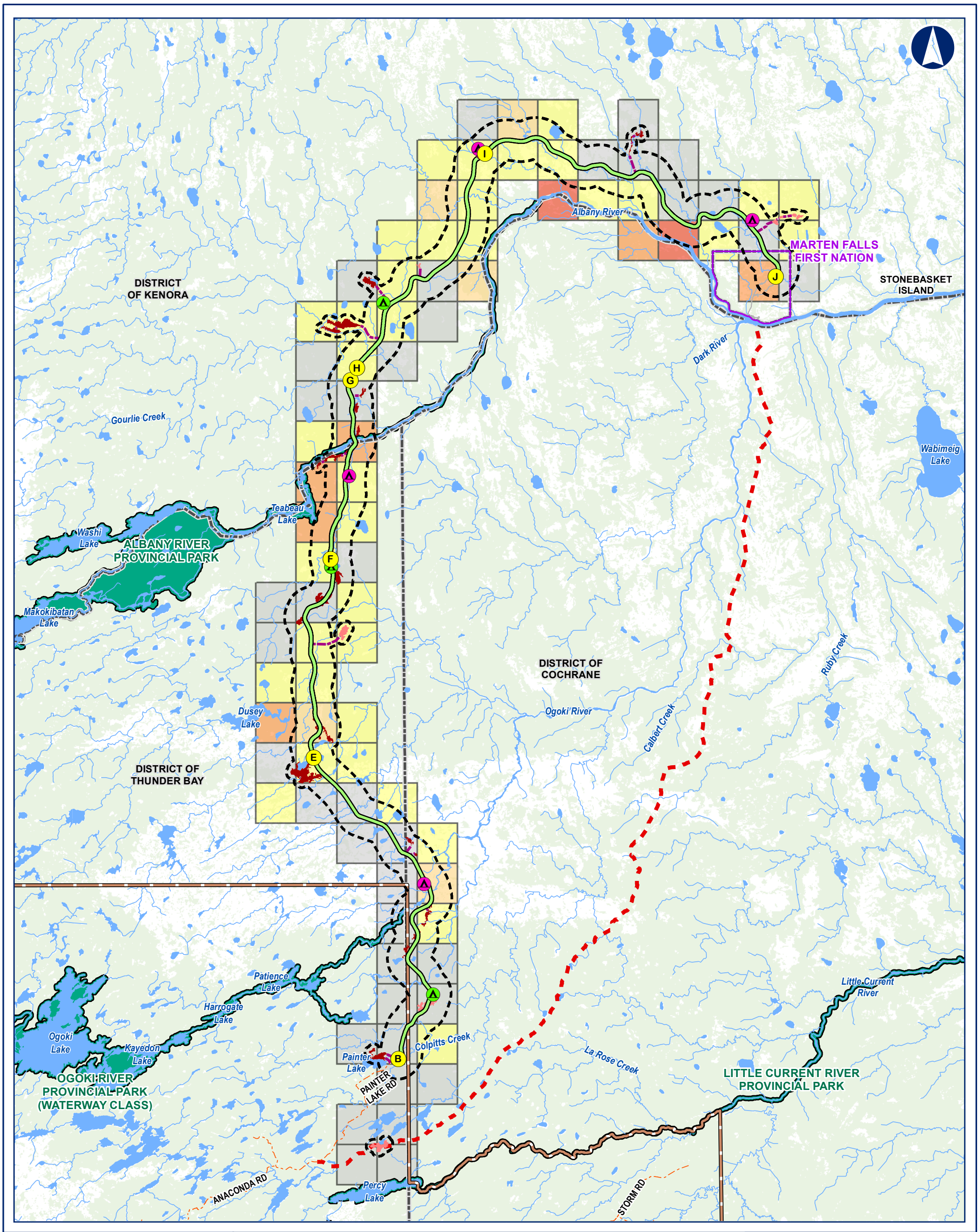
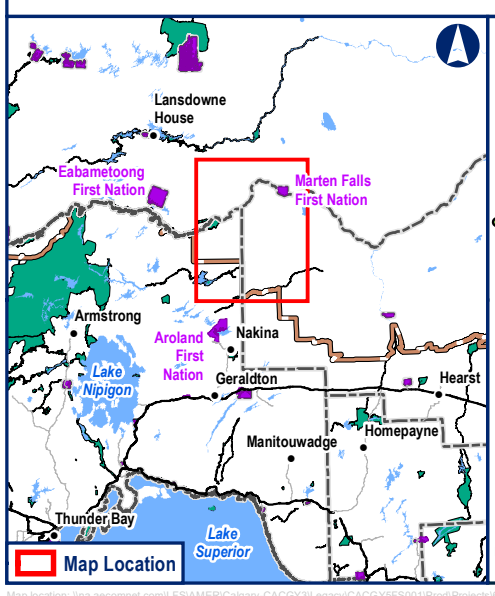
Appendix C:

Figures – Preferred Route





Legend

- Segment Node
- Local/Project Study Area

Construction Disturbance Area

- Preferred Route (100 m Right-of-Way)

Potential Camp Site

- 50 Persons (108 m x 150 m)
- 200 Persons (108 m x 150 m)
- Approximate Access Road to Potential Construction Camp (10 m Width)

Potential Aggregate Source

- Bedrock
- Sand and gravel
- Approximate Access Road to Potential Aggregate Site (10 m Width)

Point Count

- 0
- 1 to 5
- 6 to 10
- 11 to 15
- 16 to 20

General Features

- Local Road
- Resource / Recreation Road
- MFFN Existing Winter Access Road
- Watercourse
- Waterbody
- First Nation Reserve
- District Municipal Boundary
- Far North Boundary
- Provincial Park

Notes: None

Data Source:
Base Data: Provided by MNRF 2023; Route Infrastructure - Provided by AECOM 2021. Contains Information licensed under the Open Government Licence Ontario.

MARTEN FALLS FIRST NATION COMMUNITY ACCESS ROAD

Harvest Areas, Cultural, Spiritual & Sacred and Habitation

0 5 10 20
Kilometres
Datum: NAD 1983 CSRS UTM Zone 16N

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Figure C-1

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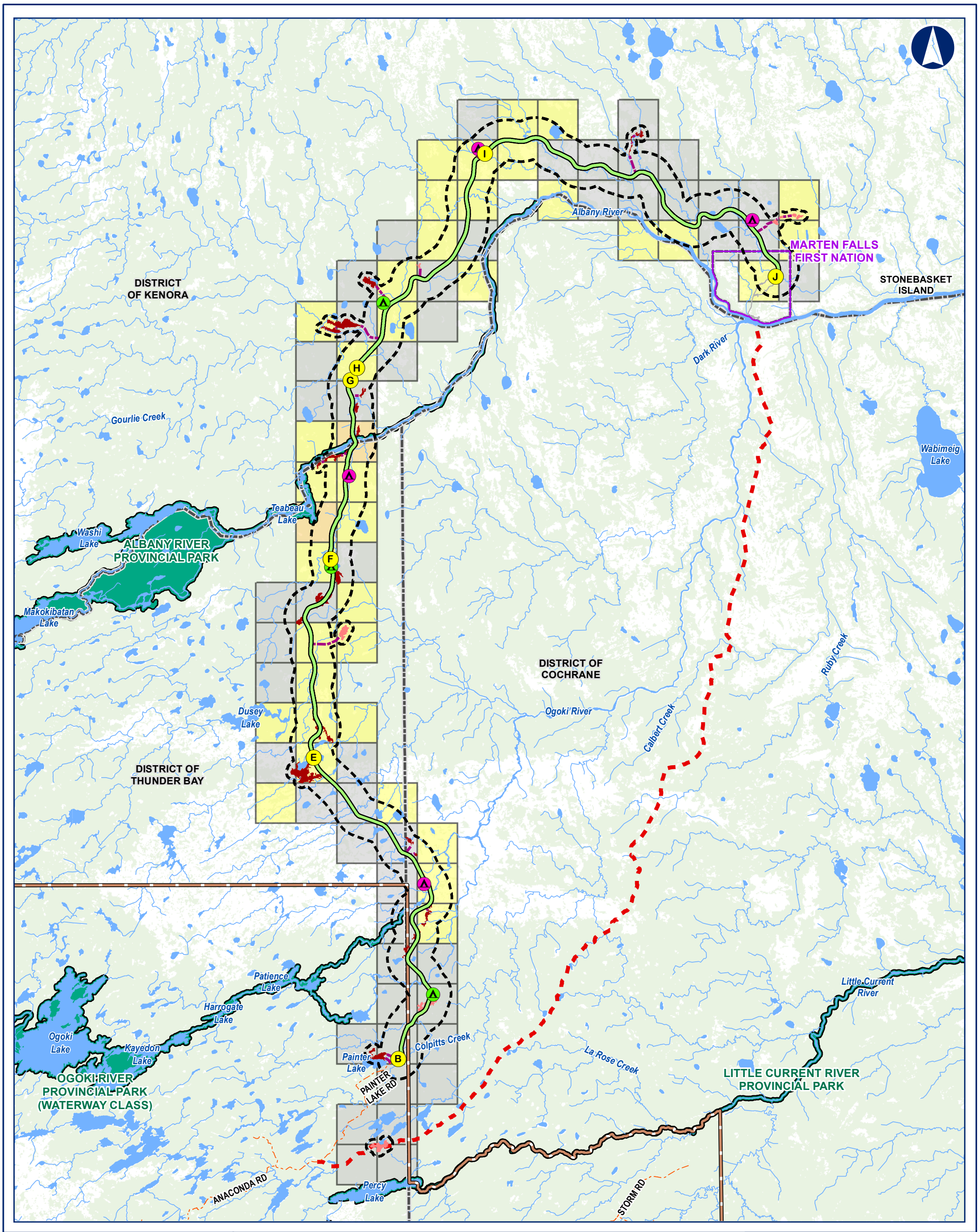

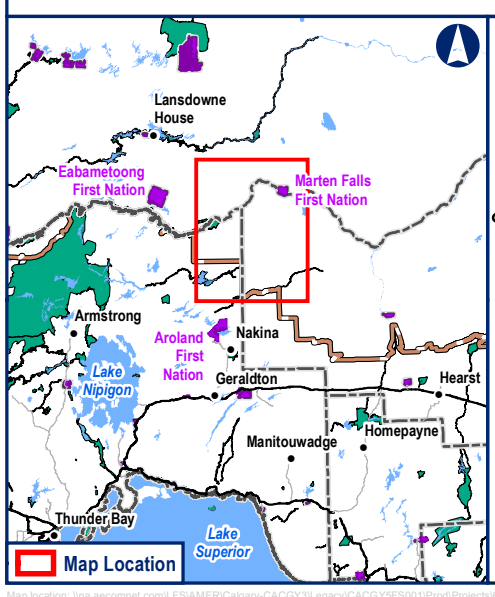

Legend

- Segment Node
- Local/Project Study Area

Construction Disturbance Area

- Preferred Route (100 m Right-of-Way)

Potential Camp Site

- 50 Persons (108 m x 150 m)
- 200 Persons (108 m x 150 m)
- Approximate Access Road to Potential Construction Camp (10 m Width)

Potential Aggregate Source

- Bedrock
- Sand and gravel
- Approximate Access Road to Potential Aggregate Site (10 m Width)

Point Count

- 0
- 1 to 5
- 6 to 10

General Features

- Local Road
- Resource / Recreation Road
- MFFN Existing Winter Access Road
- Watercourse
- Waterbody
- First Nation Reserve
- District Municipal Boundary
- Far North Boundary
- Provincial Park

Notes: None

Data Source:
Base Data: Provided by MNRF 2023; Route Infrastructure - Provided by AECOM 2021. Contains Information licensed under the Open Government Licence Ontario.

MARTEN FALLS FIRST NATION COMMUNITY ACCESS ROAD

Harvest Areas

0 5 10 20
Kilometres
Datum: NAD 1983 CSRS UTM Zone 16N

May, 2024 | 1:450,000 * when printed 11"x17"

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Figure C-2

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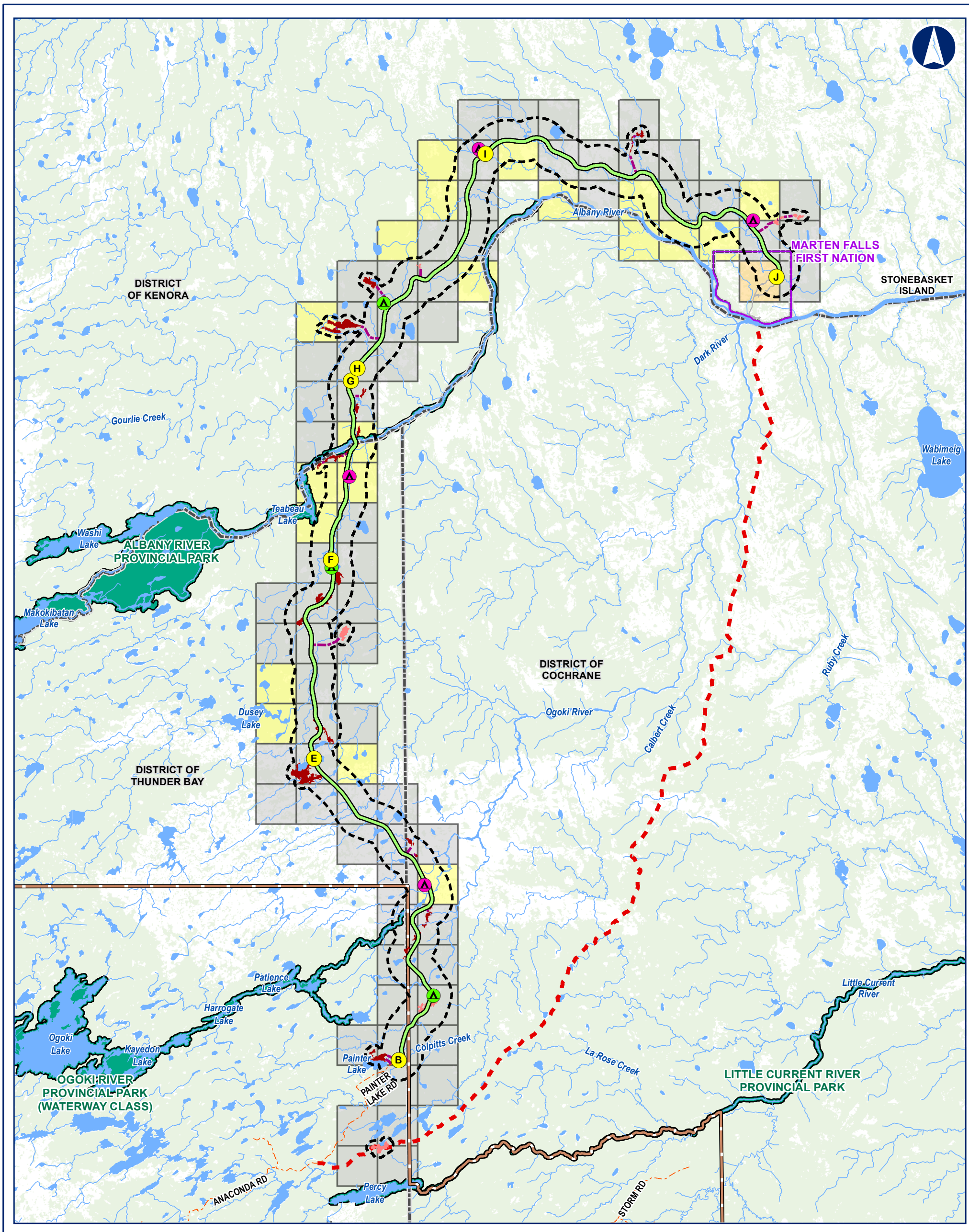

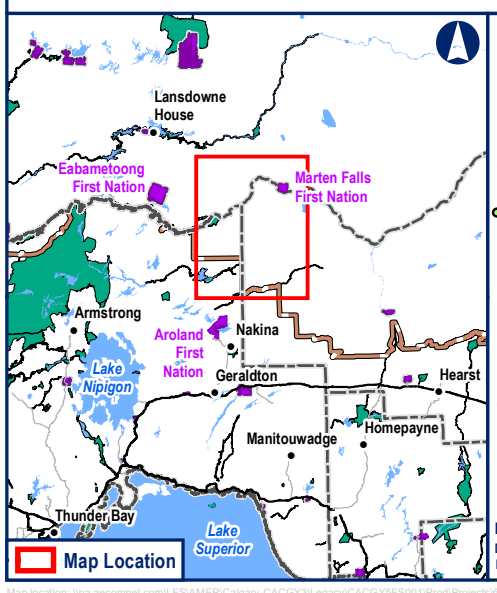

Legend

- Segment Node
- Local/Project Study Area

Construction Disturbance Area

- Preferred Route (100 m Right-of-Way)

Potential Camp Site

- 50 Persons (108 m x 150 m)
- 200 Persons (108 m x 150 m)
- Approximate Access Road to Potential Construction Camp (10 m Width)

Potential Aggregate Source

- Bedrock
- Sand and gravel
- Approximate Access Road to Potential Aggregate Site (10 m Width)

Point Count

- 0
- 1 to 5
- 6 to 10

General Features

- Local Road
- Resource / Recreation Road
- MFFN Existing Winter Access Road
- Watercourse
- Waterbody
- First Nation Reserve
- District Municipal Boundary
- Far North Boundary
- Provincial Park

Notes: None

Data Source:
Base Data: Provided by MNRF 2023; Route Infrastructure - Provided by AECOM 2021. Contains Information licensed under the Open Government Licence Ontario.

MARTEN FALLS FIRST NATION COMMUNITY ACCESS ROAD

Cultural, Spiritual & Sacred

0 5 10 20
Kilometres
Datum: NAD 1983 CSRS UTM Zone 16N

May, 2024 | 1:450,000 * when printed 11"x17"
Rev:00

Figure C-3

Map location: \\na.aecomnet.com\LFS\AMER\Calgary-CACGY3\Legacy\CACGY5FS001\Prod\Projects\60593122\900-CAD_GIS\920-929 (GIS-Graphics)\Design\01_Reports_2024\Cultural Heritage\MXD_FigC3_CulturalSacred_Preferred_60593122.mxd
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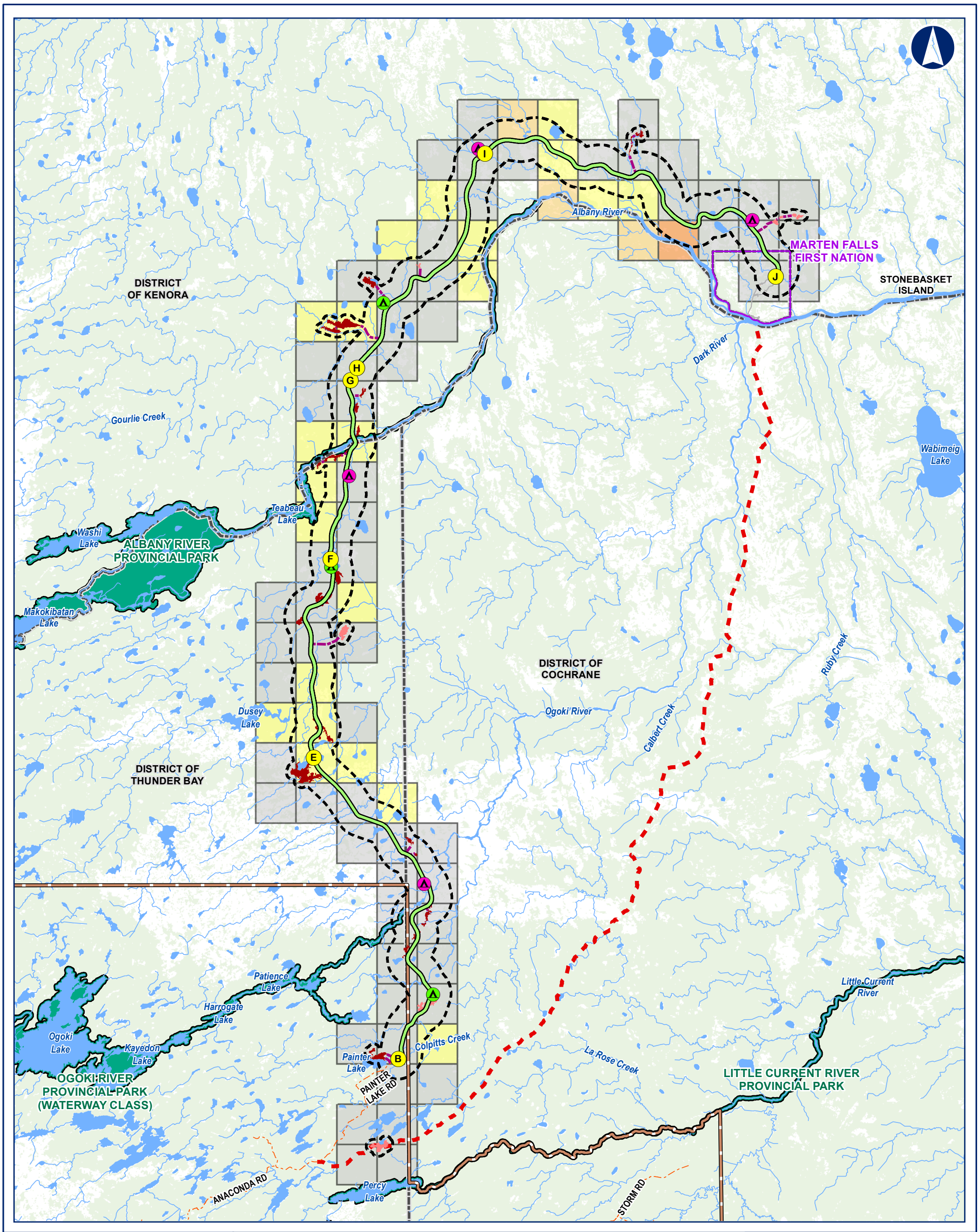

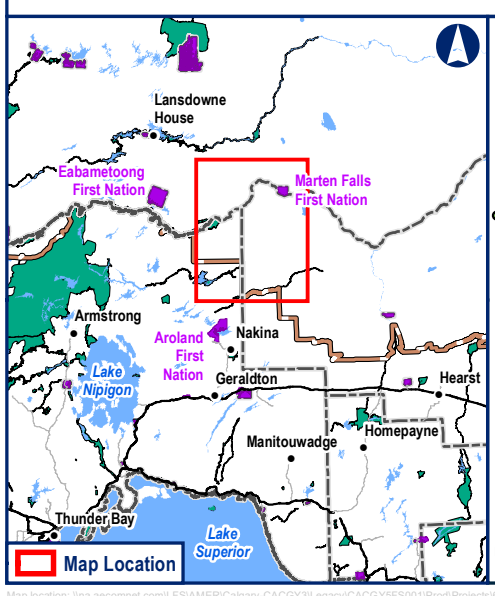

Legend

- Segment Node
- Local/Project Study Area

Construction Disturbance Area

- Preferred Route (100 m Right-of-Way)

Potential Camp Site

- 50 Persons (108 m x 150 m)
- 200 Persons (108 m x 150 m)
- Approximate Access Road to Potential Construction Camp (10 m Width)

Potential Aggregate Source

- Bedrock
- Sand and gravel
- Approximate Access Road to Potential Aggregate Site (10 m Width)

Point Count

- 0
- 1 to 5
- 6 to 10
- 11 to 15

General Features

- Local Road
- Resource / Recreation Road
- MFFN Existing Winter Access Road
- Watercourse
- Waterbody
- First Nation Reserve
- District Municipal Boundary
- Far North Boundary
- Provincial Park

Notes: None

Data Source:
Base Data: Provided by MNRF 2023; Route Infrastructure - Provided by AECOM 2021. Contains Information licensed under the Open Government Licence Ontario.

MARTEN FALLS FIRST NATION COMMUNITY ACCESS ROAD

Habitation

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Kilometres
Datum: NAD 1983 CSRS UTM Zone 16N

May, 2024 | 1:450,000 * when printed 11"x17"

Rev:00

Figure C-4

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Date Saved: 5/15/2024 8:36:39 AM User Name: Stephanie.Clark

Appendix D:

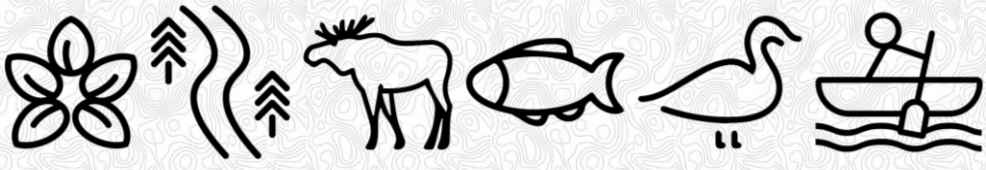
Final Cultural Heritage Study Plan and Regulator Comments

MARTEN FALLS FIRST NATION
ALL SEASON COMMUNITY ACCESS ROAD

FINAL

Cultural Heritage Study Plan

November 2023



Distribution List

# Hard Copies	PDF Required	Association / Company Name
	✓	Marten Falls First Nation
	✓	AECOM Canada Ltd.

Revision History

Rev #	Date	Revision Description
Draft	May 2020	Submitted *Study Plan – Cultural Heritage DRAFT FOR DISCUSSION* to the Agency.
Final	May 2021	Revised to address federal and provincial agency comments.
Final Revised	November 2	Revised to address outline further Cultural Heritage consultation and additional Stage 1 Archaeology investigations

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AECOM: 2015-04-13

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Appendices

Acronyms

AA ..... Archaeological Assessment
Agency ..... the Impact Assessment Agency of Canada
CAR..... Community Access Road
CHR ..... Cultural Heritage Report
EA ..... Environmental Assessment
IA..... Impact Assessment
IAA ..... *Impact Assessment Act*
IS..... Impact Statement
km ..... kilometre
LSA ..... Local Study Area
MECP..... Ontario Ministry of the Environment, Conservation and Parks
MFFN ..... Marten Falls First Nation
MHSTCI ..... Ministry of Heritage, Sport, Tourism and Culture Industries
OHA ..... *Ontario Heritage Act*
PDA..... Project Development Area
RSA..... Regional Study Area
TISG..... Tailored Impact Statement Guidelines
ToR ..... Terms of Reference
VC ..... Valued Component

1. Introduction

The Proponent of the Community Access Road (CAR or the Project) is Marten Falls First Nation (MFFN), a remote First Nation community in northern Ontario located at the junction of the Albany and Ogoki rivers, approximately 430 kilometres (km) from Thunder Bay, Ontario. The MFFN community is proposing an all-season Community Access Road that will connect the MFFN community to Ontario's provincial highway network (Highway 643) to the south via the existing Painter Lake Road. MFFN, as the Proponent of the Project, has formed a MFFN CAR Project Team that includes MFFN CAR Community Member Advisors and MFFN CAR Project Consultants who act with input, guidance and direction from the MFFN Chief and Council.

This document outlines the Study Plan for Cultural Heritage to support a coordinated Impact Assessment (IA) required for Project review by the Impact Assessment Agency of Canada (the Agency) under the federal *Impact Assessment Act* (*IAA*) and Environmental Assessment (EA) required for Project review by the Ontario Ministry of the Environment, Conservation and Parks (MECP) under the Ontario *Environmental Assessment Act* (Ontario Government, 1990a).

1.1 Federal and Provincial Terminology

The study plans have been prepared using federal terminology, however, the respective provincial terminology has been provided in **Table 1-1** for reference. The terms can be used interchangeably.

Table 1-1: Equivalent Federal and Provincial Terms

Provincial Term	Federal Term
Criteria	Valued Component
Impact Management Measure	Mitigation Measure
Net Effects	Residual Effects
Record of Consultation	Record of Engagement

1.2 Project Study Plans

This Study Plan is one of a group of study plans created for the Project. **Table 1-2** includes the study plans for each environmental[1] discipline currently planned for the Project and the valued components (VCs) covered by the study plans where applicable.

Table 1-2: Project Study Plans and Valued Components

Environmental Discipline	Study Plan Name	Valued Component(s)
Aboriginal and Treaty Rights and Interests	■ Aboriginal and Treaty Rights and Interests Study Plan	■ Indigenous Current Use of Lands and Resources for Traditional Purposes ■ Cultural Continuity (ability to practice and transmit cultural traditions)
Atmospheric Environment	■ Atmospheric Environment Study Plan	■ Air Quality ■ Greenhouse Gas Emissions
Climate Change	■ Climate Adaptation and Resiliency Study Plan	■ Climate Change
Acoustic and Vibration Environment	■ Acoustic and Vibration Environment Study Plan	■ Noise ■ Vibration
Physiography, Geology, Terrain and Soils	■ Physiography, Terrain and Soils Study Plan	■ Physiography, Terrain and Soils
Surface Water	■ Surface Water Study Plan	■ Surface Water
Groundwater and Geochemistry	■ Groundwater and Geochemistry Study Plan	■ Groundwater
Vegetation	■ Vegetation Study Plan	■ Wetland and Riparian Ecosystems ■ Upland Ecosystems ■ Designated Areas (Areas of Natural and Scientific Interest, Environmentally Significant Areas, Significant Woodlands, Critical Landform / Vegetation Associations) ■ Traditional Use Plants and SAR Plant Populations (including species with special conservation status or rarity in the province)
	■ Peatlands Study Plan	■ Peatland Ecosystems (bogs and fens)
Wildlife	■ Wildlife Study Plan	■ Bats (including SAR-bats such as: Little Brown Myotis [*Myotis lucifugus*], Northern Myotis [*Myotis septentrionalis*] and Tricolored Bat [*Perimyotis subflavus*])

1. *The use of the term environment in this document is inclusive of the components of the environment that are included in the Ontario Environmental Assessment Act definition, which includes a general description of the social, cultural, built and natural environments.*

Environmental Discipline	Study Plan Name	Valued Component(s)
		■ Fur Bearers (proxy VC[2] American Marten [*Martes americana*], Beaver [*Castor canadensis*] and Wolverine [*Gulo gulo*]) ■ Amphibians and Reptiles ■ Pollinating Insects
	■ Ungulates (Moose and Caribou) Study Plan	■ Moose (*Alces alces*) ■ Caribou, boreal population (*Rangifer tarandus*)
	■ Bird Study Plan	■ Forest Birds (proxy VC of Red-eyed vireo [*Vireo olivaceus*] for deciduous forest, Ovenbird [*Seirus aurocapilla*] for mixedwood forest, Dark-eyed Junco [*Junco hyemalis*] for coniferous forest and disturbed forest as well as SAR-birds such as: Canada Warbler [*Cardellina canadensis*], Chimney Swift [*Chaetura pelagica*], Common Nighthawk [*Chordeiles minor*], Eastern Whip-poor-will [*Antrostomus vociferous*], Eastern Wood Pewee [*Contopus virens*], Evening Grosbeak [*Coccothraustes vespertinus*] and Olive-sided Flycatcher [*Contopus cooperi*]) ■ Raptors (proxy VC of Osprey [*Pandion haliaetus*] for diurnal raptors and Boreal Owl [*Aegolius funereus*] for nocturnal raptors as well as SAR-birds such as: Bald Eagle [*Haliaeetus leucocephalus*], Peregrine Falcon [*Falco peregrinus*] and Short-eared Owl [*Asio flammeus*]) ■ Shorebirds (proxy VC of Wilson's Snipe [*Gallingo delicata*]) ■ Waterfowl (proxy VC of Mallard [*Anas platyrhynchos*]) ■ Bog / Fen Birds and Other Wetland Birds (proxy VC of Palm Warbler [*Setophaga palmarum*] for bogs, Common Yellowthroat [*Geothlypis trichas*] for fens; and Northern Waterthrush [*Parkesia noveboracensis*] for swamps as well as SAR-birds such as: Black Tern [*Childonias niger*], Rusty Blackbird [*Euphagus carolinus*] and Yellow Rail [*Coturnicops noveboracensis*]).
Fish and Fish Habitat	■ Fish and Fish Habitat Study Plan	■ Lake Sturgeon (*Acipenser fulvescens*) ■ Walleye (*Sander vitreus*) ■ Brook Trout (*Salvelinus fontinalis*) ■ Northern Pike (*Esox lucius*) ■ Lake Whitefish (*Coregonus clupeaformis*) ■ Chain Pickerel (*Esox niger*) ■ Yellow Perch (*Perca flavescens*) ■ Cisco (*Coregonus artedii*) ■ Burbot (*Lota lota*)

[2] *A proxy VC is used when looking at the effects of one species that represents many others.*

Environmental Discipline	Study Plan Name	Valued Component(s)
		■ Longnose Sucker (*Catostomus catostomus*) ■ White Sucker (*Catostomus commersonii*) ■ Forage / Prey Species (including species such as Lake Chub [*Couesius plumbeus*]) ■ Lower Trophic Organisms (e.g., benthic invertebrates)
Social	■ Social Study Plan	■ Housing and Accommodation ■ Community Service and Infrastructure ■ Transportation ■ Community Well-being ■ Populations and Demographics
Economy	■ Economic Study Plan	■ Regional Economy ■ Labour Force and Employment ■ Government Finances
Land and Resource Use	■ Land and Resource Use Study Plan	■ Land Use Compatibility ■ Parks and Protected Areas ■ Extractive Industry ■ Forestry Industry ■ Energy and Linear Infrastructure ■ Recreation and Tourism
Human Health and Community Safety	■ Human Health and Community Safety Study Plan	■ Public Safety ■ Public Health ■ Diet ■ Environmental Factors Influencing Health
Visual Aesthetics	■ Visual Aesthetics Study Plan	■ Visual Contrast / Character ■ Visibility ■ Visual Sensitivity
Archaeological and Cultural Heritage	■ Cultural Heritage Study Plan	■ Archaeological Sites and Resources ■ Built Heritage Resources and Cultural Heritage Landscapes

It should be noted that while there is not a consultation study plan, the Project has developed the *Consultation and Engagement Plan to Support the Environmental Assessment / Impact Statement* (AECOM 2020) (referred to as the Impact Statement [IS] / EA Consultation Plan).

2. Purpose and Objectives

The key objectives of conducting an IA / EA are to describe the existing environment, gather sufficient information to predict Project-related effects (positive and negative, direct and indirect) of the Project and alternatives on the environment, determine measures needed to avoid or minimize adverse Project effects and enhance beneficial Project effects where feasible, and to undertake consultation and engagement throughout. The purpose of this Study Plan is to explain:

- A baseline[3] study methodology that will result in a comprehensive description of the existing environment potentially impacted by the Project;
- How efficient and transparent data management and analysis will be undertaken;
- Effects assessment scoping inputs specific to Cultural Heritage that will allow for potential effects of the Project on the existing environment to be appropriately assessed in the IS / EA Report; and
- How the Study Plan aligns with federal and provincial requirements and guidance, including the Agency's Tailored Impact Statement Guidelines (TISG), dated February 24, 2020 (the Agency 2020b), for this Project and applicable provincial agency comments on the Draft Terms of Reference (ToR)[4].

As required by the IAA and referenced in TISG Section 7.3, work plans will also be developed for disciplines as required. It is anticipated the work plans will include further details on how to action the study plans; for example they would contain such information as location of sampling sites, scheduling, and sequencing.

For the purposes of establishing appropriate context, the Study Plan begins with background and relevant information on:

- Study plan related discussions with the Agency, the MECP and applicable agencies to date (**Section 3**);
- The approach to Project consultation and engagement (**Section 4**);
- How Indigenous Knowledge will be collected and used in the IA / EA (**Section 5**); and
- The spatial and temporal boundaries that will be used for the IA / EA (**Section 6**).

3. *Baseline refers to the current conditions of the environment potentially impacted by the Project. Baseline conditions serve as a reference against which changes due the Project are measured.*
4. *If necessary, the Study Plan will be updated to reflect the approved ToR if approval is obtained.*

2.1 Approach to Handling Confidential Information

2.1.1 Indigenous Knowledge

Permission from the Indigenous community will be sought before including Indigenous Knowledge in the IS / EA Report, regardless of the source of the Indigenous Knowledge. Sensitive and / or confidential information will be specifically collected through the Indigenous Knowledge Program to inform the IS / EA Report, and its use and publication will be governed by Indigenous community-specific Indigenous Knowledge Sharing Agreements. Sensitive and / or confidential information collected through Indigenous Knowledge Sharing Agreements will be protected from public or third-party disclosure and will be established between the Proponent and Indigenous communities participating in the Indigenous Knowledge Program prior to the sharing and use of any sensitive information. Instances where Indigenous Knowledge sharing has taken place during consultation activities (e.g., meetings) will be recorded in the Record of Consultation and Engagement, including where Indigenous Knowledge was incorporated into Project decisions and into the IS / EA Report (i.e., specifics will not be included in the Record of Consultation and Engagement given the potential sensitivity and / or confidentiality of the information shared).

3. Study Plan Technical Discussions

To facilitate the development of satisfactory study plans and eventually a satisfactory IS / EA Report, MFFN previously submitted draft study plans in an effort to hold technical discussions with the Agency, the MECP and applicable agencies. A summary of technical discussions and correspondence held to date on this Study Plan has been provided below in **Table 3-1**.

Table 3-1: Summary of Study Plan Technical Discussions

Attendees / Responsible Party	Correspondence	Discussion Point	Solution
■ **Ministry of Heritage, Sport, Tourism and Culture Industries (MHSTCI)** ■ **MECP** ■ **MFFN CAR Project Team**	■ Technical Discussion regarding the approach to studying Cultural Heritage for the Project	■ **07-May-2020:** The MHSTCI commented on the Draft ToR – recommending a Cultural Heritage Report: Existing Conditions and Preliminary Impact Assessment (CHR) be undertaken for the Project. Given the remote nature of the Project, the MFFN CAR Project Team suggested completing a cultural heritage checklist for the IS / EA Report considering the absence of structures in the study area, and also do a landscape study based on Indigenous Knowledge studies, archaeological investigation and other existing sources of information. The MHSTCI suggested an adjusted approach consisting of a landscape study (including the checklist), as well as the description of the built environment as one document. There should also be a two (2) part / phase system where: – Part 1 – Describes the existing conditions and identifies any Cultural Heritage Landscapes and other landscapes present; – Part 2 – During the IA / EA, assess the effects of the Project on cultural heritage and recommend mitigation measures where applicable. ■ The MFFN CAR Project Team confirms the requested format with the MHSTCI.	■ The MFFN CAR Project Team agreed to provide the MHSTCI with a CHR.

4. IS / EA Report Consultation and Engagement Process

4.1 Interested Persons and Government Agencies

The Proponent will provide Project notices and advise of opportunities for consultation and engagement with interested persons[5] which includes, at a minimum, members of the public outlined in the *Public Participation Plan for the Marten Falls Community Access Road Project Impact Assessment* (the Agency 2020) (referred to as the Public Participation Plan). This will include the opportunity to provide input on the existing environment, VCs, effects assessment methods, effects assessment results, and mitigation and follow-up program measures as applicable. A variety of activities will be offered so that members of the public are informed of the IS / EA Report as it progresses and are aware of the opportunities and means to provide their input. The study plans have recognized public and agency input received on the Project to date. Government agencies and interested persons will have the opportunity to comment on components of the study plans throughout the IS / EA Report consultation and engagement process. The Project's approach to handling confidential and sensitive information is outlined in **Section 2.1**.

4.2 Indigenous Communities

The Proponent will provide Project notices and opportunities for consultation and engagement with Indigenous communities identified in **Table 4-1**, which is inclusive of all Indigenous communities identified in the *Indigenous Partnership and Engagement Plan for the Marten Falls Community Access Road Project Impact Assessment* (the Agency 2020a) (referred to as the Indigenous Engagement and Partnership Plan).

Indigenous communities will be provided the opportunity to be involved at critical decision-making points throughout the IS / EA Report so that the Proponent can consider and incorporate, where appropriate Indigenous Knowledge and Indigenous land and resource use information into the Project as it pertains to the existing environment, VCs, effects assessment methods, effects assessment results, and mitigation and follow-up program measures. A variety of activities will be offered so that Indigenous communities are informed of the IS / EA Report as it progresses and are aware of the opportunities, means and timelines to

5. *Interested persons, as defined in the IS / EA Consultation Plan (AECOM 2020), are individuals and groups (e.g., associations, non-governmental organizations, industry and academia) who could have an interest in the Project, including but not limited to communities in the region, those with commercial interests (e.g., forestry, trappers, outfitters, other mineral tenure holders in the area) and recreational users or those with recreational interest (e.g., campers, hunters and environmental groups).*

provide their input. The study plans have recognized Indigenous community input received on the Project to date. Indigenous communities will have the opportunity to comment on components of the study plans throughout the IS / EA Report consultation and engagement process.

Table 4-1: Identified Neighbouring Indigenous Communities, including their Provincial Territorial Organizations and / or Tribal Council Affiliations

Tribal Council Affiliation	Indigenous Community or Organization
Matawa First Nations Management *(Nishnawbe Aski Nation)*	■ **Marten Falls First Nation** (Proponent and potentially affected Indigenous community) ■ Aroland First Nation ■ Constance Lake First Nation ■ Eabametoong First Nation ■ Ginoogaming First Nation ■ Neskantaga First Nation ■ Nibinamik First Nation ■ Webequie First Nation
Matawa First Nation Management and the Union of Ontario Indians / Nishnawbe Aski Nation	■ Long Lake #58 First Nation**
Mushkegowuk Council *(Nishnawbe Aski Nation)*	■ Attawapiskat First Nation ■ Fort Albany First Nation ■ Kashechewan First Nation
Shibogama First Nations Council *(Nishnawbe Aski Nation)*	■ Kasabonika Lake First Nation ■ Kingfisher Lake First Nation ■ Wapekeka First Nation ■ Wawakapewin First Nation ■ Wunnumin Lake First Nation
Independent First Nations Alliance *(Nishnawbe Aski Nation)*	■ Kitchenuhmaykoosib Inninuwug First Nation
Independent First Nations *(Nishnawbe Aski Nation)*	■ Mishkeegogamang First Nation ■ Weenusk First Nation
Nokiiwin Tribal Council	■ Animbiigoo Zaagi'igan Anishinaabek First Nation*
Métis Nation of Ontario	■ Métis Nation of Ontario; Region 2*
Independent Métis Nation	■ Red Sky Independent Métis Nation*

*Notes: * Indigenous communities or organizations identified by MECP who should be consulted on the basis that they may be interested in the Community Access Road.*
***The MECP indicated in a letter to MFFN that Long Lake #58 First Nation was moved from interest-based to rights-based.*

4.3 Consideration of Identity and Gender-Based Analysis Plus in Engagement

To fulfill requirements of the IAA, the Consultation and Engagement Program will consider a diverse range of perspectives from interested persons and interested Indigenous communities and their members identified in the Agency's Indigenous Engagement and Partnership Plan and the Public Participation Plan. This will include at a minimum providing ongoing opportunities for engagement to:

- **Neighbouring Indigenous communities, including relevant subpopulations:**
  - Women;
  - Youth; and
  - Elders.
- **Non-Indigenous communities including:**
  - Women;
  - Youth; and
  - Activity-based subgroups (e.g., recreationalists, snowmobilers, tourism establishment operators).

The Proponent will also consult and engage with other subpopulations identified by communities during consultation and engagement. The information from these activities and any additional identity groups identified by communities through consultation and engagement will be considered by applicable environmental disciplines for the purposes of data collection and considering disproportionate effects.

During consultation and engagement, these aforementioned groups will be consulted and engaged with on targeted input**.** Specialized knowledge will be gathered through other disciplines such as Social, Economic, Land and Resource Use and Aboriginal and Treaty Rights and Interests. The Socio-economic Data Collection Program is expected to include targeted interviews, focus groups, questionnaires and other niche tools to gather information from diverse populations to resolve gaps in socio-economic secondary data. These diverse populations include the aforementioned identity groups, which are also referenced in the *IS / EA Consultation Plan* (AECOM 2020) and those identified by communities during consultation and engagement. The importance of soliciting inputs and perspectives from diverse subgroups has also been factored into the Indigenous Knowledge Program and associated materials (see **Section 5**).

When feedback is received from interested persons and Indigenous communities, issues, comments and questions will be tracked, which is consistent with the process described in the *IS / EA Consultation Plan*

(AECOM 2020). Specific to Gender-Based Analysis Plus objectives, this will include efforts to engage with diverse populations. It is expected this will include activities specific to subgroups and tabulation of consultation and engagement participation with respect to identity factors. This will provide summary statistics to demonstrate the diversity achieved in consultation and engagement.

4.4 Cultural Heritage Consultation

A meeting was held with the MFFN Community Based Land Use Planning (CBLUP) team, and the MFFN CAR Project Team on September 16, 2019 in Thunder Bay, Ontario. The purpose of the meeting was to review the Project mapping and Indigenous Knowledge data provided by MFFN, and to discuss any specific areas the CBLUP team or MFFN would like the archaeologists to specifically examine during the Stage 1 and subsequent Stage 2 work. This information was utilized to inform the Cultural Heritage Study Plan and was also incorporated into the Cultural Heritage Study Plan and the Stage 1 Archaeological Assessment (AA) report and Stage 2 AA field work planning.

The AECOM Cultural Heritage team held a Community Engagement Session in the Marten Falls First Nation community on July 11, 2023. The Cultural Heritage Team was comprised of Liam Smythe, Cultural Heritage Specialist; Samantha Markham, Cultural Resources Manager & Project Archaeologist; and Project Coordinators for MFFN, Bob Baxter and Rowena Moonias. The purpose of the field review was to collect photographic records with associated notes and mapping to illustrate the existing conditions of the Study Area and help to reinforce background data collected via satellite, topographic, and historic mapping. The Cultural Heritage Team travelled by car to several significant points in Marten Falls community, including the north side of the convergence of the Ogoki and Albany Rivers, the site of the former Hudson's Bay Company store, the former Anglian Church, and two cemetery sites. Additionally, an engagement session was held at the gymnasium at the community school between 12:00 pm and 3:00 pm. Tables were set up with large-format, printed copies of the MFFN CAR draft project mapping, the historic map set, and mapping generated using data provided by the Indigenous Knowledge Team. Questionnaires and information sheets were provided, providing an overview of the information the Cultural Heritage team is looking to collect.

A total of twenty-one (21) individuals from the MFFN community attended the engagement session. Discussions at the session happened organically; the Cultural Heritage team provided an explanation of what work has been completed to date and the presence of the mapping typically led to a generalized discussion of culturally significant areas, and how they will be protected or mitigated during construction. Members of the MFFN community expressed a general interest in the project mapping and how the information was compiled. Some attendees noted features by writing on the map or marking them with

notes. It was suggested that the AECOM team meet with Elders and Knowledge Keepers who are unable to travel during their visit to the community. The Cultural Heritage team visited the Elders' complex upon arriving in the community, however none of the individuals present were able to converse with the Cultural Heritage team.

The information collected during the field review informs the appropriate impact management measures and recommendations for minimizing and avoiding negative effects on identified cultural heritage resources.

5. Consideration of Indigenous Knowledge in the IS / EA Report

The following provides a general description of how Indigenous Knowledge will be considered in the IA / EA process. The extent to which Indigenous Knowledge is considered by each specific VC will vary depending on the nature of the VC, the potential for Project effects on the VC and whether Indigenous knowledge that relates to a VC is provided / obtained. As such, not all aspects of the general approach described below may apply to all VCs / study plans.

There are two concurrent and complementary avenues for Indigenous communities and groups to be engaged with and provide input on the Project: the Indigenous Knowledge Program and the Consultation and Engagement Program. Both programs serve to support the collection of Indigenous perspectives, values, and input on the Project, including Aboriginal and Treaty Rights and how they may be impacted by the Project, to be integrated throughout the IA / EA process. However, the Indigenous Knowledge Program specifically aims to solicit and incorporate information that is considered sensitive and may have confidentiality requirements, including Indigenous Knowledge and information on Indigenous land and resource use. Indigenous Knowledge Sharing Agreements will be established between the Proponent and Indigenous communities participating in the Indigenous Knowledge Program prior to the sharing and use of any sensitive information.

All Indigenous communities and groups identified by the MECP and the Agency through the Indigenous Engagement and Partnership Plan have the opportunity to participate in the Indigenous Knowledge Program. The Indigenous Knowledge Program provides interested Indigenous communities an opportunity to: share existing Indigenous Knowledge and information on Indigenous land and resource use and cultural values that may be relevant to the Project, and / or complete Project-specific studies to collect and share Indigenous Knowledge and information on Indigenous land and resource use and cultural values. The Indigenous Knowledge Program includes opportunities for Indigenous communities and groups to meet with the Proponent to discuss the program, ask questions, and share concerns and interests. In support of this, the Proponent has created an Indigenous Knowledge Program Guidance Document (the Guidance Document) that provides:

- An overview of the Indigenous Knowledge Program and information on how Indigenous Knowledge, Indigenous land and resource use, and cultural values and practices can be collected and / or shared;

- Information on how Indigenous Knowledge and information on Indigenous land and resource use and cultural values and practices may be used in the planning and design processes; and
- A suite of guidance materials that were developed based on the information requirements of both the federal and provincial assessment processes, including: question guides to support the collection of information on historical and current community context; Indigenous Knowledge that may be relevant to the various technical disciplines; information on Indigenous land and resource use, cultural values and practices and associated spatial data; and perspective on potential Project-related effects and associated mitigation and / or enhancement measures.

The Guidance Document will also support participating Indigenous communities in providing Project-specific information in a manner that facilitates meaningful incorporation into the IS / EA Report.

The *IS / EA Consultation Plan* (AECOM 2020) outlines the process for obtaining information and feedback about the Project from Indigenous communities (i.e., the Consultation and Engagement Program). All Indigenous communities identified by the MECP and the Agency have the opportunity to participate in the Consultation and Engagement Program through community-specific meetings, Public Information Centres, web conferences, and other formats. All Indigenous communities identified by the MECP and the Agency will be provided information related to the Project and invited to participate at various points throughout the IA / EA process.

There are also opportunities for the MFFN CAR Project Consultant to engage with Indigenous communities to solicit perspectives and information relevant to the Project, including information related to collection of existing information and the development of the IS / EA Report. The Proponent also invites feedback and inputs throughout the Project via the Project website and ongoing communications with the Proponent.

The Indigenous Knowledge and Consultation and Engagement programs are designed to be complementary and provide multiple opportunities for communities to offer feedback and information, including perspectives on Aboriginal and Treaty Rights and interests and how these may be impacted by the proposed Project. Relevant information collected through both the Indigenous Knowledge and Consultation and Engagement programs, including potential effect pathways on Aboriginal and Treaty Rights and interests, will be shared with each of the relevant disciplines throughout the IA / EA to: guide and inform VCs; support characterization of the existing environment; identify the potential effects of the Project on VCs; help identify mitigation measures and potential monitoring programs; and ultimately guide Project planning. The nature of how the Indigenous Knowledge becomes integrated into the IS / EA Report will be dictated by the specific information provided by each Indigenous community and the parameters set out in

the Indigenous Knowledge Sharing Agreements. A description of how Indigenous Knowledge was considered in the IA / EA and in each of the technical discipline areas will be included in the IS / EA Report.

It is also important to note that information collected through the various activities (e.g., field studies and programs, effects assessments) of each discipline area (e.g., wildlife, vegetation, cultural heritage) will be shared with the Indigenous Knowledge Program leads. This will support the establishment of the existing environment and the effects assessment for the Aboriginal and Treaty Rights and Interests environmental discipline, as well as the identification of potential mitigation measures and monitoring programs, given the interrelated nature of Indigenous peoples and other environmental disciplines.

The Proponent will strive to respectfully collaborate with Indigenous communities on how Indigenous Knowledge and information on Indigenous land and resource use and cultural values will become part of the IS / EA Report, and how potential effects to Aboriginal and Treaty Rights and interests will be assessed. It is expected that measures to support this may include but are not limited to: engaging Indigenous communities to solicit information on Indigenous Knowledge and Indigenous land and resource use and cultural values to inform baseline conditions, providing Indigenous communities with draft sections of the IS / EA Report to illustrate how Indigenous Knowledge and information on Indigenous land and resource use and cultural values has been integrated and to confirm it has been presented appropriately, and completing collaborative working sessions with Indigenous communities for the effects assessment on Aboriginal and Treaty Rights and Interests. Further information on how potential effects on Indigenous rights will be assessed is provided in the Aboriginal and Treaty Rights and Interests Study Plan.

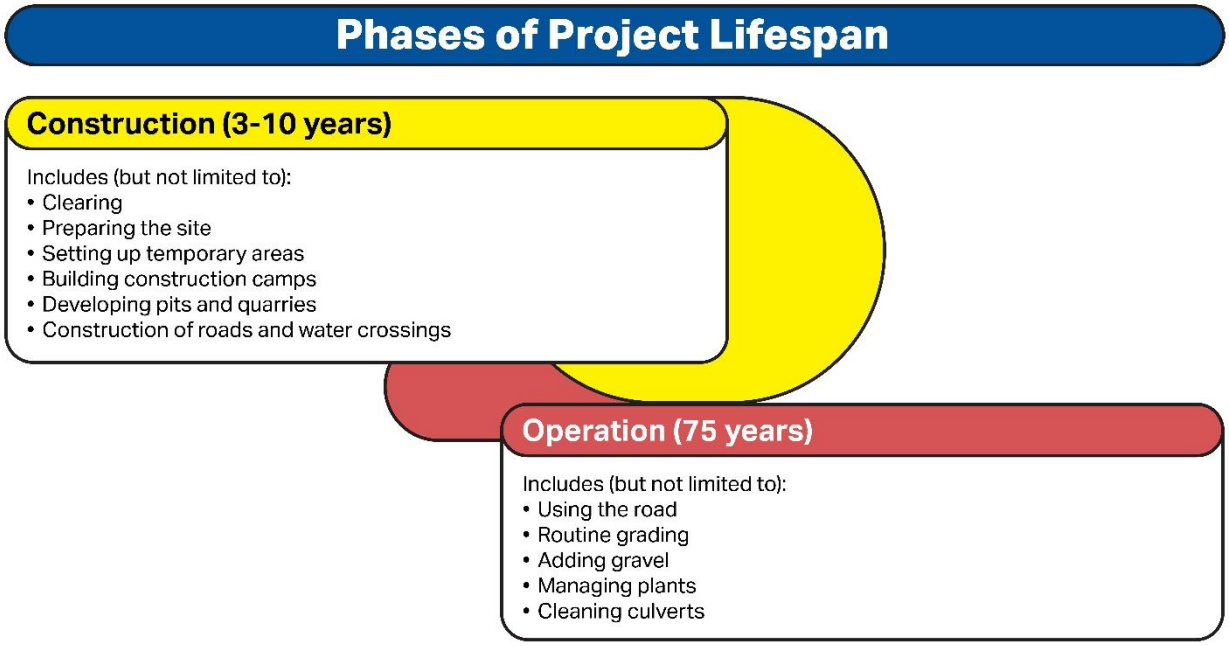
6. Assessment Boundaries

6.1 Temporal Boundaries: Project Phases

Project phases, which are temporal boundaries, are developed to establish the timeframes within which potential effects of the Project will be considered in the IS / EA Report. The Project is planned to occur in two phases, which are briefly described below and shown in **Figure 6-1**.

- **Construction Phase:**
  The time from start of construction, including site preparation activities, to the start of operations and maintenance of the CAR. Decommissioning of construction works is included in the construction phase. The construction phase is anticipated to take approximately 3 to 10 years to complete.
- **Operations and Maintenance Phase:**
  The operations and maintenance phase starts once construction activities are complete and lasts for the life of the Project. The operations and maintenance phase of the Project is considered to be 75 years based on the expected timeline for when major refurbishment of road components (e.g., bridges), is anticipated.

Figure 6-1: Project Schedule



There are currently no plans to decommission the CAR as there is no expected / known end date for its need. Therefore, future suspension, decommissioning and eventual abandonment of the CAR will not be considered in the IS / EA Report. It will be considered if and when a decommissioning or abandonment application is made for the road.

In determining the temporal boundaries, in particular the long operations and maintenance phase, consideration was given to the long-term effects on the well-being of present and future generations (Sustainability Principle #2). The final temporal boundaries to be used in the IS / EA Report will be based on regulatory agency guidance, professional judgement and input received through the Project consultation process.

The Cultural Heritage collection of baseline data and effects assessment will be completed prior to any ground disturbing activities related to the construction. As per the *Ontario Heritage Act* (*OHA*) (Ontario Government 1990) and MHSTCI *Standards and Guidelines for Consultant Archaeologists* (Ontario Government 2011), all archaeological activities must be addressed prior to any proposed construction activities. The results of the Archaeological and Built Heritage Assessments will inform route selection.

6.2 Spatial Boundaries: Study Areas

6.2.1 General Information

Study areas identify the geographic extents within which potential effects of the Project are likely to occur and will be considered in the IS / EA Report. The existing conditions and potential effects are documented for three study areas selected for the Project:

- **Project Development Area (PDA):** area of direct disturbance;
- **Local Study Area (LSA):** the area where most of the direct effects of the Project are likely to occur; and
- **Regional Study Area (RSA):** the area where indirect effects of the Project are likely to occur.

The PDA encompasses the 100 metre-wide CAR right-of-way (ROW), temporary construction access roads, work areas, worker camps, and pits, quarries and associated access roads. The preliminary LSA currently being considered within the scope of the ongoing provincial regulatory review process generally includes the area within 2.5 km of the centreline of Alternative 1 and Alternative 4. The preliminary study area generally allows for the documentation of existing conditions and prediction of potential environmental

effects for the Project. A 5 km wide study area also allows for route refinements during development of Project design (e.g., adjustment of the alignment to avoid sensitive features).

The specific location of Project components, including the roadway, quarries, pits and temporary infrastructure, are not yet known and will be included in the IS / EA Report. While most of the Project components are expected to be located within the preliminary 5 km wide study area, benefits (e.g., reduced environmental disturbance, avoidance of sensitive features, technical considerations, concerns received through consultation) for locating Project components on lands outside of the 5 km wide study area may become known during the IA / EA process. If the need to locate Project components outside the 5 km wide study area is determined to be required or of benefit to the Project, the study area would be adjusted.

The study area for each environmental discipline may vary from the above-described general study area based on the potential for the Project to directly or indirectly affect each environmental discipline; therefore, discipline-specific LSAs and RSAs have been defined for the Project. In defining the final LSAs and RSAs, each environmental discipline will consider:

- Location and other characteristics of the environmental discipline relative to the Project;
- The anticipated extent of the potential Project effects;
- Federal, provincial, regional, and local government administrative boundaries;
- Indigenous groups listed in **Table 4-1**;
- Community knowledge and Indigenous Knowledge;
- Current or traditional land and resource use by Indigenous communities;
- Exercise of Aboriginal and Treaty Rights of Indigenous peoples, including cultural and spiritual practices; and
- Physical, ecological, technical, social, health, economic and cultural considerations.

The study areas included in this document are preliminary, covering the extent to which readily available information suggests the Project may have noticeable effects on the environment. The size, nature and location of past, present and reasonably foreseeable projects will be taken into consideration in the development of the cumulative effects assessment study area(s). The appropriate study area(s) to assess cumulative effects are dependent on the VCs predicted to have direct residual adverse effects as a result of the Project, and therefore, cannot be defined until the IS / EA Report has sufficiently advanced.

As further detailed in **Section 4**, the Proponent will continue to provide opportunities for neighbouring Indigenous communities and interested persons to provide input and inform the effects assessment, including the LSAs and RSAs.

6.2.2 Cultural Heritage Study Areas

The LSA and RSA boundaries for Cultural Heritage are detailed in **Table 6-1** and shown on **Figure 6-2**.

Table 6-1: Cultural Heritage Study Areas

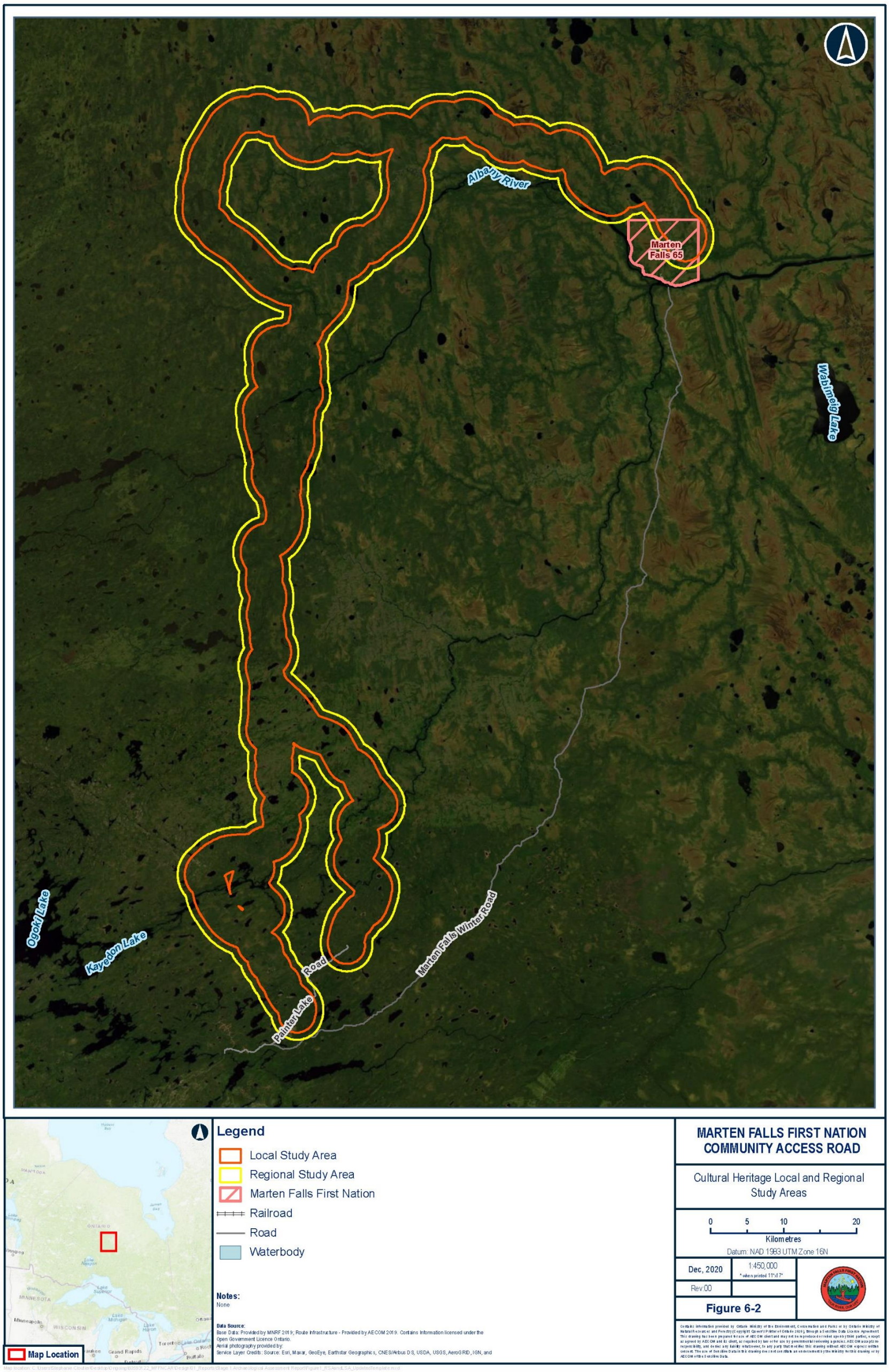
Study Area	Geographic Extent	Rationale
Local Study Area	■ Total 5 km wide area around the centreline of Alternative 1 and Alternative 4	■ To capture any temporary land use and / or access areas
Regional Study Area	■ LSA + 1 km buffer	■ Ontario Archaeological Sites Database 1 km buffer for identifying archaeological potential

The Stage 1 AA assessed land where planned Project impacts are proposed (PSA) plus a buffer of land within 2.5 km of the centreline of Alternative 1 and Alternative 4, for a total of a 5 km wide study area (LSA). The entire LSA was assessed within the Stage 1 AA in order to capture any land that may be required for temporary land uses or access areas that may be required during construction as per the *Ontario Heritage Act* (Ontario Government 1990) and the *Standards and Guidelines for Consultant Archaeologists* (Ontario Government 2011). During the production of the Stage 1 AA report, a buffer was applied to the LSA in order to conduct a search of the Ontario Archaeological Sites Database for a listing of registered archaeological sites within the RSA as per the *Standards and Guidelines for Consultant Archaeologists* (Ontario Government 2011).

Should additional land outside of the current LSA boundaries be included as part of the Project, the standard requirements for archaeological assessments to be conducted prior to land disturbance will remain in place.

Both the Stage 1 AA and the Cultural Heritage Report: Existing Conditions and Preliminary Impact Assessment (CHR) study areas will encompass the land within the LSA. A CHR will present an inventory of previously identified and potential built heritage resources and cultural heritage landscapes, identify the existing conditions of the study area, identify preliminary potential effects to the cultural heritage resources, and propose appropriate impact management measures. A description of the Stage 1 & 2 AA Process and the CHR is provided in **Section 7**.

Figure 6-2: Cultural Heritage Local and Regional Study Areas



7. Baseline Study Design

7.1 Desktop Assessment

A desktop review of existing information sources was completed to identify information gaps that will need to be addressed through further study. A preliminary list of applicable information sources has been included in **Appendix A** and reflects federal and provincial guidance received to date. This Study Plan focuses on the additional studies that are anticipated to be required to gather information beyond what is currently available through existing information sources, including those as described in **Section 7.2** 'Sources of baseline information' in the Agency's TISG for this Project (the Agency 2020b).

7.2 Archaeology Study Methods

7.2.1 Stage 1

Prior to approving land development projects regulated by legislation, the approval authority for the Project requires an archaeological assessment of all lands that are part of the Project. Assessments are required when the land is known to have an archaeological site present or has the potential to have archaeological resources. There are four stages of archaeological assessments in Ontario, regulated by the MHSTCI. A Stage 1 AA consists of a background study and optional property inspection, where a consultant archaeologist determines whether there is potential for archaeological sites in the proposed area of impact. The licensed archaeologist will review geographic, land use and historical information for the property and the relevant surrounding area, visits the property to inspect its current condition and contacts this MHSTCI to find out whether or not there are any known archaeological sites on or near the property. A Stage 2 AA is recommended when the consultant archaeologist identifies areas of archaeological potential during the Stage 1 AA as outlined in the *Standards and Guidelines for Consultant Archaeologists* (Ontario Government 2011). Upon completion of any archaeological assessment in Ontario, the licensed archaeologist must develop and provide an archaeological report to the MHSTCI for review and acceptance into the Provincial Register of Archaeological Reports (Ontario Government 2011). For further information, readers should consult the *Standards and Guidelines for Consultant Archaeologists* (Ontario Government 2011).

The objective of the Stage 1 AA was to document the archaeological and land use history, and present conditions within the study area. This information will be used to support recommendations regarding cultural heritage values or interests as well as assessment and impact management strategies. The Stage 1

AA was completed by a licensed archaeologist and has identified known archaeological sites, areas subject to previous assessments and has evaluated the potential for archaeological resources to be present on undisturbed land according to provincial criteria (Ontario Government 2011). The Stage 1 AA involved:

- Review of recent maps (i.e., satellite imagery, LiDAR) of the study area;
- Review of reports of previous AAs in the RSA;
- Review of the MHSTCI Ontario Archaeological Sites Database for a listing of registered archaeological sites within a 1 km radius of the LSA;
- A visual inspection of the existing conditions of the LSA and surroundings;
- Archaeological management plans or other archaeological potential mapping, where available; and
- Incorporation of Indigenous Knowledge provided as part of the consultation process of the Project.

Archaeological potential is established by determining the likelihood that archaeological resources may be present on a subject property. Criteria commonly used by the MHSTCI to determine areas of archaeological potential are listed in Section 1.3.1 of the *Standards and Guidelines for Consultant Archaeologists* (Ontario Government 2011), and include:

- Proximity to previously identified archaeological sites;
- Distance to various types of water sources;
- Soil texture and drainage;
- Glacial geomorphology, elevated topography and the general topographic variability of the area;
- Resource areas including food or medicinal plants, scarce raw materials and early Euro-Canadian industry;
- Areas of early Euro- Canadian settlement and early transportation routes;
- Properties listed on municipal register of properties designated under the *OHA* (Ontario Government 1990);
- Properties that local histories or informants have identified with possible archaeological sites, historical events, activities or occupants; and
- Historic landmarks or sites.

Distance to modern or ancient water sources is generally accepted as the most important element for past human occupations and settlement patterns, and when considered alone may result in a determination of archaeological potential. In addition, any combination of two or more of the listed criteria indicates

archaeological potential. Stream ordering can be used as a tool for predicting archaeological potential, as the importance of a watercourse decreases with their relative size and navigability.

In addition to the above listed criteria defined by the MHSTCI, consultation with local First Nations groups is crucial to the background data collection. Since Indigenous groups identify culturally important and sensitive areas and sites without material culture (artifacts) and features (such as ceremonial and sacred sites) associated with them, this information is relevant to our conclusions. MFFN provided the MFFN CAR Project Team with Indigenous Knowledge data for the study area, which includes information on trapping and harvest areas (plant, fish and other wildlife), camp and campsites, spiritual / sacred places, travel routes, historical sites and historical villages, burials, and other important areas of interest. It is important to include the Indigenous Knowledge data in the archaeological potential mapping as they identify areas which often differ from those identified with MHSTCI criteria, as noted above. The gathering of Indigenous Knowledge information from MFFN and other interested neighbouring First Nation communities is ongoing (further details of that program can be found in Aboriginal and Treaty Rights and Interests Study Pla*n*. The Stage 1 AA has been conducted to meet the requirements of the MHSTCI *Standards and Guidelines for Consultant Archaeologists* (Ontario Government 2011). The nature of how Indigenous Knowledge shared becomes integrated into the IS / EA Report will be dictated by the specific information provided by each Indigenous community and the parameters set out in the respective Indigenous Knowledge Sharing Agreements. Any data collected via consultation or shared to inform the Stage 1AA is considered sensitive information and is not included in any public documentation. This information is shared with the MHSTCI in a Supplementary Documentation Report as a separate report not released for public consumption.

It is also important to note that information collected through the various activities (e.g., field studies and programs, effects assessments) of each discipline area (e.g., wildlife, vegetation, cultural heritage) will also be shared with the Indigenous Knowledge Program leads. This will support the establishment of baseline conditions and the effects assessment for the Aboriginal and Treaty Rights and Interests VC, as well as the identification of potential impact management measures and monitoring programs, given the interrelated nature of Indigenous peoples and the various VCs. Mechanisms to support this iterative and continuous information process among MFFN CAR Project Team members include regular cross-disciplinary team meetings throughout the IA / EA processes.

Stage 1 Baseline Field work Completed to Date

The MFFN CAR Project Team completed portions of the field program in the fall of 2019 from September 24 to October 4, 2019. During this time, a number of field tasks were accomplished including a Stage 1 field review / visual inspection of the LSA, consultation and engagement with Aroland First Nation, and initial contact and introductions with Marten Falls First Nation Elders.

The MFFN CAR Project Team completed the Stage 1 field review in order to narrow down areas of archaeological potential that had been identified during the background research. This was accomplished by utilizing the helicopter to fly over the LSA. Photographs were taken out of the helicopter windows to illustrate some of the existing conditions of the general Project area. This was incorporated into the Stage 1 report results. The Stage 1 AA report has been written and will be submitted to the Ontario MHSTCI for review and acceptance into the register of archaeological reports. This document will provide the results of the background study, field review / visual inspection and evaluation of archaeological potential. The report will be concluded with a recommendation on whether a Stage 2 AA is required and what the appropriate Stage 2 assessment strategy should consist of as well as indicating what areas are cleared of archaeological concerns.

A second Stage 1 archaeological report is currently underway for additional land identified outside of the LSA that is required as part of the project, specifically for aggregate sourcing during road construction. All areas outside of the original LSA that will be impacted during construction must be subject to archaeological assessment. This report will be concluded with a recommendation of whether a Stage 2 AA is required and what the appropriate Stage 2 assessment strategy should consist of as well as indicate what areas are cleared of archaeological concerns.

7.2.2 Stage 2

Once the preferred route has been chosen, a Stage 2 AA will be completed on the PDA. The objective of the Stage 2 AA is to provide an overview of archaeological resources within the PDA, make a determination as to whether any of the resources might be artifacts or archaeological sites with cultural heritage value or interest requiring further assessment, and to recommend appropriate Stage 3 assessment strategies for any archaeological sites identified. The Stage 2 AA is not expected to be provided as a component of this EA process.

The Stage 2 survey will consist of physically inspecting the areas identified as retaining archaeological potential within the PDA as per Section 2.1.5 of the *Standards and Guidelines for Consultant Archaeologists* (Ontario Government 2011) for special survey conditions in northern Ontario and on Canadian Shield terrain. This will be completed by walking within the areas identified as retaining potential, which includes beach survey and test pit survey where possible. In areas that were not found to be wet or steeply sloped, test pit survey will be conducted. Test pit intervals will range to a maximum of 5 m, which will be decided based on professional judgement in each area. Each test pit will be no less than 30 cm in diameter and all soil will be screened though hardware mesh 6 mm in size to facilitate the recovery of cultural material. All test pits are examined for stratigraphy, cultural features or evidence of fill. If cultural material is identified,

further archaeological investigation will be recommended based on the *Standards and Guidelines for Consultant Archaeologists* (Ontario Government 2011).

Stage 2 Baseline Field work Completed to Date

In addition to completing the Stage 1 field fly over, the MFFN CAR Project Team also began the Stage 2 field work in the fall of 2019, operating from September 24 to October 4, 2019. The Stage 2 strategy at this time, given the weather constraints, consisted of concentrating primarily on the alternatives at targeted river crossings based on proposed bridge designs and any specific locations MFFN requested to be examined and recorded. Based on professional judgement and in consultation with MFFN, it was agreed that the fall 2019 Stage 2 field work would consists of the survey of an area covering 1 km upstream and 1 km downstream from each of the proposed river crossing locations currently under consideration given the large size of the LSA. The MFFN CAR Project Team was only able to physically survey two river crossings in the fall of 2019 – Albany River crossing WA-15 and Ogoki River crossing WA-01 within the timeframe that the weather allowed. The field program was then put on hold for the year, and further Stage 2 archaeological work is required to be completed.

As per the *Standards and Guidelines for Consultant Archaeologists* (Ontario Government 2011), the Stage 2 AA was completed by a licensed archaeologist and consisted of physically inspecting the areas identified as retaining archaeological potential within both river crossings. This was completed by walking within the areas identified as retaining potential, which included beach survey and test pit survey where possible. The beach survey of exposed shorelines consisted of the MFFN CAR Project Consultant examining the beach surface for artifacts. In areas that were not found to be wet or steeply sloped, test pit survey was conducted. Test pit intervals ranged from 2.5 m to a maximum of 5 m apart, which were decided based on professional judgement in each area. Each test pit was dug by hand with a shovel and was approximately 30 cm in diameter. All soil was screened though hardware mesh 6 mm in size to facilitate the recovery of cultural material.

7.3 Cultural (Built) Heritage Study Methods

A CHR will be completed to describe the existing conditions of the study area, present a built heritage and cultural landscape inventory of material and non-material cultural heritage resources, and propose appropriate impact management measures and recommendations for minimizing and avoiding negative effects on identified cultural heritage resources. This Study Plan is guided by the following documents and legislation: *Guidelines for Preparing the Cultural Heritage Resource Component of Environmental Assessments* (MHSTCI 1992); the *Ontario Heritage Act* (Ontario Government 1990); and the *Ontario Heritage Tool Kit* (MHSTCI 2006). The CHR will focus on conducting and analyzing background research

and field survey results for the purposes of identifying effects of the proposed undertaking on any cultural heritage resources. The following steps will be taken in order to identify built heritage resources and / or cultural heritage landscapes within the study area:

- Background historical research to identify major historical themes and activities within the RSA study area, including a review of historical maps.
- A review to identify properties within the RSA study area that have been designated under Part IV or V of the *OHA* or listed on a District inventory or heritage register.
- Indigenous community engagement including with MFFN, with particular focus on obtaining knowledge regarding the cultural heritage landscape in general and potential material and non-material cultural heritage resources.
- A field review to confirm the location and condition of previously identified material and non-material cultural heritage resources. The field review is also used to identify cultural heritage resources that have not been previously identified on federal, provincial, or municipal databases. The results of survey will be recorded on survey forms including photographs, where appropriate.
- Conduct a preliminary effects assessment in order to propose appropriate impact management measures and recommendations for minimizing and avoiding negative effects on cultural heritage resources, and the identification of further reporting requirements such as Cultural Heritage Evaluation Reports and / or Heritage Impact Assessments, if necessary.

7.4 Schedule for Baseline Data Collection

The Stage 1 AA report is currently under development and will incorporate preliminary information from the initial field review in the fall of 2019 to inform existing baseline conditions. The Stage 1 AA report will be written to meet the *Standards and Guidelines for Consultant Archaeologists* (Ontario Government 2011) by employing the methodology outlined in **Section 7.2** of this Study Plan.

Once the preferred route has been chosen, a Stage 2 AA will be completed on the PDA. The objective of the Stage 2 AA is to provide an overview of archaeological resources within the PDA, make a determination as to whether any of the resources might be artifacts or archaeological sites with cultural heritage value or interest requiring further assessment, and to recommend appropriate Stage 3 assessment strategies for any archaeological sites identified. Once the preferred route alternative has been chosen, the Stage 2 AA will be undertaken based on the results of the Stage 1 AA. The field investigations during the fall of 2019 were suspended because of Project timing and weather implications, as archaeological assessments cannot be

completed when visibility of the ground surface is impeded by snow cover as per the *Standards and Guidelines for Consultant Archaeologists* (Ontario Government 2011). Additionally, a PDA has yet to be defined. Therefore, further Stage 2 field work will be completed for all areas as retaining archaeological potential within the PDA when conditions allow, which would ideally be completed between the months of May and September. There are no sampling strategies in place as archaeological assessments are conducted to meet the requirements of the *Standards and Guidelines for Consultant Archaeologists* (Ontario Government 2011). The work will only be considered complete when all areas identified as retaining archaeological potential have been investigated, reported on, and reviewed and accepted by the MHSTCI.

8. Data Management and Analysis

Data management including quality assurance / quality control (QA / QC) will be employed to minimize potential for data entry and analysis errors, prepare data sets for analysis and limit sensitive data distribution in accordance to established agreements.

8.1 Archaeology

The results of the Stage 1 AA include extensive archaeological potential mapping developed from the methods outlined in **Section 7.2**.

Background Review

The archaeological potential mapping is a culmination of stream order data, the Indigenous Knowledge provided by Indigenous communities, satellite imagery, and visual inspection of the study area. The mapping illustrates where Stage 2 AA is required and where archaeological potential has been removed based on physical landscape features of low archaeological potential (e.g., bog, wetlands), as per the *Standards and Guidelines for Consultant Archaeologists* (Ontario Government 2011). These data are then used as a tool in order to evaluate potential effects relating to the Project.

Field Data

Data collected during the Stage 1 AA field work include pictorial records and associated notes and mapping. Any information collected as part of the Stage 1 field work is currently being stored digitally on the AECOM London, Ontario server. The pictorial records will be incorporated in the Stage 1 AA report to illustrate the existing conditions of the LSA and help to reinforce background data collected via satellite, topographic, and vegetation mapping. This will cumulatively inform the determination of archaeological potential within the LSA as per the *Standards and Guidelines for Consultant Archaeologists* (Ontario Government 2011).

Indigenous Knowledge

Any Indigenous Knowledge data collected through consultation with Indigenous groups that has been used to inform the Stage 1 AA is not included directly within any archaeological reports, as per the data sharing agreements in place with Indigenous communities. This is sensitive information that is not made public as part of the archaeological assessment and is provided in a Supplementary Documentation report to the client and the MHSTCI only as per the *Standards and Guidelines for Consultant Archaeologists* (Ontario Government 2011). The information collected will cumulatively inform the determination of archaeological potential within the LSA.

8.2 Cultural (Built) Heritage

The CHR will result in the preparation of a cultural resource inventory, including descriptions and photographs. A preliminary analysis of potential effects of the undertaking on identified potential cultural heritage resources will also be conducted, along with the identification of impact management measures based on the Project alternatives. The CHR will be prepared based on the results of the background research, including a review of historical maps, a cultural heritage field review of the existing conditions, and community engagement, including MFFN. The CHR is guided by the following documents and legislation: *Guidelines for Preparing the Cultural Heritage Resource Component of Environmental Assessments* (MHSTCI 1992); the *Ontario Heritage Act* (Ontario Government 1990); and the *Ontario Heritage Tool Kit* (MHSTCI 2006).

Background Research

Historical maps and information collected from primary and secondary sources will be examined to determine if the LSA contains any built heritage resources or landscape features. The significance of these features will then be determined through a built heritage and cultural landscape inventory of material and non-material cultural heritage resources and will propose appropriate impact management measures and recommendations for minimizing and avoiding negative effects on identified cultural heritage resources.

Field Data

Field data collected during the CHR field work include pictorial records and associated notes and mapping. Any information collected as part of the CHR field work will be stored digitally on the AECOM London, Ontario server. The pictorial records will be incorporated in the CHR report to illustrate the existing conditions of the LSA and help to reinforce background data collected via satellite, topographic, and historic mapping. This will cumulatively inform the appropriate impact management measures and recommendations for minimizing and avoiding negative effects on identified cultural heritage resources.

Indigenous Knowledge

Any Indigenous Knowledge data collected through consultation with Indigenous groups that has been used to inform the CHR is not included directly within any reports, as per agreements in place with the First Nations communities. This is sensitive information that is not made public as part of the CHR. A copy of the sensitive material may only be provided in a Supplementary Documentation-type report to the client and the MHSTCI only.

9. Effects Assessment

The following sections provide discipline-specific input and considerations as they pertain to the methodology for effects assessment. The Project is in the early stage of the IS / EA Report preparation and it is expected that the effects assessment methodology will be refined iteratively based on regulatory agency guidance, professional judgment and input received through the Project consultation and engagement process.

9.1 Project-Environment Interactions

The Project activities that may result in changes to the environment are described within the identified temporal and spatial boundaries. This includes identification of both direct and indirect changes by comparing the existing setting to the conditions anticipated to occur as a result of the Project. For each environmental discipline, the likely Project-environment interactions will be identified based on professional judgment, activities listed in TISG Section 3.2 (the Agency 2020b) as well as projects of similar magnitude and / or location.

A preliminary analysis of Project-environment interactions for the Cultural Heritage is provided in **Table 9-1** and will be confirmed during the IA / EA process to identify the Project-environment interactions that are likely to have a potential effect, and to identify measures to avoid or minimize potential negative effects and enhance benefits.

The Cultural Heritage assessments for the Project will be completed and approved by the MHSTCI prior to any and all proposed construction and operations activities as per *Ontario Heritage Act* and the MHSTCI' *Standards and Guidelines for Consultant Archaeologists* (Ontario Government 2011). A Stage 1 AA draft report will be submitted to the Ontario MHSTCI for review and acceptance into the register of archaeological reports. The Stage 1 AA will be submitted for MHSTCI review during the environmental assessment process (pre-planning phase) but prior to the EA completion. This information will be used to inform the evaluation of alternatives and any additional studies. This document provides the results of the background study, property inspection and evaluation of archaeological potential. The report is concluded with a recommendation on whether Stage 2 AA is required and what the appropriate Stage 2 assessment strategy should consist of as well as indicating what areas are cleared of archaeological concerns. Should the results of the Stage 1 AA recommend further archaeological assessment(s) within the preferred alternative, or PDA, then any further stages of archaeological assessment will be completed as early as possible during the planning or design phase of the Project, and prior to the completion of detailed design. The Stage 2 AA must be conducted by a licensed archaeologist and will meet the requirements of the *Ontario Heritage Act* and the MHSTCI' *Standards and Guidelines for Consultant Archaeologists* (Ontario Government 2011).

Table 9-1: Project – Environment Interactions

Project Phases	Project Activities	Cultural Heritage
Construction Phase	*Mobilization of Equipment and Supplies*	**X**
	Temporary Construction Staging Areas[1]	**X**
	Temporary Access Roads and Trails[1]	**X**
	Temporary Construction Camps[1]	**X**
	ROW Clearing and Grubbing	**X**
	Brush and Timber Disposal	**X**
	Pits and Quarries[1]	**X**
	Drilling / Blasting / Aggregate Production	**X**
	Road Construction (stripping, subgrade excavation, embankment fill placement, grading, ditching)	**X**
	Bridge and Culvert Installation (approach embankments, foundations, substructures, superstructures, traffic protection, erosion controls)	**X**
	Construction Site Restoration	**X**
Construction Phase: Decommissioning	*Pits and Quarries*	**X**
	Temporary Camps, Roads / Trails and Staging Areas	**X**
Operations Phase	*Road Usage*	
	Maintenance[2]	**X**

Notes: 1. Includes construction and use of
2. Includes General Maintenance (e.g., grading, erosion control, quarrying, pits and quarries), Seasonal Maintenance (e.g., snow clearing, bridge and culvert maintenance), and Special Maintenance (e.g., slope failures, road settlement / break-up.).

Should future work as part of maintenance or operations be required outside of the previously assessed and cleared areas, further archaeological work is required.

9.2 Valued Components and Indicators

VCs are the environmental, health, social, economic or additional elements or conditions of the natural and human environment that may be impacted by a proposed project and are of concern or value to the public, Indigenous peoples, federal authorities and interested parties (the Agency 2020b). Indicators represent the resource, feature, or issue related to the VC that, if changed, may demonstrate an effect on the environment. The indicators and rationale for selection and measurement of potential effects, to be used to assess and evaluate the alternative routes in the IS / EA Report are provided in **Table 9-2**. The table includes both quantitative and qualitative indicators. The final list of VCs and indicators to be used in the IS / EA Report will be based on regulatory agency guidance, professional judgement and input received through the Project consultation and engagement process.

Table 9-2: Cultural Heritage Indicators

Valued Component	Indicators	Rationale for Selection
Archaeology	■ Previously identified archaeological sites ■ Proximity to water ■ Soil texture and drainage ■ Glacial geomorphology, elevated topography ■ Resource areas including food or medicinal plants, scarce raw materials ■ Areas of early 19th century settlement and transportation routes ■ Properties that local histories or informants have identified with possible archaeological sites, historical events, activities or occupants	■ Retains high archaeological potential because of: – Burial Sites – Historical Villages – Areas of Cultural Significance (material and non-material) – Culturally Important Landscape Features (e.g., related to traditional hunting / harvesting area, portage routes) – Registered archaeological sites – Areas of importance to local communities – Locations related to Oral histories – Indigenous Knowledge – Recent and historical maps of the study area – Primary and secondary documentary sources (both current and archival written accounts, maps, drawings, plans and images) – Site visits – Community Based Land Use Planning initiatives
Cultural Heritage	■ Culturally Significant Landscapes	■ Areas of importance to local communities ■ Areas of Historical (Regional) Significance (e.g., historic lumber routes) ■ Culturally Important Landscape Features (e.g., related to traditional hunting / harvesting area, portage routes) ■ Areas of Religious or Spiritual Significance (material and non-material) ■ Locations related to Oral histories ■ Indigenous Knowledge ■ Recent and historical maps of the study area ■ Primary and secondary documentary sources (both current and archival written accounts, maps, drawings, plans and images) ■ Site visits ■ Community Based Land Use Planning initiatives

The VCs of the Cultural Heritage have been determined through consideration of the following factors listed in the TISG[6]:

- VC presence in the study area;
- the extent to which the VC is linked to the interests or exercise of Aboriginal and Treaty Rights of Indigenous peoples, and whether an Indigenous group has requested the VC;

6. *The TISG also states that information from ongoing and completed regional assessments in the proposed area of the Project should be used to inform VCs for the Project. In February 2020 a regional assessment of the Ring of Fire region commenced; however, it is not sufficiently advanced at this time to inform the Project VCs. The VCs will be consulted and engaged on early in the IA/ EA process and finalized taking into consideration the input received. Therefore, only information relevant to the Project that arises from the regional assessment of the Ring of Fire within an appropriate timeline will inform the VCs for the Project.*

- the extent to which the effects (real or perceived) of the Project and related activities have the potential to interact with the VC;
- the extent to which the VC may be under cumulative stress from other past, existing or future undertakings in combination with other human activities and natural processes;
- the extent to which the VC is linked to federal, provincial, territorial or municipal government priorities (e.g., legislation, programs, policies);
- the possibility that adverse or positive effects on the VC would be of particular concern to Indigenous groups, the public, or federal, provincial, territorial, municipal or Indigenous governments; and
- whether the potential effects of the Project on the VC can be measured and / or monitored or would be better ascertained through the analysis of a proxy VC.

Inputs received to date from Indigenous communities, agencies and interested persons through the Consultation and Engagement Program, including inputs received on the Draft ToR, have also been used to inform the selection of the VCs and indicators for Cultural Heritage.

9.3 Potential Effects

A direct effect occurs through the direct interaction of an activity with an environmental discipline. The Project-environment interactions currently anticipated, based upon preliminary analysis, to result in direct effects to Cultural Heritage have been identified in **Table 9-1**. The potential direct effects resulting from the Project-environment interactions will be confirmed during the IA / EA process and will be based on input received through the Indigenous Knowledge Program and Consultation and Engagement Program, regulatory agency guidance, and professional judgement.

An indirect effect occurs when a change to one environmental discipline resulting from a Project activity causes a change to another environmental discipline (e.g., changes in vegetation could indirectly affect wildlife). **Table 9-3** provides a preliminary identification of how changes to Cultural Heritage may result in indirect effects to other environmental disciplines.

Table 9-3: Potential Discipline Interactions

Discipline and Associated Valued Components	Aboriginal Treaty Rights and Interests	Atmospheric Environment	Climate Change	Acoustic Environment	Physiology, Geology, Terrain and Soils	Surface Water	Groundwater and Geochemistry	Vegetation	Wildlife	Fish and Fish Habitat	Social	Economy	Land and Resource Use	Human Health and Community Safety	Visual Aesthetics	Archaeological and Cultural Heritage
Archaeological and Cultural Heritage ■ **Archaeological Sites and Resources** ■ **Built Heritage Resources and Cultural Heritage Landscapes**	X	-	X	-	-	-	-	-	-	-	X	-	X	-	-	

Notes: X = Potential pathway for indirect effect as a result of the Project.
- = No pathway for indirect effect is anticipated as a result of the Project.

9.4 Methods for Predicting Future Conditions

With respect to quantitative models and predictions, the IS / EA Report will detail the model assumptions, parameters, the quality of the data and the degree of certainty of the predictions obtained.

9.4.1 Archaeology

The Stage 1 Archaeological program will assess qualitative effects resulting from the Project on archaeological resources in the LSA. This program will seek to preserve and protect archaeological resources in place where possible, and as a result there is no quantitative approach to predicting future condition required.

The Stage 1 AA results in the determination of what areas retain archaeological potential and what areas are cleared of archaeological potential based on the criteria outlined in **Section 7.2**. This includes examining proximity to previously identified archaeological sites, other relevant archaeological assessments, proximity to water, elevated topography, a review of primary and secondary sources, significant areas identified during the collection of Indigenous Knowledge, and a visual inspection of the study area, as per the *Standards and Guidelines for Consultant Archaeologists* (Ontario Government 2011). The report is concluded with a recommendation on whether Stage 2 AA is required and what the appropriate Stage 2 assessment strategy should consist of, as well as indicating what areas are cleared of archaeological concern. The report is then submitted to the MHSTCI for review and acceptance into the Provincial Register of Archaeological Reports (Ontario Government).

9.4.2 Cultural (Built) Heritage

The Cultural Heritage program will assess qualitative effects resulting from the Project on built heritage and landscape resources in the LSA. This program will seek to preserve and protect built heritage and landscape resources in place where possible, and as a result there is no quantitative approach to predicting future condition required.

The CHR will assure that cultural heritage resources of cultural heritage value or interest, including cultural heritage landscapes, are appropriately identified, understood, and conserved as part of this community-led EA. A transportation route may directly or indirectly affect cultural heritage resources through the introduction of physical, visual, audible or atmospheric elements to the existing environment that does not keep in character with the northern setting. When the nature of the undertaking is such that negative effects are unavoidable, it may be necessary to implement management or impact management measures that

alleviate the deleterious effects on cultural heritage resources. Impact management is the process of causing lessening or negating anticipated negative effects to cultural heritage resources.

To assess the potential effects of an undertaking within the LSA, identified cultural heritage resources are considered against a range of possible effects based on the *Ontario Heritage Tool Kit (*MHSTCI 2006*), Heritage Resources in the Land Use Planning Process (Ontario Government 2014)*, InfoSheet #5 *Heritage Impact Assessments and Conservation Plans* (MHSTCI 2006a) which include, but are not limited to:

- Destruction, removal or relocation of any, or part of any, significant heritage attributes or features
- Alteration that is not sympathetic, or is incompatible, with the historic fabric or appearance
- Shadows created that alter the appearance of a heritage attribute or change the exposure or visibility of a natural feature or plantings, such as a garden
- Isolation of a heritage attribute from its surrounding environment, context, or a significant relationship
- Direct or indirect obstruction of significant views or vistas from, within, or to a built or natural heritage feature
- A change in land use such as rezoning a battlefield from open space to residential use, allowing new development or site alteration to fill in the formerly open spaces
- Land disturbances such as a change in grade that alters soils, and drainage patterns that adversely affect an archaeological resource

Several additional factors are also considered when evaluating potential effects on identified cultural heritage resources. These are outlined in a document set out by the Ministry of Culture and Communications (now MHSTCI) and the Ministry of the Environment entitled *Guideline for Preparing the Cultural Heritage Resource Component of Environmental Assessments* (MHSTCI 1992) and include[7]:

- Magnitude: the expected change from existing conditions
- Severity[8]: the ability to return to existing conditions
- Duration: the period of time the effect is expected to occur
- Frequency: how often the effect is expected to occur
- Range[9]: the spatial area that the effect is expected to occur within
- Diversity: the number of different kinds of activities to affect a heritage resource

7. *The majority of additional factors defined within the Guideline for Preparing the Cultural Heritage Resource Component of Environmental Assessment are effects characteristics defined for the Project to be used to undertake the residual effects assessment. For consistency the definitions provided are the Project definitions for these terms rather than the definitions provided by MHSTCI. The MHSTCI and Project definitions are equivalent in meaning but vary slightly in how they are written.*
8. *This term is referred to as reversibility in the effects characteristics that will be used for the residual effect's assessment for the Project.*
9. *This term is referred to as geographic extent in the effects characteristics that will be used for the residual effect's assessment for the Project.*

A preliminary impact assessment is conducted as a part of the CHR for the LSA in order to propose appropriate impact management measures and recommendations for minimizing and avoiding negative effects on cultural heritage resources, and the identification of further reporting requirements such as Cultural Heritage Evaluation Reports and / or Heritage Impact Assessments, if necessary.

9.5 Mitigation and Enhancement Measures

Once potential effects have been identified, the effects assessment will explore technically and economically feasible mitigation measures to avoid or minimize the identified negative effects and enhancement measures to increase positive effects, beyond those that are already inherent to design. These measures will consist of industry-standard practices, federal and provincial standard specifications, regulator-mandated measures, best management practices, Indigenous and community recommendations and recommendations from industry and environmental professionals based on expertise, scientific publications, experience and judgement.

It is important that mitigation and enhancement measures are achievable, measurable and verifiable and monitored for compliance and effectiveness during all temporal phases as part of the Project follow-up monitoring plan. Required environmental monitoring will verify the potential environmental effects predicted in the IS / EA Report, evaluate the effectiveness of mitigation and enhancement measures, and identify the process the Proponent will follow if mitigation and enhancement measures are not effective.

9.5.1 TISG Section 20 Requirements

There are two mitigation and enhancement measures to be included in the IS relating to Cultural Heritage:

1. Describe mitigation measures that are specific to each environmental, health, social or economic effect identified. Mitigation measures are to be written as specific commitments that clearly describe when and how the proponent intends to implement them, what decision-making criteria will be used, and the outcome these mitigation measures are designed to address; and,
2. Describe mitigation measures proposed by Indigenous peoples and the consideration of those in the Project.

Mitigation measures for addressing potential Project-environment interactions in the IS / EA Report include completing a Stage 1 AA to identify areas of archaeological potential within the LSA. Mitigation measures outlined in the Stage 1 AA will consist of whether an area is or is not clear of archaeological concerns, and

what areas require additional Stage 2 AA as per the *Standards and Guidelines for Consultant Archaeologists* (Ontario Government 2011). The determination of the degree of archaeological potential (i.e., negligible, low, high) within the Stage 1 AA will provide an opportunity to avoid or minimize any potential negative effects to areas of archaeological potential, or areas identified by the Indigenous Consultation as being significant. Additionally, the CHR will assess the potential effects of an undertaking within the LSA, identified cultural heritage resources are considered against a range of possible effects based on the *Ontario Heritage Tool Kit (*MHSTCI 2006*), Heritage Resources in the Land Use Planning Process (Ontario Government 2014)*, InfoSheet #5 *Heritage Impact Assessments and Conservation Plans* (MHSTCI 2006a).

Mitigation measures proposed by Indigenous peoples will be outlined and incorporated in the Stage 1 AA report and CHR collected through the Consultation and Engagement with Indigenous communities.

Further information on when and how mitigation measures will be implemented, what decision-making criteria will be used, and the outcome the mitigation measures are designed to address can be found in the following sections.

9.6 Residual Effects

Residual effects are the effects remaining after the application of mitigation measures. The IS / EA Report will describe in detail the potential adverse and positive residual effects in relation to each temporal phase of the Project (i.e., construction, operation). Residual effects will be described using criteria to quantify or qualify adverse and positive effects, taking into account any important contextual factors. The residual effects will therefore be described in terms of the direction, magnitude, geographic extent, duration, frequency, likelihood, and whether effects are reversible or irreversible[10]. Ecological and socio-economic context may also be relevant when describing a residual effect. Context relates to the existing setting, its level of disturbance and resilience to adverse effects. Context can also relate to timing as it applies to assessing the worst-case scenario (e.g., effect during migratory or calving season for wildlife). Where appropriate, information regarding residual effects will be disaggregated by sex, gender, age and other community relevant identifying factors to identify disproportionate residual effects for diverse subgroups.

Once detail design is complete and impacts are known, the archaeological assessment and the CHR will assess the impacts and provide mitigation, whether that is through excavation and removal of material

10. TISG Section 13.1 identifies additional effects characteristics for certain disciplines (e.g., wetlands, birds, terrestrial wildlife, species at risk). These additional effects characteristics are described in the respective discipline-specific study plans.

aspects, or Project revision and avoidance. The CHR will include an impact assessment table that outlines the proposed impacts and the mitigations for each type of physical and non-material resource identified based on its location in proximity to the study area (i.e., within, abutting or participating). The CHR addresses the impacts specifically and will be discussed in detail in that report.

9.6.1 Magnitude

For magnitude, environmental discipline-specific definitions are required and are proposed below in **Table 9-4**.

Table 9-4: Cultural Heritage Magnitude Definition

Magnitude Level	Definition	Rationale
Negligible	■ Retains no archaeological potential	■ Areas that have been subject to extensive and intensive deep land alterations that have severely damaged the integrity of any archaeological resources (i.e., previously disturbed or altered)
Low	■ Retains low archaeological potential	■ Areas that are permanently wet (e.g., wetlands, bogs, fens)
Medium - High	■ Retains medium to high archaeological potential	■ Proximity to previously identified archaeological sites; ■ Distance to various types of water sources ■ Soil texture and drainage; ■ Glacial geomorphology, elevated topography and the general topographic variability of the area; ■ Resource areas including food or medicinal plants, scarce raw materials and early Euro-Canadian industry; ■ Areas of early Euro-Canadian settlement and early transportation routes; ■ Properties listed on municipal register of properties designated under the *Ontario Heritage Act* (Ontario Government 1990); ■ Properties that local histories or informants have identified with possible archaeological sites, historical events, activities or occupants; ■ Historic landmark sites; ■ Areas identified by Indigenous Knowledge of the area

Criteria commonly used by the MHSTCI to determine areas of archaeological potential are listed in Section 1.3.1 of the *Standards and Guidelines for Consultant Archaeologists* (Ontario Government 2011). Distance to modern or ancient water sources is generally accepted as the most important element for past human settlement patterns and when considered alone may result in a determination of archaeological potential. In addition, any combination of two or more of the listed rationale indicates archaeological potential.

9.7 Consideration of Sustainability Principles

The following provides a generic description of how sustainability principles will be considered in the effects assessment. The extent to which sustainability principles apply to a specific VC will vary depending on the nature of the VC and the potential for Project effects on the VC.

The effects assessment approach for the Project has included the consideration of the sustainability principles outlined in the Project TISG (the Agency 2020b) and the Agency's guidance on sustainability. The sustainability principles that have been considered include:

1. Consider the interconnectedness and interdependence of human-ecological systems;
2. Consider the well-being of present and future generations;
3. Consider positive effects and reduce adverse effects of the Project; and
4. Apply the precautionary principle by considering uncertainty and risk of irreversible harm.

The interconnectedness and interdependence of human-ecological systems will be considered through the assessment of potential indirect effects of each alternative. An indirect effect occurs when a change to one environmental discipline resulting from a Project activity causes a change to another environmental discipline (e.g., changes in vegetation could indirectly affect wildlife). A preliminary assessment of indirect effects has been included in **Section 9.3**.

The well-being of present and future generations will be considered in the effects assessment through the application of the long-term operations phase temporal boundary of 75 years (**Section 6.1**) and through the effects characteristics description of duration and reversibility for each residual effect predicted.

The consideration of positive effects and reducing adverse effects of the Project is fundamental to the effects assessment methodology through the identification of mitigation measures to reduce potential adverse effects and the identification of the preferred alternative through the evaluation of advantages (e.g., positive effects) and disadvantages (e.g., adverse effects).

The effects assessment will apply the precautionary principle by clearly describing and documenting all uncertainties and assumptions underpinning the analysis and identifying information sources. The effects assessment will consider risk of irreversible harm through the effects characteristics description of reversibility for each residual effect predicted and will describe any uncertainty associated with the assessment of residual effects.

The scope of the sustainability assessment will be defined by issues of importance identified by Indigenous communities and interested persons through consultation and engagement activities, while also ensuring to be inclusive of the diversity of views expressed. The selection of VCs that will be the focus of the sustainability assessment will be aligned with the issues of importance identified by Indigenous communities and interested persons, as well as residual effects identified through the effects assessment process. The sustainability assessment will describe how the planning and design of the Project, in all phases including follow-up monitoring, considered the sustainability principles.

9.8 Consideration of Identity and Gender-Based Analysis Plus in Effects Assessment

The Proponent recognizes that communities and sub-populations within those communities may be impacted differently by the Project with respect to VCs and indicators. As such, the Project aims to collect baseline information for the purpose of assessing differential effects and establishing relevant mitigation measures, as further elaborated on in **Section 4.3**. Gender-Based Analysis Plus will not be limited to community feedback; when offered or discussed in secondary texts, additional sub-population information as is applicable to the relevant assessment will be incorporated.

9.9 Follow-up Programs

A follow-up program verifies the accuracy of the effects assessment and evaluates the effectiveness of mitigation measures. Identification of follow-up programs for the Project are not described in this Study Plan as the information needed to determine environmental monitoring requirements is dependent on the outcome of the effects assessment and consultation with Indigenous communities, agencies and interested persons. Therefore, the Proponent will include information on follow-up programs, that address the requirements outlined in Section 26 of the TISG, in the IS / EA Report and will identify the compliance and effects monitoring activities to be undertaken during all phases of the Project, as required.

Should archaeological resources be identified during the Stage 2 field work, further archaeological work may be required to mitigate the resource, as needed.

10. Assumptions

Any assumption used in the effects assessment, for example the assumed average daily traffic on the CAR, will be clearly identified and a rationale provided in the IS / EA Report.

Should proposed impacts be planned for land outside of the previously assessed LSA, another Stage 1 AA will be required to capture those lands. This includes land required for construction, maintenance or temporary land uses (e.g., aggregate pits, temporary access roads, laydown areas).

It is assumed the PDA will be defined, including temporary areas required for construction (i.e., laydown or easements), prior to undertaking the Stage 2 AA. The Stage 2 AA will only be completed for the direct areas of proposed impacts for the Project.

It is assumed the CHR will be completed for the study area outlined in Figure 6-2, and the alternatives will be evaluated as part of the EA. Therefore, the CHR preliminary impact assessment component may be updated once a preferred route option has been selected. This will be captured under additional scope, as required.

11. Concordance with Federal and Provincial Guidance

This section provides the best information currently available on how federal and provincial requirements identified for the Project to date will be addressed. The final concordance with federal and provincial requirements will be included in the IS / EA Report, and will be based on regulatory agency guidance, professional judgement and input received through the Project consultation and engagement process.

The *Far North Act*, is the legislative foundation of land use planning in the Far North and is an approach using consensus-based decision-making between First Nations and Ontario. The purpose of the Act is to provide for community based land use planning in the Far North that:

- sets out a joint planning process between the First Nations and Ontario
- supports the environmental, social and economic objectives for land use planning for the peoples of Ontario
- is done in a manner that is consistent with the recognition and affirmation of existing Aboriginal and Treaty Rights in Section 35 of the *Constitution Act,* 1982, including the Duty to Consult

As set out in the act, the objectives for land use planning include the following:

- a significant role for First Nations in the planning
- the protection of areas of cultural value and protection of ecological systems by including at least 225,000 square km of the Far North in an interconnected network of protected areas designated in community based land use plans
- the maintenance of biological diversity, ecological processes and ecological functions, including the storage and sequestration of carbon in the Far North
- enabling sustainable economic development that benefits the First Nations

11.1 Archaeology

Unless otherwise specified, archaeological assessments in Ontario completed on Crown land defaults to the Ontario's MHSTCI's *Standards and Guidelines for Consultant Archaeologists* (Ontario Government 2011). Parks Canada is notified only when the assessment is conducted on federally owned and operated land, which includes any of the Canadian Parks. Archaeological investigations on other federally designated land,

such as First Nations reserve land, will be completed to meet all federal and provincial standards. This will be achieved through meaningful consultation and engagement with each Nation in order to incorporate other specific protocols that may be implemented on First Nations Reserve land. This is reflected in the *Far North Act* (Ontario Government 2010), a legislative foundation of land use planning in the Far North using consensus-based decision making between First Nations and Ontario.

The MECP requires a permit for completing invasive archaeological investigations within provincial park boundaries (MECP *n.d.;* Canadian Government 2009; Parks Canada *n.d.*). The LSA includes the Albany River and the Ogoki River Provincial Parks (MECP 1985, 2003). Should further Stage 2 AA be required within the park properties, a permit must be obtained prior to work commencing.

The Stage 1 AA report is submitted to the Ontario Minister of Heritage, Sport, Tourism, and Culture Industries as a condition of licensing in accordance with Part VI of the *OHA*, R.S.O. 1990, c 0.18 (Ontario Government 1990). The report is reviewed to assure that it complies with the standards and guidelines that are issued by the Minister, and that the archaeological field work and report recommendations assure the conservation, protection and preservation of the cultural heritage of Ontario. When all matters relating to archaeological sites within the Project area of a development proposal have been addressed to the satisfaction of the Ministry of Heritage, Sport, Tourism and Culture Industries, a letter will be issued by the Ministry stating that there are no further concerns with regard to alterations to archaeological sites by the proposed development.

It is an offence under Sections 48 and 69 of the *OHA* for any party other than a licensed archaeologist to make any alteration to a known archaeological site or to remove any artifact or other physical evidence of past human use or activity from the site, until such time as a licensed archaeologist has completed field work on the site, submitted a report to the Minister stating that the site has no further cultural heritage value or interest, and the report has been filed in the Ontario Public Register of Archaeology Reports referred to in Section 65.1 of the *OHA*.

Should previously undocumented archaeological resources be discovered, they may be a new archaeological site and therefore subject to Section 48(1) of the *Ontario Heritage Act*. The proponent or person discovering the archaeological resources must cease alteration of the site immediately and engage a licensed consultant archaeologist to carry out archaeological field work, in compliance with Section 48(1) of the *OHA*.

Archaeological sites recommended for further archaeological field work or protection remain subject to section 48 (1) of the *OHA* and may not be altered, or have artifacts removed from them, except by a person holding an archaeological license.

The *Funeral, Burial and Cremation Services Act*, 2002, S.O. 2002, c.33 (when proclaimed in force in 2012) (Ontario Government 2002) require that any person discovering human remains must notify the police or coroner and the Registrar of Burial Sites, War Graves, Abandoned Cemeteries, and Cemetery Closures.

11.2 Cultural (Built) Heritage

The analysis throughout the study process addresses cultural heritage resources under various pieces of legislation and their supporting guidelines. This cultural heritage assessment considers cultural heritage resources in the context of improvements to specified areas, pursuant to the *Environmental Assessment Act*. The *Environmental Assessment Act* (Ontario Government 1990a) provides for the protection, conservation and management of Ontario's environment. Under the *Environmental Assessment Act*, "environment" is defined in Subsection 1(c) to include:

- cultural conditions that influence the life of man or a community; and
- any building, structure, machine, or other device or thing made by man.

The *OHA* gives the MHSTCI the responsibility for the conservation, protection and preservation of Ontario's cultural heritage resources. The MHSTCI is charged under Section 2 of the *OHA* with the responsibility to determine policies, priorities and programs for the conservation, protection and preservation of the heritage of Ontario and has published two guidelines to assist in assessing cultural heritage resources as part of an environmental assessment: *Guideline for Preparing the Cultural Heritage Resource Component of Environmental Assessments* (MHSTCI 1992), and *Guidelines on the Man-Made Heritage Component of Environmental Assessments* (MHSTCI 1980). Accordingly, both guidelines have been utilized in this assessment process.

The *Guidelines on the Man-Made Heritage Component of Environmental Assessments* (Section 1.0) states the following:

> "When speaking of man-made heritage we are concerned with the works of man and the effects of his activities in the environment rather than with movable human artifacts or those environments that are natural and completely undisturbed by man."

In addition, environment may be interpreted to include the combination and interrelationships of human artifacts with all other aspects of the physical environment, as well as with the social, economic and cultural conditions that influence the life of the people and communities in Ontario. The *Guidelines on the Man-*

Made Heritage Component of Environmental Assessments distinguish between two basic ways of visually experiencing this heritage in the environment, namely as cultural heritage landscapes and as built heritage.

The MHSTCI has also published *Standards and Guidelines for Conservation of Provincial Heritage Properties*, effective as of July 1, 2010 (hereafter *Standards and Guidelines*). These *Standards and Guidelines* apply to properties the Government of Ontario owns or controls that have cultural heritage value or interest. The *Standards and Guidelines* provide a series of guidelines that apply to provincial heritage properties in the areas of identification and evaluation: protection, maintenance, use, and disposal. For the purpose of this CHR, the *Standards and Guidelines* provide points of reference to aid in determining heritage significance in the evaluation of these properties.

Similarly, the *Ontario Heritage Tool Kit* (MHSTCI 2006) provides a guide to evaluate heritage properties. It states, to conserve a cultural heritage resource a municipality or approval authority may require a heritage impact assessment and / or a conservation plan to guide the approval, modification, or denial of a proposed development.

Additionally, the *Planning Act* (Ontario Government 1990c) and related *Provincial Policy Statement* (Ontario Government 2020), make a number of provisions relating to heritage conservation. It is important to note that while these policies are not necessarily applicable under the *Far North Act*, they do highlight the importance of conserving archaeological and cultural heritage features to the province of Ontario and are utilized as guidance documents.

One of the general purposes of the *Planning Act* is to integrate matters of provincial interest in provincial and municipal planning decisions. In order to inform all those involved in planning activities of the scope of these matters of provincial interest, Section 2 of the *Planning Act* provides an extensive listing. One of these provincial interests is directly concerned with:

> 2.(d) the conservation of features of significant architectural, cultural, historical, archaeological or scientific interest

Those policies of particular relevance for the conservation of heritage features are contained in Section 2-Wise Use and Management of Resources, wherein Subsection 2.6 - Cultural Heritage and Archaeological Resources, makes the following provisions:

> 2.6.1 Significant built heritage resources and significant cultural heritage landscapes shall be conserved.

A number of definitions that have specific meanings for use in a policy context accompany the *Provincial Policy Statement* (Ontario Government 2020). For the purposes of the study plan in reference to Cultural Heritage, the term 'cultural heritage resources' was used to describe both cultural heritage landscapes and built heritage resources.

> A *built heritage resource* "means a building, structure, monument, installation or any manufactured or constructed part or remnant that contributes to a property's cultural heritage value or interest as identified by a community, including an Indigenous community. Built heritage resources are located on property that may be designated under Parts IV or V of the *Ontario Heritage Act*, or that may be included on local, provincial, federal and / or international registers." (Ontario Government 2020).
>
> A *cultural heritage landscape* "means a defined geographical area that may have been modified by human activity and is identified as having cultural heritage value or interest by a community, including an Indigenous community. The area may include features such as buildings, structures, spaces, views, archaeological sites or natural elements that are valued together for their interrelationship, meaning or association. Cultural heritage landscapes may be properties that have been determined to have cultural heritage value or interest under the *Ontario Heritage Act*, or have been included on federal and / or international registers, and / or protected through official plan, zoning by-law, or other land use planning mechanisms." (Ontario Government 2020).

In addition, significance is also more generally defined. It is assigned a specific meaning according to the subject matter or policy context, such as wetlands or ecologically important areas. With regard to cultural heritage and archaeology resources, resources of significance are those that are valued for the important contribution they make to our understanding of the history of a place, an event, or a people (Ontario Government 2020).

Criteria for determining significance for the resources are recommended by the Province. While some significant resources may already be identified and inventoried by official sources, the significance of others can only be determined after evaluation (Ontario Government 2020).

Accordingly, the abovementioned guidelines and relevant policy statements can be used to guide the scope and methodology of a CHR.

Table 11-1: Study Plan Federal Concordance – Conformance with Requirements

ID #	Federal TISG Reference	Requirement / Comment / Concern	Response	Study Plan Reference
1	TISG Section 12.1	■ The IA will include a description of the historical baseline conditions associated with Indigenous cultures and the ability to transmit culture (e.g., through language, ceremonies, harvesting, teaching of sacred laws, traditional laws, stewardship laws, and traditional knowledge)	■ The Stage 1 AA will identify areas of high archaeological potential or sites that may be impacted by the Project. This will be completed by examining proximity to previously identified archaeological sites, proximity to water, elevated topography, incorporation of Indigenous Knowledge, and a visual inspection of the study area. ■ The CHR will present an inventory of previously identified and potential built heritage resources and cultural heritage landscapes, identify the existing conditions of the study area, identify preliminary potential impacts to the cultural heritage resources, and propose appropriate mitigation measures	■ Section 7
2	TISG Section 17.6	■ The IA will include an assessment of potential impacts to surrounding communities, including local Indigenous communities. Changes to: – structures, sites or things of historical, archaeological, paleontological or architectural significance and associated effects on other social and economic conditions, specifically burial sites – traditional cultural activities (such as religious ceremonies, traditional hunting, etc.) that might be caused by the project; and culturally significant plants or wildlife	■ The Stage 1 AA will identify areas of high archaeological potential or sites that may be impacted by the Project. Based on Project design, excavation/mitigation of archaeological sites will be recommended in subsequent stages of archaeological investigation for the Project that are outside of the scope of the Stage 1 AA. ■ The CHR will present an inventory of previously identified and potential built heritage resources and cultural heritage landscapes, identify the existing conditions of the study area, identify preliminary potential impacts to the cultural heritage resources, and propose appropriate mitigation measures.	■ Section 9
3	TISG Section 19.1	■ The IA will include a discussion of appropriate methodologies for assessing effects and impacts on the physical and cultural heritage by the Project. Specifically including cultural heritage, and structures, sites or things of historical, archaeological, paleontological or architectural significance to groups, including, but not limited to: – the loss or destruction of physical and cultural heritage; – changes to access to physical and cultural heritage; – changes to the cultural value, spirituality, or importance associated with physical and cultural heritage; – sacred, ceremonial or culturally important places, objects, or things, including languages, stories and traditions; and visual aesthetics over the life of the Project and post-Project abandonment or decommissioning.	■ The Stage 1 AA will identify areas of high archaeological potential or sites that may be impacted by the Project. Based on Project design, excavation/mitigation of archaeological sites will be recommended in subsequent stages of archaeological investigation for the Project that are outside of the scope of the Stage 1 AA. ■ The CHR will present an inventory of previously identified and potential built heritage resources and cultural heritage landscapes, identify the existing conditions of the study area, identify preliminary potential impacts to the cultural heritage resources, and propose appropriate mitigation measures.	■ Section 7

Table 11-2: Study Plan Provincial Concordance – Conformance with Requirements

ID #	Comment From Regulatory Agency	Provincial Draft ToR Comment Reference[2]	Requirement / Comment / Concern	Response	Study Plan Reference
1	MECP	■ Email from Katherine Kirzati, Heritage Planning Unit , Ministry of Heritage, Sport, Tourism, and Culture Industries, Programs and Services Branch with comments on the Draft ToR	■ **7.1.4.13 Cultural Heritage Resources** Page 45 6th paragraph – In addition to archaeological resources, which focus on specific localities and material remains of past occupation (…) key information sources will be Indigenous knowledge and discussions. – Please note that Standards and Guidelines for Conservation of Provincial Heritage Properties apply to this project as some properties are owned or controlled by the Crown in right of Ontario or by a public body prescribed under Ontario Regulation 157/10. Given the size of the study area, MHSTCI recommends that a Cultural Heritage Report: Existing Conditions and Preliminary Impact Assessment be undertaken. Indigenous communities may have knowledge that can contribute to the identification of cultural heritage resources, and we suggest that any engagement with Indigenous communities includes a discussion about known or potential cultural heritage resources that are of value to them. Please note that definitions of built heritage resources and cultural heritage landscapes are from the Provincial Policy Statement. – Therefore, MHSTCI recommends inserting the following: • Include a subheading (2) Built Heritage Resources and Cultural Heritage Landscapes. • Replace the 6th paragraph with: ▪ A Cultural Heritage Report: Existing Conditions and Preliminary Impact Assessment will be undertaken by a qualified person. The Report will: ▪ Identify existing baseline cultural heritage conditions, including a historical summary of the development of the study area and all known or potential built heritage resources and cultural heritage landscapes in the study area based on research. Indigenous knowledge, MHSTCI screening checklist Criteria for Evaluating Potential for Built Heritage Resources and Cultural Heritage Landscapes and professional judgement. ▪ Identify preliminary potential project-specific impacts on the known and potential built heritage resources and cultural heritage landscapes that have been identified. • Propose and recommend measures to avoid or mitigate potential negative impacts to known or potential built heritage resources and cultural heritage landscapes. – As part of this study, engagement with Indigenous communities is key. The Report will be completed during the environmental assessment and prior to the EA completion. The proposed mitigation measures will inform the selection of alternatives, next steps of project planning and design as well as additional studies)	■ Upon consultation with the MHSTCI on May 7, 2020, it is understood that a Cultural Heritage Report: Existing Conditions and Preliminary Impact Assessment is required to be undertaken by a qualified person. ■ The CHR will present an inventory of previously identified and potential built heritage resources and cultural heritage landscapes, identify the existing conditions of the study area, identify preliminary potential impacts to the cultural heritage resources, and propose appropriate mitigation measures. ■ A preliminary impact assessment is conducted as a part of the CHR for the LSA in order to propose appropriate impact management measures and recommendations for minimizing and avoiding negative effects on cultural heritage resources, and the identification of further reporting requirements such as Cultural Heritage Evaluation Reports and/or Heritage Impact Assessments, if necessary. However, the CHR may be updated with the preliminary impact assessment component once a preferred route option has been selected.	Section 7.3

ID #	Comment From Regulatory Agency	Provincial Draft ToR Comment Reference[2]	Requirement / Comment / Concern	Response	Study Plan Reference
2	MECP	■ Email from Katherine Kirzati, Heritage Planning Unit , Ministry of Heritage, Sport, Tourism, and Culture Industries, Programs and Services Branch with comments on the Draft ToR	■ **Table 7-4: Preliminary Identification of Potential Environmental Effects** Page 48 / Potential Effects on Cultural Heritage Resources – Damage to, or loss of, archaeological or other sites. – MHSTCI recommends that the description of potential effects be expanded as follow: • Disturbance or destruction of, archaeological resources. • Displacement of built heritage resources and/or cultural heritage landscape by removal and/or demolition and/or disruption by isolation • Impacts to registered and unregistered cemeteries which have been identified and documented. • Effects on cultural heritage landscapes – Disruption of cultural heritage resources by the introduction of physical, visual, audible or atmospheric elements that are not in keeping with the character and setting of cultural heritage resources	■ The CHR will present an inventory of previously identified and potential built heritage resources and cultural heritage landscapes, identify the existing conditions of the study area, identify preliminary potential impacts to the cultural heritage resources, and propose appropriate mitigation measures.	Section 9
3	MECP	■ Email from Katherine Kirzati, Heritage Planning Unit , Ministry of Heritage, Sport, Tourism, and Culture Industries, Programs and Services Branch with comments on the Draft ToR	■ **7.2.12 Cultural Heritage Resources** Page 53 / Potential Environmental Effects to Cultural Heritage Resources – Should any archaeological or built heritage and cultural landscapes be identified in the area of the Project, there is a potential for damage to, or the loss of the cultural heritage resources through ground disturbance activities (e.g., blasting, grading). Any activity with the potential to cause ground disturbance may also inadvertently discover and/or disturb previously unknown resources. Vibration generated by heavy equipment. – This project has the potential to impact cultural heritage resources. This section should be expanded to indicate how potential environmental effects / impacts to cultural heritage resources will be identified and assessed. Therefore, MHSTCI recommends that the existing paragraph be replace with the following suggested text: • *Cultural heritage resources (archaeological resources, built heritage resources and cultural heritage landscapes) may be impacted by the Project. Potential environmental effects as relates to cultural heritage resources are described in Table 7-4. Technical cultural heritage studies (i.e. archaeological assessment(s), Cultural Heritage Report: Existing Conditions and Preliminary Impact Assessment) will be undertaken during the EA process and will identify preliminary effect/impacts and recommend avoidance and/or mitigation measures, if any negative effects/impacts on cultural heritage resources.*	■ The Stage 1 AA will identify areas of high archaeological potential or sites that may be impacted by the Project. Based on Project design, excavation / mitigation of archaeological sites will be recommended in subsequent stages of archaeological investigation for the Project that are outside of the scope of the Stage 1 AA. ■ The CHR will present an inventory of previously identified and potential built heritage resources and cultural heritage landscapes, identify the existing conditions of the study area, identify preliminary potential impacts to the cultural heritage resources, and propose appropriate mitigation measures.	Section 7
4	MECP	■ Email from Katherine Kirzati, Heritage Planning Unit , Ministry of Heritage, Sport, Tourism, and Culture Industries, Programs and Services Branch with comments on the Draft ToR	■ **Table 13-1: Potential Permits and Approvals for the Proposed Project** Page 83 / Ministry of Heritage, Sport, Tourism and Culture Industries Archaeological and Cultural Clearances – See above comments regarding technical cultural heritage studies.	■ Upon consultation with the MHSTCI on May 7, 2020, it is understood that a Cultural Heritage Report: Existing Conditions and Preliminary Impact Assessment is required to be undertaken by a qualified person. ■ The CHR will present an inventory of previously identified and potential built heritage resources and cultural heritage landscapes, identify the existing conditions of the study area, identify preliminary potential impacts to the cultural heritage resources, and propose appropriate mitigation measures. ■ A preliminary impact assessment is conducted as a part of the CHR for the LSA in order to propose appropriate impact management measures and recommendations for minimizing and avoiding negative effects on cultural heritage resources, and the identification of further reporting requirements such as Cultural Heritage Evaluation Reports and/or Heritage Impact Assessments, if necessary. However, the CHR may be updated with the preliminary impact assessment component once a preferred route option has been selected.	Section 7.3

ID #	Comment From Regulatory Agency	Provincial Draft ToR Comment Reference[2]	Requirement / Comment / Concern	Response	Study Plan Reference
5	MECP	■ Email from Katherine Kirzati, Heritage Planning Unit , Ministry of Heritage, Sport, Tourism, and Culture Industries, Programs and Services Branch with comments on the Draft ToR	■ **Appendix A – Appendix A – Draft Criteria and Indicators for Alternatives Evaluation** Page 6 Environmental Discipline: Cultural Environment/Cultural Heritage Resources – Based on the comments above, MHSTCI recommends the following text: Criteria: Built Heritage Resources and Cultural Heritage Landscapes Indicator: • Areas of significance to local communities • Areas of known or potential cultural heritage value or interest • Areas of Religious or Spiritual Significance Potential Data Sources: ▪ Indigenous Knowledge ▪ Recent and historical maps of the study area ▪ Primary and secondary documentary sources (both current and archival written accounts, maps, drawings, plans and images) ▪ Site visits ▪ Community Based Land Use Planning initiatives	■ The CHR will present an inventory of previously identified and potential built heritage resources and cultural heritage landscapes, identify the existing conditions of the study area, identify preliminary potential impacts to the cultural heritage resources, and propose appropriate mitigation measures.	Section 9

12. References

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Indigenous Partnership and Engagement Plan for the Marten Falls Community Access Road Project Impact Assessment.

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Appendix A

Preliminary List of Data Sources

Archaeology

- **Primary Sources**
  - Indigenous Knowledge
  - Recent and historical maps of the study area
  - Community Based Land Use Planning initiatives
  - Field Survey
  - Primary and secondary documentary sources (both current and archival written accounts, maps, drawings, plans and images)
  - Public and Indigenous community engagement
- **Secondary Sources**
  - Scientific or academic publications
  - Reports of previous Archaeological Assessments in proximity to the study area
  - The MHSTCI's Ontario Archaeological Sites Database for a listing of registered archaeological sites within a 5 km radius of the study area

Cultural Heritage

- **Primary Sources**
  - Indigenous Knowledge
  - Recent and historical maps of the study area
  - Community Based Land Use Planning initiatives
  - Field Survey
  - Primary and secondary documentary sources (both current and archival written accounts, maps, drawings, plans and images)
  - Public and Indigenous community engagement
- **Secondary Sources**
  - Scientific or academic publications
  - Reports of previous Archaeological Assessments in proximity to the study area
  - The MHSTCI's Ontario Archaeological Sites Database for a listing of registered archaeological sites within a 5 km radius of the study area

Appendix B

Draft Study Plan Comments – Federal Agencies

Comment #/ Ref #	DRAFT Study Plan Section	TISG Section	Agency/ Regulatory Body Comments Received from	Comment / Context	Action Item	Final Response	Study Plan Reference
GC	■ General Comment	■ N/A	■ The Agency	■ In addition to the required actions detailed below, other required actions to be addressed in the update to this study plan are detailed in a separate table titled "2020-07-02 – IAAC to Marten Falls First Nation - General Comments on MFCAR Draft Study Plans". The Agency has provided these other required actions to highlight common sections of the Tailored Impact Statement Guidelines (the Guidelines) where requirements were not met in the draft study plans submitted to the Agency. These additional actions must be addressed in the updated study plans.		■ We have reviewed the relevant comments and incorporated where appropriate. Please refer to the General Comments Table Response submitted separately to the Agency for specific responses.	■ Various Sections
CH-01	■ Section 3	■ Section 7.1 and 7.4 of the Guidelines	■ The Agency	■ **Spatial Boundaries: Study Areas** – Section 3 of the study plan states that the Project Study Area (PSA), the Local Study Area (LSA) and the Regional Study Area (RSA) were defined to meet the requirements of the Ontario Heritage Act (Ontario Government 1990b) and the Standards and Guidelines for Consultant Archaeologists (Ontario Government 2011). Section 3 states that the LSA will encompass a "5km wide area around the centreline of Alternative 1 and Alternative 4" and the RSA will encompass the "LSA + a 1km radius". – Section 7.1 of the Guidelines explains that the Impact Statement must establish appropriate study area boundaries to describe the baseline conditions. The study area boundaries need to encompass the spatial boundaries of the Project, including any associated project components or activities, and the anticipated boundaries of the Project's effects, including all potentially impacted local communities, municipalities and Indigenous groups. – Section 7.4 of the Guidelines states that the proponent should engage with Indigenous groups when defining spatial and temporal boundaries for valued components, especially for those that are identified by Indigenous groups. Spatial boundaries are defined taking into account the appropriate scale and spatial extent of potential effects and impacts of the Project; community knowledge and Indigenous knowledge; current or traditional land and resource use by Indigenous groups; exercise of Aboriginal and Treaty rights of Indigenous peoples, including cultural and spiritual practices; and physical, ecological, technical, social, health, economic and cultural considerations. – The criteria used to define the PSA, LSA, and RSA in the study plan appear to consider provincial requirements only and do not meet the requirements of Section 7.1 or 7.4 of the Guidelines.	■ **Required Action # 1:** Update the study plan to demonstrate an approach to collect information that meets the requirements of Sections 7.1 and 7.4 of the Guidelines and how Indigenous groups and the public have been, or will be, provided an opportunity to inform the spatial and temporal boundaries. ■ **Required Action # 2:** Provide further detail in the study plan to clarify if stage 1 of the archaeological assessment, as mentioned in Section 4.1 of the study plan, took into account the aforementioned requirements of Sections 7.1 and 7.4 of the Guidelines.	■ The spatial boundaries for the Stage 1 AA were developed based on direction provided by the Proponent. The LSA boundaries are to include the spatial boundaries of the Project, including any associated Project components or activities, and the anticipated boundaries of the Project's effects, including all potentially impacted local communities, municipalities and Indigenous groups. The effects assessment can be found in **Section 9**. The MFFN CAR Project Team will provide opportunities for consultation and engagement with Indigenous communities identified in *the Indigenous Partnership and Engagement Plan for the Marten Falls Community Access Road Project Impact Assessment* (the Agency 2020a). Indigenous communities will be involved throughout the environmental assessment so that the MFFN CAR Project Team can consider and incorporate, where appropriate, Indigenous Knowledge and Indigenous land and resource use information into the Project as applicable. Specific consultation and engagement activities and schedules are currently in development and will be shared with the MECP once available. A summary of the consultation plan has been provided in the Study Plan; further details can be found in the ToR.	■ Section 6 Project Boundaries; Section 4 Consultation and Engagement; Section 9 Effects Assessment

Comment #/ Ref #	DRAFT Study Plan Section	TISG Section	Agency/ Regulatory Body Comments Received from	Comment / Context	Action Item	Final Response	Study Plan Reference
CH-02	■ General Comment	■ Section 7.4.2 of the Guidelines	■ The Agency	■ **Temporal Boundaries** – The study plan provides no information on how temporal boundaries of the impact assessment will be established for the Project. – Section 7.4.2 of the Guidelines requires the proponent to consider how elements of environmental, health, social and economic well-being that local communities, including municipalities, and Indigenous groups identify as being valuable could change over time.	■ **Required Action # 3:** Provide a clear description in the study plan of the proposed methods for the establishment of temporal boundaries for the baseline and effects assessment of physical and cultural heritage.	■ In determining the temporal boundaries, in particular the long operations and maintenance phase, consideration was given to the long-term effects on the well-being of present and future generations. The final temporal boundaries to be used in the IS / EA Report will be based on regulatory agency guidance, professional judgement and input received through the Project consultation process. **Section 6.2** of the Study Plan describes temporal boundaries in more detail.	■ Section 6.2
CH-03	■ Section 4.1 and 4.2	■ Section 6 of the Guidelines	■ The Agency	■ **Baseline Data Collection** – Section 4.1 of the study plan states that the stage 1 archeological assessment completed for the Project involved incorporation of Indigenous traditional knowledge and that "MFFN provided AECOM with Indigenous Knowledge (IK) data for the study area". Section 4.2 states that cultural heritage will be identified through "community engagement including with MFFN, with particular knowledge regarding the cultural heritage landscape in general and potential cultural heritage resources." – Section 6 of the Guidelines states: "The Agency requires the proponent to engage with, at a minimum, the communities listed in the Indigenous Engagement and Partnership Plan (IEPP)". Section 12 of the Guidelines states: "Proponents are required to engage with Indigenous groups in developing baseline conditions, in order to identify and understand the potential impacts of their projects on Indigenous peoples, the exercise of Aboriginal and Treaty rights and to incorporate Indigenous knowledge into the impact assessment. The results of any engagement should be presented in the Impact Statement, and, as best as possible should reflect the perspective of the Indigenous peoples involved. If an Indigenous group has chosen not to participate, the proponent should identify the community and provide evidence of efforts to engage". – It is not clear whether Indigenous groups listed in the IEPP, other than Marten Falls First Nation and Aroland First Nation, have been engaged on baseline data collection to date and which groups will be engaged on baseline data collection moving forward.	■ **Required Action # 4:** Provide a clear description in the study plan of how all Indigenous groups listed in the IEPP will have opportunities to provide Indigenous knowledge, including the validation of the baseline data collected. This should include a description of the proposed methods for data collection, management of confidentiality, and information storage. This should also include a methodology for tracking information that has been approved by the group, to demonstrate that guidance outlined in Section 6.2 of the Guidelines has been incorporated into this study plan.	■ The MFFN CAR Project Team will provide opportunities for consultation and engagement with Indigenous communities identified in *the Indigenous Partnership and Engagement Plan for the Marten Falls Community Access Road Project Impact Assessment* (the Agency 2020a). Indigenous communities will be involved throughout the environmental assessment so that the MFFN CAR Project Team can consider and incorporate, where appropriate, Indigenous Knowledge and Indigenous land and resource use information into the Project as applicable. Specific consultation and engagement activities and schedules are currently in development and will be shared with MECP once available. A summary of the *Consultation and Engagement Plan to Support the EA / IS* (AECOM 2020) has been provided in the Study Plan; further details can be found in the ToR.	■ Section 4

Comment #/ Ref #	DRAFT Study Plan Section	TISG Section	Agency/ Regulatory Body Comments Received from	Comment / Context	Action Item	Final Response	Study Plan Reference
CH-04	■ Section 4.1 and 4.2	■ Sections 12.1,17.6 and 19.1 of the Guidelines	■ The Agency	■ Section 7.2 of the study plan states that "for the purposes of the Study Plan in reference to Cultural Heritage, the term 'cultural heritage resources' was used to describe both cultural heritage landscapes and built heritage resources." By defining cultural heritage as cultural heritage landscapes and built cultural heritage, the study plan fails to consider non-material aspects of cultural heritage. ■ Sections 12.1, 17.6 and 19.1 of the Guidelines instruct the proponent to consider the following non-material aspects of cultural heritage: – cultural values and experiences of being on the land, including harvesting specific resources (section 12.1) – Indigenous governance systems and Indigenous laws tied to the landscape (section 12.1); – anticipated effects to language, such as the relative balance of speakers of local languages, English, and French, and the availability of public services in these languages (section 17.6); – traditional cultural activities (such as religious ceremonies, traditional hunting, etc.) that might be caused by the Project (section 17.6); and – changes to the cultural value, spirituality, or importance associated with physical and cultural heritage (section 19.1).	■ **Required Action # 5:** Provide details of how non-material aspects of cultural heritage will be considered during the baseline data collection. The study plan should note or draw linkages to the requirements of section 12.2 and 12.4 of the Guidelines. Findings of the cultural heritage study plan should inform the proponent's characterization of the current use of lands and resources for traditional purposes and the conditions related to the rights of Indigenous peoples in the Impact Statement.	■ The MFFN CAR Project Team will work with Indigenous communities to ensure that Indigenous Knowledge and any information on Indigenous land and resource use shared is appropriately integrated into the assessment processes. This will include providing Indigenous communities with the opportunity to collaborate with the MFFN CAR Project Team on the effects assessment. The opportunity to complete their own effects assessment will also be provided to communities, and the MFFN CAR Project Team will work with you to incorporate your effects assessment into the assessment processes. The MFFN CAR Project Team will also provide opportunities to review and discuss draft assessment documents to ensure that the information has been captured and presented appropriately. Study Plan **Section 5** describes how Indigenous Knowledge will be incorporated into the effects assessment.	■ Section 5
CH-05	■ Section 4.1	■ N/A	■ The Agency	■ Archeology Study Methods – Section 4.1 of the study plan states that "…a number of field tasks were accomplished including a Stage 1 field review/visual inspection, some initial Stage 2 fieldwork at major river crossings" and "The Stage 2 strategy consisted of concentrating primarily on the alternatives for the major river crossings and any specific locations MFFN would like us to examine/record this season". – It is unclear why only the two major water crossings were included in the archeological assessment.	■ **Required Action # 6:** Provide a rationale in the study plan, as to why the minor water crossings were not considered in the Stage 1 archeological assessment.	■ This is a misreading of the information provided, and the study plan has been updated in **Section 7** to provide more clarity. There are two activities occurring simultaneously. During the Stage 1AA, archaeological potential was determined through the criteria outlined in **Section 7** of the Study Plan. In addition to completing the Stage 1 property inspection, the Stage 2 field assessment was started. Given direction from the internal team, the Stage 2 began at some of the larger water crossings (the major water crossings were a focus in order to inform ongoing bridge design). This does not mean the minor watercourses will not be assessed if they have been deemed to retain archaeological potential, but given the time of the Stage 2 AA, only specific areas were targeted at that time of the year. Further Stage 2 fieldwork is required.	■ Section 7

Comment #/ Ref #	DRAFT Study Plan Section	TISG Section	Agency/ Regulatory Body Comments Received from	Comment / Context	Action Item	Final Response	Study Plan Reference
CH-06	■ Section 4.1	■ Section 7.2 of the Guidelines	■ The Agency	■ Section 4.1 of the study plan states: "further Stage 2 fieldwork will be required for all areas of proposed impacts, which would ideally be completed between the months of July and September." ■ Section 7.2 of the Guidelines states that "With regard to field studies, survey work must be planned to include multiple sampling locations and multiple visits to each location to support all required assessment analyses. Existing data should be considered as a limited augmentation of this new data. See the "Establishing Baseline Conditions" (sections 8.5, 8.9, 8.10, 8.11) in the Guidelines for recommendations on survey design and methodology. Surveys and analyses should be conducted by qualified experts."	■ **Required Action # 7:** In consideration of the ongoing COVID-19 pandemic and that some Indigenous groups are presently in a state of emergency, provide updated information reflecting measures taken in the methodology for the archeological assessment to ensure that the Indigenous groups (at a minimum those listed in the IEPP) and the public are able to inform baseline studies, as is required in Sections 7.2 of the Guidelines. ■ **Required Action # 8:** Provide further details regarding the schedule for the baseline data collection of the archeological assessment (e.g. number of visits to sampling sites, identification of sample sites and types of analysis). Clarify the qualifications of the experts that conducted or will conduct surveys and analysis for the archeological assessment. ■ **Required Action # 9:** Inform potentially impacted Indigenous groups (at a minimum the Indigenous groups listed in the IEPP) about the status of the stage 1 archeological assessment, sharing information about baseline data collected, so that the groups have an opportunity to inform the archeological assessment scope and can volunteer information to inform the scope of the stage 2 assessment. The Agency also notes that Neskantaga First Nation has specifically requested that Dr. Hamilton be included in archeological assessments for the Project. ■ **Required Action # 10:** Provide details of opportunities to be given for Indigenous groups to review baseline data collected during Stage 1 of the archeological assessment and to participate in the Stage 2 of the archeological assessment. Indigenous groups should also be provided with an opportunity to inform thresholds of significance of a heritage resource.	■ **Action 7:** All Indigenous communities and organizations listed in the **Table 4**, including government agencies and interested persons will be informed of baseline studies and will be provided opportunities for input. MFFN is having ongoing discussions with Indigenous communities and continues to request preferences for each community's preferred method(s) of engagement during the EA and in consideration of COVID-19. ■ **Action 8:** Updated text to include a header for "Schedule" under **Section 4**. No sampling strategy employed with archaeology. All areas identified as retaining archaeological potential where proposed impacts are to occur, must be subject to Stage 2 AA as per the *Ontario Heritage Act* and the *Standards and Guidelines for Consultant Archaeologists*. The qualifications of the person are outlined in **Section 4** - all archaeological assessments must be completed by a licensed archaeologists in Ontario, administered by the MHSTCI. ■ **Action #9:** The Stage 1 AA is in Draft form, submitted to the MHSTCI and under Ministry review. Once the reports are accepted from the MHSTCI, the MFFN CAR Project Team will evaluate sharing the report with Indigenous Communities listed in **Table 4-1** and Dr. Hamilton. ■ **Action #10:** The Stage 1 AA is in Draft form and can be shared once accepted by the Minister of Heritage, Sport, Tourism and Culture Industries.	■ Action 8- Section 7

Comment #/ Ref #	DRAFT Study Plan Section	TISG Section	Agency/ Regulatory Body Comments Received from	Comment / Context	Action Item	Final Response	Study Plan Reference
CH-07	■ Section 4.2	■ N/A	■ The Agency	■ Cultural Heritage Assessment Study Methods More details are required on the methodology of baseline data collection for the cultural heritage assessment (including both material and non-material aspects of cultural heritage) for the Agency and federal experts to understand the work that the proponent is planning to undertake.	■ **Required Action # 11:** Provide details on what baseline information will be sourced from primary information sources, and what will be sourced from secondary information sources so that it is clear where information is being sourced for the indicators listed in the study plan. ■ **Required Action # 12:** Regarding primary information collection, including field review and community engagement, the study plan requires additional details on how the collection methodology would meet the expectations of the Guidelines, including: – Specify types of engagement activities (surveys, questionnaires, community sessions, chief and council sessions, workshops, etc.). – Describe how Gender-Based Analysis Plus (GBA+) has been applied to the consideration of engagement activities. Identify any specific methods targeted to specific subgroups. – Specify participants in engagement activities (reflecting the Indigenous groups listed in the IEPP and members of the public listed in the Public Participation Plan) including rationale for how the selection of participants meets the objectives of the study and demonstrates accessibility considerations (e.g. language requirements) and GBA+. – Describe the approach the proponent intends to take to encourage or attract participation, including how opportunities to participate will be planned and advertised. – Describe how Indigenous knowledge will be used to inform types of engagement activities and participant selection. – If sample questionnaires, interview questions, or other data collection tools exist, identify them in an appendix to the study plan, and provide clear links to how they relate to physical and cultural heritage. – Identify past public or Indigenous engagement activities that have taken place and are being used to inform this study plan.	■ **Action # 11:** Primary sources include field review and community and public engagement. Secondary sources include current and archival written accounts, maps, drawings, plans and images, scientific or academic publications. ■ **Action # 12:** The Indigenous Knowledge and Consultation Programs for the Project both serve to support the collection of Indigenous perspectives, values, and input on the Project, including in terms of physical and cultural heritage. The Guidance Document developed for the Project and provided to all Indigenous communities and groups identified in **Table 4-1** in November 2020 includes questions related to historical baseline conditions associated with Indigenous cultures (refer to Sections 6.3 and Appendix D in the Guidance Document). The Guidance Document also includes considerations for burial sites, oral histories, cultural values and experiences of being on the land, Indigenous laws and governance systems, and culturally important sites and resources (refer to Sections 6.6 and 6.7 and Appendices D and E in the Guidance Document). These considerations have also been factored into the identification of preliminary indicators for the assessment.	■ Section 4; Section 9, Table 9-2

Comment #/ Ref #	DRAFT Study Plan Section	TISG Section	Agency/ Regulatory Body Comments Received from	Comment / Context	Action Item	Final Response	Study Plan Reference
					– Specify the methods used to conduct a field review of identified cultural heritage resources. – Describe identified data limitations and how such data limitations will be addressed. ■ **Required Action # 13:** For secondary information collection, including background historical research, provide specific information sources to be used, and for which indicators they apply. Provide detail on how the proponent has considered GBA+ requirements in the identification of secondary information sources.	■ **Action # 13:** Primary sources include field review and community and public engagement. Secondary sources include current and archival written accounts, maps, drawings, plans and images, scientific or academic publications.	
CH-08	■ Section 4.1, 4.2 and 5	■ Sections 6.1,6.2 and 7.2 of the Guidelines	■ The Agency	■ **Data Management Analysis** – Sections 4.1, 4.2 and 5 of the study plan do not include any information on how data collection methodology and data management will comply with ethical guidelines and cultural protocols governing research, data collection, and confidentiality. – Sections 6.1, 6.2 and 7.2, and Appendix 1 of the Guidelines provide guidance and information on the use of ethical guidelines and cultural protocols in data collection, management, and analysis.	■ **Required Action # 14:** Provide details to demonstrate how the requirements of Sections 6.1, 6.2 and 7.2 of the Guidelines will be met.	■ Primary sources include field review and community and public engagement. Secondary sources include current and archival written accounts, maps, drawings, plans and images, scientific or academic publications. Any Indigenous Knowledge data shared as part of the Stage 1 AA will not be made public, as outlined in **Section 8**. The Stage 1 AA is with the MHSTCI for review, it can be provided it Indigenous communities once returned . The Proponent will provide opportunities for consultation and engagement with Indigenous communities identified in *the Indigenous Partnership and Engagement Plan for the Marten Falls Community Access Road Project Impact Assessment* (the Agency 2020a). Indigenous communities will be involved throughout the environmental assessment so that the Proponent can consider and incorporate, where appropriate, Indigenous Knowledge and Indigenous land and resource use information into the Project as applicable. Specific consultation and engagement activities and schedules are currently in development and will be shared with the MECP once available. A summary of the consultation plan has been provided in the Study Plan; further details can be found in the ToR.	■ Section 2; Section 4; Section 8

Comment #/ Ref #	DRAFT Study Plan Section	TISG Section	Agency/ Regulatory Body Comments Received from	Comment / Context	Action Item	Final Response	Study Plan Reference
CH-09	■ Section 6.1	■ Section 6 of the Guidelines	■ The Agency	■ **Indicators** – The Agency notes that the indicator "archeology and cultural heritage" listed in Table 6-1 of the study plan does not provide sufficient detail about how physical and cultural heritage features outlined in Sections 12.1, 17,6 and 19.1 of the Guidelines will be assessed. It is unclear whether the features listed under "Rationale for Selection" in Table 6-1 are intended to serve as indicators, and if so, how they will be measured to assess change. – The Agency requests that the study plan include additional details on the indicators that will be used to describe each feature so that both the Agency and federal reviewers can provide meaningful feedback on the assessment of baseline conditions and potential effects. Indicators must provide data (either quantitative or qualitative) that can be measured and used to identify changes stemming from the Project. – Note that Section 6 of the Guidelines requires the proponent to provide Indigenous groups with an opportunity to comment on the list of valued components and indicators.	■ **Required Action # 15:** Include detailed and measurable indicators related to physical and cultural heritage features, as outlined in Sections 12.1, 17.6, and 19.1 of the Guidelines. ■ **Required Action # 16:** Identify how and when Indigenous groups will be provided opportunities to validate the list of valued components and indicators related to physical and cultural heritage features, as required by section 6 of the Guidelines.	■ Detailed and Measurable indicators related to physical and cultural heritage features will be determined once the temporal and spatial boundaries of construction impacts are known. This information will be included in the IS / EA Report. ■ The Proponent will provide opportunities for consultation and engagement with Indigenous communities identified in the *Indigenous Partnership and Engagement Plan for the Marten Falls Community Access Road Project Impact Assessment* (the Agency 2020a). Indigenous communities will be involved throughout the environmental assessment so that the Proponent can consider and incorporate, where appropriate, Indigenous Knowledge and Indigenous land and resource use information into the Project as applicable. Specific consultation and engagement activities and schedules are currently in development and will be shared with MECP once available. A summary of the consultation plan has been provided in the Study Plan; further details can be found in the ToR.	■ Section 9; Section 4
CH-10	■ Section 4.1, 4.2, and 6.2	■ Sections 7.1 and 13.1 of the Guidelines	■ The Agency	■ **Public Engagement** – Sections 4.1, 4.2 and 6.2 of the study plan do not identify any opportunities for the public to provide input during baseline data collection and effects assessment. The plan should reflect meaningful two-way dialogue with local communities, municipalities and Indigenous groups (at the minimum the Indigenous groups identified in the IEPP and the members of the public identified in the Public Participation Plan) so that input can be provided on how components and processes are interrelated as is referenced in Section 7.1 of the Guidelines. The Agency also notes that determining and characterizing effects should be largely based on the level of concern expressed through engagement as is pointed out in Section 13.1 of the Guidelines.	■ **Required Action # 17:** Identify when and how the public will be provided with opportunities to provide input and share their views during baseline data collection and effects assessment.	■ The Proponent will provide Project notices and advise of opportunities for consultation and engagement with members of the public outlined in the *Public Participation Plan for the Marten Falls Community Access Road Project Impact Assessment* (the Agency 2020) (referred to as the Public Participation Plan). This will include the opportunity to provide input on the existing environment, VCs, effects assessment methods, effects assessment results, and mitigation and follow-up program measures as applicable. A variety of activities will be offered so that members of the public are informed of the IS / EA Report as it progresses and are aware of the opportunities and means to provide their input. The study plans have recognized public and agency input received on the Project to date.	■ Section 4

Comment #/ Ref #	DRAFT Study Plan Section	TISG Section	Agency/ Regulatory Body Comments Received from	Comment / Context	Action Item	Final Response	Study Plan Reference
CH-11	■ Section 6.2 and 6.3	■ Section 13.1 of the Guidelines	■ The Agency	■ **Effects Assessment** – Sections 6.2 and 6.3 of the study plan describe the provincial requirements for a Stage 2 archeological assessment and assert that a preliminary impact assessment of cultural heritage resources for the LSA will be conducted. However, the study plan does not describe the effects assessment methodology in sufficient detail to enable the Agency and federal authorities to understand how the potential adverse and positive effects of the Project will be assessed. – Refer to section 13.1 of the Guidelines for additional guidance on the requirements of an effects assessment.	■ **Required Action # 18:** Provide details on how the effects assessment methodology would meet the requirements of Sections 13.1 and 13.2 of the Guidelines. Ensure that the effects assessment considers the effects of each of the project components and physical activities, in all phases, and that it is based on a comparison to the proposed baseline work. While the cultural heritage study plan focuses on the archeological resources present in the project area, the study plan should also include baseline information on the access and experience of heritage sites in relation to Indigenous group's exercise of rights as they relate to the physical and cultural heritage in or around the Project. ■ **Required Action # 19:** Provide details of how non-material aspects of cultural heritage described in sections 12.1, 17.6, and 19.1 of the Guidelines will be considered during the effects assessment. The study plan should note or draw linkages to the requirements of section 12.2 and 12.4 of the Guidelines. Findings of the cultural heritage study plan should inform the proponent's characterization of the current use of lands and resources for traditional purposes and the conditions related to the rights of Indigenous peoples in the Impact Statement.	■ The indicators and rationale for selection and measurement of potential effects to be used to assess and evaluate the alternative routes is provided in the Study Plan **Section 9**. Previous studies providing baseline data were completed prior to the release of the TISG. These studies were developed in consultation with provincial and federal regulators. Baseline Reports including results from these studies will be amended to the Study Plan, when they are available. ■ The MFFN CAR Project Team will work with Indigenous communities to ensure that Indigenous Knowledge and any information on Indigenous land and resource use shared is appropriately integrated into the assessment processes. This will include providing Indigenous communities with the opportunity to collaborate with the MFFN CAR Project Team on the effects assessment . The opportunity to complete their own effects assessment will also be provided to communities, and the MFFN CAR Project Team will work with you to incorporate your effects assessment into the assessment processes. The MFFN CAR Project Team will also provide opportunities to review and discuss draft assessment documents to ensure that the information has been captured and presented appropriately. Study plan S**ection 5** describes how Indigenous Knowledge will be incorporated into the effects assessment.	■ Section 9; Section 4
CH-12	■ Section 7.1	■ N/A	■ The Agency	■ Section 7.1 of the study plan states that "Unless otherwise specified, archaeological assessments in Ontario completed on Crown land defaults to the Ontario's MHSTCI's Standards and Guidelines for Consultant Archaeologists (Ontario Government 2011). Parks Canada is notified only when the assessment is conducted on federally owned and operated land, which includes any of the Canadian Parks. Archaeological investigations on other federally designated land, such as First Nations reserve land, will be completed to meet all federal and provincial standards. This will be achieved through meaningful consultation and engagement with	■ **Required Action # 20:** Clarify the plans for engaging Indigenous groups and demonstrate how the requirements of Sections 6 of the Guidelines will be met.	■ The Proponent will provide opportunities for consultation and engagement with Indigenous communities identified in *the Indigenous Partnership and Engagement Plan for the Marten Falls Community Access Road Project Impact Assessment* (the Agency 2020a). Indigenous communities will be involved throughout the environmental assessment so that the Proponent can consider and incorporate, where appropriate, Indigenous Knowledge and Indigenous land and resource use information into the Project as applicable. Specific consultation and engagement activities and schedules are currently in development and will be shared with the MECP	■ Section 4

Comment #/ Ref #	DRAFT Study Plan Section	TISG Section	Agency/ Regulatory Body Comments Received from	Comment / Context	Action Item	Final Response	Study Plan Reference
				each Nation in order to incorporate other specific protocols that may be implemented on First Nations Reserve land." ■ It is unclear from the study plan if the proponent intends to engage with Indigenous groups only when collecting baseline data on federally designated lands or if engagement will be undertaken also with other Indigenous groups who have traditional territory on crown lands.		once available. A summary of *the Consultation and Engagement Plan to Support the EA / IS* has been provided in the study plan; further details can be found in the ToR.	

Comments Table

Proposal: Marten Falls Community Access Road Project – Draft Technical Study Plan _ Cultural Heritage
Proponent: Marten Falls First Nation

Study Plan Title: [Cultural Heritage – May 2021]
Commenter Name, Job Title and Ministry: [Natural Resources and Forestry arm of the Ministry of Northern Development and Mines, Natural Resources and Forestry**]**

Note: Page numbers indicated are overall Adobe Page numbers, not page numbers on the document pages.

Comment #	Page/Section # in Work Plan	Comments & Rationale	Proposed Action/Solution
1.	Pg. 37 Table 9-2: Cultural Heritage Indicators	"Community Based Land Use Planning initiatives" are listed under the columns *Rationale for Selection* for *Archaeology* and *Cultural Heritage.* Additionally, this table indicates that Archaeology sites "Retains high archaeological potential because of: Community Based Land Use Planning initiatives". Note that land use direction in the Marten Falls First Nation Community Based Land Use Plan (CBLUP) is not yet publicly available. Archaeology and Cultural Heritage information resides with the community.	Remove reference to "CBLUP initiatives" which are not publicly available.
2.	Pg. 48 Concordance with Federal and Provincial Guidance	This section provides a general description of the *Far North Act* (FNA) and objectives for planning. Aspects of the Act that are most applicable to the road project are, however, not included. For example: • development authorizations are required under the FNA for any development within the Far	Recommend including aspects of the Far North Act that are most relevant to the Marten Falls Community Access Road Project.

Comment #	Page/Section # in Work Plan	Comments & Rationale	Proposed Action/Solution
		North boundary where a community based land use plan has not been approved (s.12) • duty to consult requirements for developments being authorized/permitted through the FNA • development authorizations must be consistent with land use direction in approved CBLUPs (s.14(1)) The MFCAR project team should be aware that, as with all authorizations required from NRF under other legislation in order to implement the project, FNA authorizations are not issued until approval has been granted for the project/undertaking under the *Environmental Assessment Act*. Further, should authorization be required under the FNA for the MFCAR, NRF issues the FNA Approval first, before issuing others required to implement the project.	
3.	Pg. 49 11.1 Archaeology,	This section includes the following sentence in relation to the need for meaningful consultation about the project: "*This will be achieved through meaningful consultation and engagement with each Nation in order to incorporate other specific protocols that may be implemented on First Nations Reserve land. This is reflected in the Far North Act (Ontario Government 2010), a legislative foundation of land use planning in the Far*	Recommend removing reference to the Far North Act. The purpose of the Far North Act is to provide for community based land use planning, not to set out consultation requirements for developments.

Comment #	Page/Section # in Work Plan	Comments & Rationale	Proposed Action/Solution
		North using consensus-based decision making between First Nations and Ontario." It is not clear what is being referred to as reflected in the Far North Act.	
4.	Pg. 51 11.2 Cultural (Built) Heritage	The following statement is included in this section of the document: *"Additionally, the Planning Act (Ontario Government 1990c) and related Provincial Policy Statement (Ontario Government 2020), make a number of provisions relating to heritage conservation. It is important to note that while these policies are not necessarily applicable under the Far North Act …".* The Provincial Policy Statement related to the Planning Act is not applicable under the Far North Act.	Change "*not necessarily applicable*" to "*not applicable".* Consider specifying the Far North Act applies north of the Far North boundary.

Appendix E:

Criteria Checklist

Clear Form Print Form

Ontario

Ministry of Tourism, Culture and Sport

Programs & Services Branch
401 Bay Street, Suite 1700
Toronto ON M7A 0A7

Criteria for Evaluating Potential for Built Heritage Resources and Cultural Heritage Landscapes

A Checklist for the Non-Specialist

The **purpose of the checklist** is to determine:

- if a property(ies) or project area:
  - is a recognized heritage property
  - may be of cultural heritage value
- it includes all areas that may be impacted by project activities, including – but not limited to:
  - the main project area
  - temporary storage
  - staging and working areas
  - temporary roads and detours

Processes covered under this checklist, such as:

- *Planning Act*
- *Environmental Assessment Act*
- *Aggregates Resources Act*
- *Ontario Heritage Act* – Standards and Guidelines for Conservation of Provincial Heritage Properties

Cultural Heritage Evaluation Report (CHER)

If you are not sure how to answer one or more of the questions on the checklist, you may want to hire a qualified person(s) (see page 5 for definitions) to undertake a cultural heritage evaluation report (CHER).

The CHER will help you:

- identify, evaluate and protect cultural heritage resources on your property or project area
- reduce potential delays and risks to a project

Other checklists

Please use a separate checklist for your project, if:

- you are seeking a Renewable Energy Approval under Ontario Regulation 359/09 – separate checklist
- your Parent Class EA document has an approved screening criteria (as referenced in Question 1)

Please refer to the Instructions pages for more detailed information and when completing this form.

Project or Property Name

Marten Falls First Nation All Season Community Access Road

Project or Property Location (upper and lower or single tier municipality)

Local Study Area (Thunder Bay District, Cochrane District, Kenora District)

Proponent Name

Marten Falls First Nation

Proponent Contact Information

Screening Questions

	Yes	No
1. Is there a pre-approved screening checklist, methodology or process in place?	☐	☑

If Yes, please follow the pre-approved screening checklist, methodology or process.

If No, continue to Question 2.

Part A: Screening for known (or recognized) Cultural Heritage Value

	Yes	No
2. Has the property (or project area) been evaluated before and found **not** to be of cultural heritage value?	☐	☑

If Yes, do **not** complete the rest of the checklist.

The proponent, property owner and/or approval authority will:

- summarize the previous evaluation and
- add this checklist to the project file, with the appropriate documents that demonstrate a cultural heritage evaluation was undertaken

The summary and appropriate documentation may be:

- submitted as part of a report requirement
- maintained by the property owner, proponent or approval authority

If No, continue to Question 3.

	Yes	No
3. Is the property (or project area):		
a. identified, designated or otherwise protected under the *Ontario Heritage Act* as being of cultural heritage value?	☐	☑
b. a National Historic Site (or part of)?	☐	☑
c. designated under the *Heritage Railway Stations Protection Act*?	☐	☑
d. designated under the *Heritage Lighthouse Protection Act*?	☐	☑
e. identified as a Federal Heritage Building by the Federal Heritage Buildings Review Office (FHBRO)?	☐	☑
f. located within a United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Site?	☐	☑

If Yes to any of the above questions, you need to hire a qualified person(s) to undertake:

- a Cultural Heritage Evaluation Report, if a Statement of Cultural Heritage Value has not previously been prepared or the statement needs to be updated

If a Statement of Cultural Heritage Value has been prepared previously and if alterations or development are proposed, you need to hire a qualified person(s) to undertake:

- a Heritage Impact Assessment (HIA) – the report will assess and avoid, eliminate or mitigate impacts

If No, continue to Question 4.

Part B: Screening for Potential Cultural Heritage Value

	Yes	No
4. Does the property (or project area) contain a parcel of land that:		
a. is the subject of a municipal, provincial or federal commemorative or interpretive plaque?	☐	☑
b. has or is adjacent to a known burial site and/or cemetery?	☑	☐
c. is in a Canadian Heritage River watershed?	☐	☑
d. contains buildings or structures that are 40 or more years old?	☑	☐

Part C: Other Considerations

	Yes	No
5. Is there local or Aboriginal knowledge or accessible documentation suggesting that the property (or project area):		
a. is considered a landmark in the local community or contains any structures or sites that are important in defining the character of the area?	☑	☐
b. has a special association with a community, person or historical event?	☑	☐
c. contains or is part of a cultural heritage landscape?	☑	☐

If Yes to one or more of the above questions (Part B and C), there is potential for cultural heritage resources on the property or within the project area.

You need to hire a qualified person(s) to undertake:

- a Cultural Heritage Evaluation Report (CHER)

If the property is determined to be of cultural heritage value and alterations or development is proposed, you need to hire a qualified person(s) to undertake:

- a Heritage Impact Assessment (HIA) – the report will assess and avoid, eliminate or mitigate impacts

If No to all of the above questions, there is low potential for built heritage or cultural heritage landscape on the property.

The proponent, property owner and/or approval authority will:

- summarize the conclusion
- add this checklist with the appropriate documentation to the project file

The summary and appropriate documentation may be:

- submitted as part of a report requirement e.g. under the *Environmental Assessment Act, Planning Act* processes
- maintained by the property owner, proponent or approval authority

Instructions

Please have the following available, when requesting information related to the screening questions below:

- a clear map showing the location and boundary of the property or project area
  - large scale and small scale showing nearby township names for context purposes
- the municipal addresses of all properties within the project area
- the lot(s), concession(s), and parcel number(s) of all properties within a project area

For more information, see the Ministry of Tourism, Culture and Sport's Ontario Heritage Toolkit or Standards and Guidelines for Conservation of Provincial Heritage Properties.

In this context, the following definitions apply:

- **qualified person(s)** means individuals – professional engineers, architects, archaeologists, etc. – having relevant, recent experience in the conservation of cultural heritage resources.
- **proponent** means a person, agency, group or organization that carries out or proposes to carry out an undertaking or is the owner or person having charge, management or control of an undertaking.

1. Is there a pre-approved screening checklist, methodology or process in place?

An existing checklist, methodology or process may already be in place for identifying potential cultural heritage resources, including:

- one endorsed by a municipality
- an environmental assessment process e.g. screening checklist for municipal bridges
- one that is approved by the Ministry of Tourism, Culture and Sport (MTCS) under the Ontario government's Standards & Guidelines for Conservation of Provincial Heritage Properties [s.B.2.]

Part A: Screening for known (or recognized) Cultural Heritage Value

2. Has the property (or project area) been evaluated before and found not to be of cultural heritage value?

Respond 'yes' to this question, if all of the following are true:

A property can be considered not to be of cultural heritage value if:

- a Cultural Heritage Evaluation Report (CHER) - or equivalent - has been prepared for the property with the advice of a qualified person and it has been determined not to be of cultural heritage value and/or
- the municipal heritage committee has evaluated the property for its cultural heritage value or interest and determined that the property is not of cultural heritage value or interest

A property may need to be re-evaluated, if:

- there is evidence that its heritage attributes may have changed
- new information is available
- the existing Statement of Cultural Heritage Value does not provide the information necessary to manage the property
- the evaluation took place after 2005 and did not use the criteria in Regulations 9/06 and 10/06

Note: Ontario government ministries and public bodies [prescribed under Regulation 157/10] may continue to use their existing evaluation processes, until the evaluation process required under section B.2 of the Standards & Guidelines for Conservation of Provincial Heritage Properties has been developed and approved by MTCS.

To determine if your property or project area has been evaluated, contact:

- the approval authority
- the proponent
- the Ministry of Tourism, Culture and Sport

3a. Is the property (or project area) identified, designated or otherwise protected under the *Ontario Heritage Act* as being of cultural heritage value e.g.:

i. designated under the *Ontario Heritage Act*

- individual designation (Part IV)
- part of a heritage conservation district (Part V)

Individual Designation – Part IV

A property that is designated:

- by a municipal by-law as being of cultural heritage value or interest [s.29 of the *Ontario Heritage Act*]
- by order of the Minister of Tourism, Culture and Sport as being of cultural heritage value or interest of provincial significance [s.34.5]. **Note**: To date, no properties have been designated by the Minister.

Heritage Conservation District – Part V

A property or project area that is located within an area designated by a municipal by-law as a heritage conservation district [s. 41 of the *Ontario Heritage Act*].

For more information on Parts IV and V, contact:

- municipal clerk
- Ontario Heritage Trust
- local land registry office (for a title search)

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ii. subject of an agreement, covenant or easement entered into under Parts II or IV of the *Ontario Heritage Act*

An agreement, covenant or easement is usually between the owner of a property and a conservation body or level of government. It is usually registered on title.

The primary purpose of the agreement is to:

- preserve, conserve, and maintain a cultural heritage resource
- prevent its destruction, demolition or loss

For more information, contact:

- Ontario Heritage Trust - for an agreement, covenant or easement [clause 10 (1) (c) of the *Ontario Heritage Act*]
- municipal clerk – for a property that is the subject of an easement or a covenant [s.37 of the *Ontario Heritage Act*]
- local land registry office (for a title search)

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iii. listed on a register of heritage properties maintained by the municipality

Municipal registers are the official lists - or record - of cultural heritage properties identified as being important to the community.

Registers include:

- all properties that are designated under the *Ontario Heritage Act* (Part IV or V)
- properties that have not been formally designated, but have been identified as having cultural heritage value or interest to the community

For more information, contact:

- municipal clerk
- municipal heritage planning staff
- municipal heritage committee

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iv. subject to a notice of:

- intention to designate (under Part IV of the *Ontario Heritage Act*)
- a Heritage Conservation District study area bylaw (under Part V of the *Ontario Heritage Act*)

A property that is subject to a **notice of intention to designate** as a property of cultural heritage value or interest and the notice is in accordance with:

- section 29 of the *Ontario Heritage Act*
- section 34.6 of the *Ontario Heritage Act.* **Note**: To date, the only applicable property is Meldrum Bay Inn, Manitoulin Island. [s.34.6]

An area designated by a municipal by-law made under section 40.1 of the *Ontario Heritage Act* as a **heritage conservation district study area**.

For more information, contact:

- municipal clerk – for a property that is the subject of notice of intention [s. 29 and s. 40.1]
- Ontario Heritage Trust

v. included in the Ministry of Tourism, Culture and Sport's list of provincial heritage properties

Provincial heritage properties are properties the Government of Ontario owns or controls that have cultural heritage value or interest.

The Ministry of Tourism, Culture and Sport (MTCS) maintains a list of all provincial heritage properties based on information provided by ministries and prescribed public bodies. As they are identified, MTCS adds properties to the list of provincial heritage properties.

For more information, contact the MTCS Registrar at registrar@ontario.ca.

3b. Is the property (or project area) a National Historic Site (or part of)?

National Historic Sites are properties or districts of national historic significance that are designated by the Federal Minister of the Environment, under the *Canada National Parks Act*, based on the advice of the Historic Sites and Monuments Board of Canada.

For more information, see the National Historic Sites website.

3c. Is the property (or project area) designated under the *Heritage Railway Stations Protection Act*?

The *Heritage Railway Stations Protection Act* protects heritage railway stations that are owned by a railway company under federal jurisdiction. Designated railway stations that pass from federal ownership may continue to have cultural heritage value.

For more information, see the Directory of Designated Heritage Railway Stations.

3d. Is the property (or project area) designated under the *Heritage Lighthouse Protection Act*?

The *Heritage Lighthouse Protection Act* helps preserve historically significant Canadian lighthouses. The Act sets up a public nomination process and includes heritage building conservation standards for lighthouses which are officially designated.

For more information, see the Heritage Lighthouses of Canada website.

3e. Is the property (or project area) identified as a Federal Heritage Building by the Federal Heritage Buildings Review Office?

The role of the Federal Heritage Buildings Review Office (FHBRO) is to help the federal government protect the heritage buildings it owns. The policy applies to all federal government departments that administer real property, but not to federal Crown Corporations.

For more information, contact the Federal Heritage Buildings Review Office.

See a directory of all federal heritage designations.

3f. Is the property (or project area) located within a United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Site?

A UNESCO World Heritage Site is a place listed by UNESCO as having outstanding universal value to humanity under the Convention Concerning the Protection of the World Cultural and Natural Heritage. In order to retain the status of a World Heritage Site, each site must maintain its character defining features.

Currently, the Rideau Canal is the only World Heritage Site in Ontario.

For more information, see Parks Canada – World Heritage Site website.

Part B: Screening for potential Cultural Heritage Value

4a. Does the property (or project area) contain a parcel of land that has a municipal, provincial or federal commemorative or interpretive plaque?

Heritage resources are often recognized with formal plaques or markers.

Plaques are prepared by:

- municipalities
- provincial ministries or agencies
- federal ministries or agencies
- local non-government or non-profit organizations

For more information, contact:

- municipal heritage committees or local heritage organizations – for information on the location of plaques in their community
- Ontario Historical Society's Heritage directory – for a list of historical societies and heritage organizations
- Ontario Heritage Trust – for a list of plaques commemorating Ontario's history
- Historic Sites and Monuments Board of Canada – for a list of plaques commemorating Canada's history

4b. Does the property (or project area) contain a parcel of land that has or is adjacent to a known burial site and/or cemetery?

For more information on known cemeteries and/or burial sites, see:

- Cemeteries Regulations, Ontario Ministry of Consumer Services – for a database of registered cemeteries
- Ontario Genealogical Society (OGS) – to locate records of Ontario cemeteries, both currently and no longer in existence; cairns, family plots and burial registers
- Canadian County Atlas Digital Project – to locate early cemeteries

In this context, adjacent means contiguous or as otherwise defined in a municipal official plan.

4c. Does the property (or project area) contain a parcel of land that is in a Canadian Heritage River watershed?

The Canadian Heritage River System is a national river conservation program that promotes, protects and enhances the best examples of Canada's river heritage.

Canadian Heritage Rivers must have, and maintain, outstanding natural, cultural and/or recreational values, and a high level of public support.

For more information, contact the Canadian Heritage River System.

If you have questions regarding the boundaries of a watershed, please contact:

- your conservation authority
- municipal staff

4d. Does the property (or project area) contain a parcel of land that contains buildings or structures that are 40 or more years old?

A 40 year 'rule of thumb' is typically used to indicate the potential of a site to be of cultural heritage value. The approximate age of buildings and/or structures may be estimated based on:

- history of the development of the area
- fire insurance maps
- architectural style
- building methods

Property owners may have information on the age of any buildings or structures on their property. The municipality, local land registry office or library may also have background information on the property.

Note: 40+ year old buildings or structure do not necessarily hold cultural heritage value or interest; their age simply indicates a higher potential.

A building or structure can include:

- residential structure
- farm building or outbuilding
- industrial, commercial, or institutional building
- remnant or ruin
- engineering work such as a bridge, canal, dams, etc.

For more information on researching the age of buildings or properties, see the Ontario Heritage Tool Kit Guide Heritage Property Evaluation.

Part C: Other Considerations

5a. Is there local or Aboriginal knowledge or accessible documentation suggesting that the property (or project area) is considered a landmark in the local community or contains any structures or sites that are important to defining the character of the area?

Local or Aboriginal knowledge may reveal that the project location is situated on a parcel of land that has potential landmarks or defining structures and sites, for instance:

- buildings or landscape features accessible to the public or readily noticeable and widely known
- complexes of buildings
- monuments
- ruins

5b. Is there local or Aboriginal knowledge or accessible documentation suggesting that the property (or project area) has a special association with a community, person or historical event?

Local or Aboriginal knowledge may reveal that the project location is situated on a parcel of land that has a special association with a community, person or event of historic interest, for instance:

- Aboriginal sacred site
- traditional-use area
- battlefield
- birthplace of an individual of importance to the community

5c. Is there local or Aboriginal knowledge or accessible documentation suggesting that the property (or project area) contains or is part of a cultural heritage landscape?

Landscapes (which may include a combination of archaeological resources, built heritage resources and landscape elements) may be of cultural heritage value or interest to a community.

For example, an Aboriginal trail, historic road or rail corridor may have been established as a key transportation or trade route and may have been important to the early settlement of an area. Parks, designed gardens or unique landforms such as waterfalls, rock faces, caverns, or mounds are areas that may have connections to a particular event, group or belief.

For more information on Questions 5.a., 5.b. and 5.c., contact:

- Elders in Aboriginal Communities or community researchers who may have information on potential cultural heritage resources. Please note that Aboriginal traditional knowledge may be considered sensitive.
- municipal heritage committees or local heritage organizations
- Ontario Historical Society's "Heritage Directory" - for a list of historical societies and heritage organizations in the province

An internet search may find helpful resources, including:

- historical maps
- historical walking tours
- municipal heritage management plans
- cultural heritage landscape studies
- municipal cultural plans

Information specific to trails may be obtained through Ontario Trails.

Phone: 1-800-764-9114 **Email:** info@martenfallsaccessroad.ca **Web:** http://www.martenfallsaccessroad.ca