Marten Falls First Nation

Detailed Project Description

Marten Falls All-Season Community Access Road

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Submitted to:

Impact Assessment Agency of Canada

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AECOM: 2015-04-13

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List of Acronyms and Abbreviations

CAR..... Community Access Road
CEA Agency..... Canadian Environmental Assessment Agency
CBLUP ..... Community Based Land Use Plan
CO_2e..... Carbon dioxide equivalent
dBA ..... A-weighted decibels
ENDM..... Ministry of Energy, Northern Development and Mines
ESA ..... *Endangered Species Act*
IAA ..... *Impact Assessment Act*
IAAC..... Impact Assessment Agency of Canada
km ..... Kilometres
m ..... Metres
mm ..... Millimetres
MBCA..... *Migratory Bird Convention Act, 1994*
MECP..... Ministry of Environment, Conservation and Parks
MFFN ..... Marten Falls First Nation
MNRF..... Ministry of Natural Resources and Forestry
MTCS..... Ministry of Tourism, Culture and Sport
MTO ..... Ministry of Transportation
SARA ..... *Species at Risk Act*

Prologue

Marten Falls First Nation (MFFN) submitted their Project Description for their proposed All-Season Community Access Road (CAR; the Project) to the federal CEA Agency (Canadian Environmental Assessment Agency) on July 29, 2019 and commenced the public review process on their Project Description under the *Canadian Environmental Assessment Act, 2012*.

On August 28, 2019, *the Impact Assessment Act* (IAA) came into force, which replaced the *Canadian Environmental Assessment Act, 2012* (CEAA, 2012) and resulted in MFFN's Project Description transitioning into the new Act requirements. This change in legislation required the submitted Project Description to be re-designated as their Initial Project Description under the new Act and resulted in a second public review period under the new Act.

On October 11, 2019, MFFN received a Summary of Issues document, issued by the new Impact Assessment Agency of Canada (IAAC). Under the new legislation, the objectives of the Detailed Project Description are to summarize any changes that have happened since the submission of the Initial Project Description, provide an update on ongoing and planned activities and provide a formal response to the Summary of Issues document. This document and **Appendix 1** reflect these three main objectives.

Key Changes / Updates Topic	Initial Project Description	Detailed Project Description
Route Alternatives	▪ Four (4) access road route alternatives being considered (two (2) eastern and two (2) western)	▪ Community decision not to proceed with two (2) eastern access road route alternatives; two (2) western access road route alternatives remain
Project Design	▪ Designed to annual average daily traffic of 300 vehicles	▪ The Geometric Design Criteria as reviewed by the Ontario Ministry of Transportation includes an annual average daily traffic of 400 vehicles which is appropriate for the proposed CAR route alternatives
Environmental Baseline Studies	▪ Preliminary environmental baseline studies commenced and focus on planning subsequent baseline studies as part of the provincial regulatory review process	▪ Ongoing environmental baseline studies as part of the provincial regulatory review process is underway
Effects Assessment	▪ Initial listing of potential Project-related effects	▪ Table 22-1 summarizes additional discussion topics on the potential Project-related effects ▪ Updated Green house Gas emission calculation with updated annual average daily traffic
Regulatory	▪ Original Project Description submitted under the Canadian Environmental Assessment Act, 2012.	▪ New Impact Assessment Act and other federal acts, associated with the coming into force of Bill C-69, altered on August 28, 2019.
Engagement and Consultation	▪ Announcement made on the Project and the commencement of the provincial regulatory review through print media, radio ads, and notices to those on Project Contact List ▪ Project notification to the initial 22 Indigenous communities identified by the MECP including 14 communities that identified by the CEA Agency in 2018 ▪ Contact and calls made to all 22 Communities to identify interest level in the Project ▪ Meetings with MFFN community and six (6) neighbouring Communities	▪ Ongoing effort to arrange meetings with potentially interested Indigenous communities. ▪ Notice of Field Studies submitted to stakeholders and Indigenous communities. ▪ Contact made to additional community (Mishkeegogamang First Nation) in summer 2019 through letter ▪ Second meeting (conference call) with Aroland First Nation (October 2019) ▪ MFFN community meeting in Thunder Bay and in Marten Falls (October 2019)

Key Changes / Updates Topic	Initial Project Description	Detailed Project Description
	▪ Public Information Centres in Thunder Bay and Geraldton ▪ Project website/hotline established ▪ Meeting with Geraldton Areas Natural Resource Advisory Committee (GANAC)	▪ Attendance at Northern Ontario First Nations Environmental Conference Tradeshow ▪ Advertisement in The Circle magazine to raise awareness of the Project and provide contact information.
Other	▪ Improvements to Painter Lake Road not anticipated for Project	▪ MFFN understands that improvements to Painter Lake Road are expected to be completed by Aroland First Nation another proponent to allow for access to the MFFN CAR Project. Aroland First Nation has received an agreement for funding from the Province of Ontario to initiate a planning and design study for the Painter Lake Road improvements as an independent project to the MFFN CAR

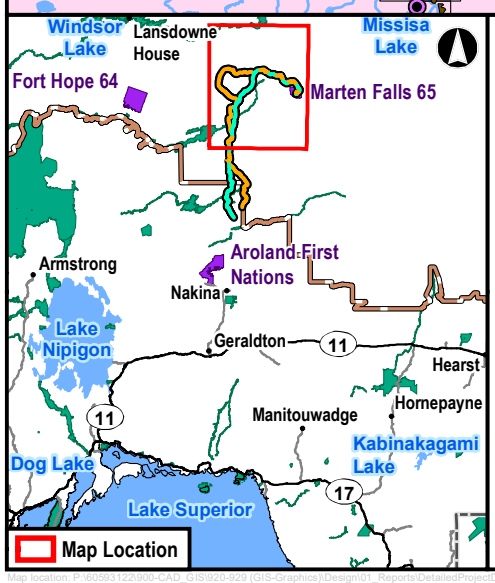
Part A: Updated General Information

1. The project's name, type or sector and proposed location.

Project Name / Type / Sector: **Marten Falls All-Season Community Access Road**

Marten Falls First Nation (MFFN; the Community) is 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 Community is proposing an all-season Community Access Road (CAR; the Project) that will connect the Community to the Ontario's provincial highway network (Highway 643) to the south via the existing Painter Lake Road, which is maintained by Aroland First Nation. Two alternative routes are being considered and are shown in **Figures 1-1 and 1-2**. The final CAR route alignment will be determined based on feedback from the ongoing engagement and consultation process, including Indigenous Knowledge, previous studies, and information that is currently being gathered through ongoing desktop studies, and field studies within the proposed alternative route corridors.

Attawapiskat River
Streatfeild Lake
OTOSKWIN-ATTAWAPISKAT RIVER PROVINCIAL PARK
Buffaloskin River
Albany River
Marten Falls 65
ALBANY RIVER PROVINCIAL PARK
Ogoki River
Dark River



Legend

Route Alternatives
- Alternative 1
- Alternative 4

General Features
- Trail
- Existing Winter Access Road
- Far North Boundary
- First Nation Reserve
- Provincial Park
- Mining Claim
- Proposed Water Crossing
- Non Freehold Disposition
- Potential Aggregate Sources *

Socio-economic Features
- District of Cochrane
- District of Kenora
- District of Thunder Bay

Note:
*Aggregate sources used for the CAR will be a minimum of 100 metres from waterbodies.

Marten Falls First Nation All Season Community Access Road Project

Route Alternatives - Northern Section

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

Nov, 2019	1:300,000 * when printed 11"x17"	**Data Sources:** MFFN, MNRF, NRCAN, KGS
P#:60593122	Rev:00	

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Figure 1-1

Map location: P:\60593122\900-CAD_GIS\920-929 (GIS-Graphics)\Design\01_Reports\DetailedProjectDescription\MXD_2019-11-04_Fig1-1_RouteAltsandExistingCond_R01_60593122_Page1.mxd
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Albany River
ALBANY RIVER PROVINCIAL PARK
Ogoki River
Calbert Creek
Jenner Creek
Ogoki Lake
Kayedon Lake
OGOKI RIVER PROVINCIAL PARK (WATERWAY CLASS)
Colpitts Creek
La Rose Creek
LITTLE CURRENT RIVER PROVINCIAL PARK
Kapikotongwa Lake
Melchett Lake
Percy Lake
Little Current River
Abamasagi Lake
ANACONDA RD
Aroland First Nations
O'Sullivan Lake
Drowning River

Fort Hope 64
Marten Falls 65
Aroland First Nations
Nakina
Armstrong
Lake Nipigon
Geraldton
11
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Manitouwadge
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17
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101
Map Location

Legend

Route Alternatives
- Alternative 1
- Alternative 4

General Features
- Resource Road
- Trail
- Existing Winter Access Road
- Painter Lake Road
- Far North Boundary
- First Nation Reserve
- Provincial Park
- Mining Claim
- Non Freehold Disposition
- Proposed Water Crossing
- Trapper Cabin
- Existing Aggregate Pit (Active)
- Existing Aggregate Pit (Inactive)
- Potential Aggregate Sources *

Socio-economic Features
- District of Cochrane
- District of Kenora
- District of Thunder Bay

Patent Land
- Private

Note:
*Aggregate sources used for the CAR will be a minimum of 100 metres from waterbodies.

Marten Falls First Nation All Season Community Access Road Project

Route Alternatives - Southern Section

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

Nov, 2019	1:300,000 * when printed 11"x17"	Data Sources: MFFN, MNRF, NRCAN, KGS
P#:60593122	Rev:00	

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Figure 1-2

Map location: P:\60593122\900-CAD_GIS\920-929 (GIS-Graphics)\Design\01_Reports\DetailedProjectDescription\MXD_2019-11-04_Fig1-2_RouteAltsandExistingCond_R01_60593122_Page2.mxd
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2. The proponent's name and contact information and the name and contact information of their primary representative for the purpose of the description of the project.

Proponent Name:	**Marten Falls First Nation, as represented by Chief and Council.**
Proponent Contact Information:	■ Chief Bruce Achneepineskum ■ Qasim Saddique, Project Director ■ c / o Marten Falls First Nation General Delivery Ogoki Post Ontario, P0T 2L0 Telephone: 1-800-764-9114 Email: info@martenfallsaccessroad.ca

The proponent (and lead) of the proposed Project is MFFN. MFFN, as per the funding agreement with the Province of Ontario, will be responsible for the planning and design of the proposed Project, including the Environmental Assessment and permitting. Responsibility of the construction, operation and maintenance of the CAR will be determined through the ongoing negotiations between MFFN and the Province of Ontario. MFFN, however, is responsible to ensure the Environmental Assessment and permitting accommodates all phases of the Project, including construction, operation and maintenance. The planning of the Project is community-led; meaning the community of MFFN will develop solutions and advance decisions on the CAR. The community, lead by Chief and Council, has formed a Project Team consisting of MFFN members and non-MFFN members to guide the Project through the required regulatory permitting process. The Project Team will act on behalf of the MFFN community based on guidance, direction and input from MFFN Chief and Council, MFFN community Member Advisers and community members. Therefore, the Project Team has recognized two distinct roles for MFFN community members: 1) involvement in the community-led process as a proponent of the Project; and 2) an Indigenous community potentially affected by the Project.

Part B: Planning Phase Results

3. A summary of and the results of any engagement undertaken with any jurisdictions or other party, including a description of how the proponent intends to address the issues raised in the summary referred to in subsection 14(1) of the Act (Summary of Issues).

Throughout this Detailed Project Description, both terms 'engagement' and 'consultation' are used to mean the activities undertaken by MFFN to provide Project information to neighbouring Indigenous communities*, stakeholders, the public, government departments and others who may have an interest in the Project and gather feedback on those outreach activities. Under federal and provincial legislation regarding proposed developments such as this Project, the federal and provincial governments have a 'duty to consult'. In Ontario the Crown may delegate this duty to consult to the proponent. Ontario is sharing the duty to consult for this Project with the proponent (MFFN) by way of a Memorandum of Understanding. The federal government does not delegate the 'duty to consult'. Therefore, 'consultation' within this document does not refer to the activities undertaken by the federal government to consult on this Project.

Summary of Engagement – Public

Public stakeholders are individuals and groups that could have an interest in the Project, including but not limited to communities in the region (e.g., Geraldton, Longlac), recreational users or those with recreational interest (e.g., hikers, campers, hunters, and environmental groups), and those with commercial interests (e.g., forestry, trappers, outfitters, and other mineral tenure holders in the area).

Consultation with the public and other interested stakeholders has included the release of Project notices, comment submission on the Project Description under CEAA 2012, comment submission on the Initial Project Description, under the new IAA, the development and maintenance of the Project website, a Public Information Centre, and meetings with interest groups. An initial list of contact information of public and other stakeholders was developed based on discussions prior to the initiation of the provincial regulatory review process and expanded on during preparation of the Initial Project Description. This list will continue to be updated as the Project evolves through the regulatory review processes.

The Project was introduced to the public in August 2018 at the Northern Ontario Expo in Thunder Bay and in December 2018 at the Ring of Fire Mining Symposium held in Thunder Bay, Geraldton and Marten Falls. The annual Mining Symposium is an event organized and hosted by MFFN to bring together industrial and commercial representatives with community members to engage in ongoing communication and awareness regarding the resource potential of the Ring of Fire area. The Ring of Fire is a remote area of northwestern Ontario, which is an area of significant mineralization and potential large mineral reserve in Ontario (KBM Resources Group 2014)

The general public (e.g., individuals and organizations) was notified of the Project in March 2019 through direct mailing and / or emails to various individuals and organizations using the Project Contact List and the publishing of notices in seven newspapers and a 30 second radio advertisement (Wawatay Radio) regarding the commencement of a provincial regulatory review process. A Project website was also established at the time of the release of the Notice of Commencement to provide general information about the Project, including how to contact the Project

* Neighbouring Indigenous Communities includes the 23 Indigenous communities identified for engagement by Federal and Provincial governments plus other community members who may have participated in engagement activities held to date. This is discussed more in **Section 4.**

Team for further information. The MFFN Community Access Road website is updated regularly with new information to reflect Project progress and ongoing consultation and engagement, and provides the opportunity for members of the public to submit comments and questions http://www.martenfallsaccessroad.ca/ .

The first project Public Information Centres were held April 30 and May 1, 2019 in Thunder Bay and the Municipality of Greenstone (Geraldton), respectively. Notices for the Public Information Centres were also placed in local newspapers (i.e., Thunder Bay Source, Wawatay News, TBNewsWatch). The Public Information Centres were also advertised on the Project website and notices were sent to those on the Project Contact List.

The Public Information Centres provided an overview of the Project, including the need for a Community Access Road to MFFN and the community-led approach to planning, the study area, the proposed Project alternative routes and the way in which a preferred route would be selected, an outline of the environmental approval process, including a possible need for a federal impact assessment, and the proposed engagement program.

The Public Information Centres were held as an open house format and featured a series of 25 display boards. Participants were encouraged to review the display boards and provide feedback using the materials and comment forms provided and/or by having one-on-one discussions with members of the Project Team. Subject matter experts from the Project Team were stationed alongside corresponding display board groups to help ensure questions were documented.

Approximately 39 individuals signed into this first round of Public Information Centres - 30 people on April 30, 2019 and nine (9) people on May 1, 2019). Attendees included Indigenous community members, provincial agencies, members of the public, and industry representatives - including small business owners and union representatives. Two media channels (i.e., Wawatay News, Thunder Bay CTV) also attended the Thunder Bay event, resulting in two media stories and increased promotion of the Project.

In May 2019, Project presentations were made to the Geraldton Area Natural Resources Advisory Committee, which consists of local industry and interest group representatives and to the Mayor of Greenstone.

The previous CEA Agency initiated Project consultation activities on the Project Description document in August 2019, by publicly releasing the document for comment. Following the establishment IAAC in August 2019, the Initial Project Description was re-released, and the comment period was re-opened in September 2019. Comments received during both comment periods, under both agencies were subsequently published on the federal government public registry for the Project. This action allowed Indigenous communities and groups, the public and other participants, to identify key issues of concern within the Initial Project Description and to communicate how they would like to be engaged through the impact assessment, should the federal process be required. On October 11, 2019, MFFN received a Summary of Issues document from IAAC regarding the Project that included issues raised by provincial, territorial and Indigenous jurisdictions, Indigenous groups, the public, federal authorities and other participants. MFFN collective responses to the Summary of Issues are provided in **Appendix 1.**

The Summary of Issues document from IAAC does not include the specific sources of issues, but the federal government public registry for this Project review includes original submissions from at least nine federal agencies, two businesses, two community advocacy groups and multiple Indigenous communities/groups (discussed more in **Section 4**).

To date, public stakeholders have received three main sources of communication on the Project including:

- March 2019: Project update letter including information on the provincial Environmental Assessment process and its progress of issuing an official Notice of Commencement
- April 2019: Invitation to the first Public Information Centre
- Summer 2019: Notice of field studies being undertaken

Table 3-1 includes a list of stakeholders and groups and the number of individuals who are on the Project Contact List and receive communication notices.

Table 3-1: Public Stakeholders on the Project Contact List

Non-profit / Not-for-Profit Organization:	Canadian Parks and Wilderness Society Wildlands League
Advocacy Group:	• Greenstone District Trappers Council • Ontario Federation of Anglers and Hunters • Sierra Club of Canada- Ontario Chapter • Wildlife Conservation Society Canada
Association / Institute:	• Geraldton Chamber of Commerce • Longlac Chamber of Commerce • Ontario Forest Industries Association
Business / Industry:	• Aditya – Birla, Columbia Forest Products • Arctic Watershed Outposts • Canada Chrome Corporation • Debut Diamonds • Journey's North Outfitters • Leuenberger Air Service Limited • Nakina Air Service Ltd. • Northern Ontario Tourist Outfitters Northland Outfitters • O'Sullivan Lake Outfitters / Rainbow Lodge • Timberidge Air & Outpost Camps • Twin Lakes Outfitters • Wilderness Outfitters
Mining Claim Holders:	• Golden Share Resource Corporation • KWG Resources Inc. • Noront Resources • Wabassi Resources Inc.
Individuals:	• Approximately 100 individuals, who do not personally identify as members of MFFN

Engagement activities that have occurred with public stakeholders to date are summarized below in **Table 3-2** These consultations with the public have largely been introductory in nature. Additional engagement activities are planned for late 2019 and continuing into 2020, including another round of Public Information Centres to provide updates on the Project, and the status of the provincial and federal Project review processes.

Table 3-2: Summary of Engagement Activities with the Public and Other Interested Stakeholders

Date	Activity Description
August 2018	Presentation at the Northern Ontario Expo by MFFN Chief
December 2018	Presentations given at the Mining Symposium
March 2019	Notices regarding the proposed Project and the commencement of the provincial regulatory review process
April / May 2019	Public Information Centres in Thunder Bay and Geraldton to provide information on the Project and the provincial regulatory review process; reference was made to the potential need to also complete a federal regulatory review process
May 2019	Meeting with Geraldton Area Natural Resources Advisory Committee (GANRAC).
August / September 2019	Release of the Initial Project Description by IAAC for public review and comment.
October 2019	Northern Ontario First Nations Environmental Conference Tradeshow Participation for First Nations, Government Representatives and Industry Representatives
October 2019	Advertisement in The Circle to raise awareness of the Project, and provide contact information
Ongoing	Development and update of the Project website: http://www.martenfallsaccessroad.ca/

MFFN appreciates the contribution of any relevant information and assistance from interested parties that may help in the identification and mitigation of potential Project effects and in the development of a feasible and beneficial Project design. In addition to the activities noted above, MFFN has for many years engaged directly with industrial stakeholders such as Noront Resources and KWG Resources Inc. in the planning and development of the CAR and to remain informed regarding future mineral exploration and development in the area, including the Ring of Fire area.

Summary of Key Issues and Results of Engagement – Public

The following provides a summary of comments received from the public and other stakeholders to date regarding the Project and responses to these comments by the Proponent:

- Interest in construction timelines and if the Project would extend to Ring of Fire;
  - *Response: At this time, estimated Project construction is anywhere from 3 to 10 years, depending on financing arrangements and agreement and contingent on receiving approvals. The Community Access Road Project does not include an extension to the Ring of Fire. This would be a separate project requiring separate approvals.*
- Feedback with respect to road construction and potential routes. Local public noted how difficult it is to get materials in the winter months, heavy equipment not always available when you need it;
  - *Response: Alternative routes have been identified and will be assessed and evaluated, including feedback from engagement, as part of future planning and design activities.*
- Interest in the benefit that would result from development that could happen as a result of the road (e.g., mining, forestry, tourism);
  - *Response: Potential benefits and development opportunities will be identified as part of future Project planning and design activities. MFFN is committed to the Project providing local benefits.*
- General support for a community access road to Marten Falls but some have noted that environmental protection should also occur;
  - *Environmental protection measures will be developed as part of the planning and design of the Project*
- A desire to see Indigenous people being involved and benefiting from the Project because in the past they did not receive benefits from these types of projects;
  - *Response: Potential benefits to Indigenous communities will be examined as part of future Project planning and design activities. MFFN is committed to local benefits as a result of the Project, including Indigenous community members and businesses.*
- Interest in how the communities need to benefit from any development that happens as a result of the road (e.g., mining, forestry, tourism);
  - *Response: Potential benefits and development opportunities will be documented as part of future project planning and design activities. Any benefits resulting from this would need to be considered in balance with possible negative effects associated with industrial use of the access road. MFFN is committed to local benefits as a result of the Project, including Indigenous community members and businesses.*
- Health and environmental concerns expressed regarding possible spraying of pesticides and herbicides along the corridor;
  - *Response: Pesticides and herbicides will not be used for Project maintenance activities.*
- Suggestion to hold a Public Information Centre in Longlac instead of Geraldton to get a slightly different industry crowd; and Ginoogaming and Long Lake 58 are located nearby;
  - *Response: The Project will be hosting a Public Information Centre in Longlac*

- Questions regarding whether the CAR would be open for the public; would the public be able to hunt and fish in the area or would the CAR be similar to the Ogoki Forest Road that only allows industrial access and use by First Nations to hunt and fish;
  - *Response: Public access to the MFCAR will be examined as part of future project planning and design activities. Recommendations on the need for public access control will be made.*
- Interest in how the rail line proposal to support the Ring of Fire fits with the Project, and whether it is also being considered.
  - *Response: This Project is for a community access road only. It does not include a railway.*

Summary of Engagement – Government Agencies

The Provincial Ministry of Energy Northern Development and Mines (ENDM) has been involved with the Project planning for many years given their role with Project funding. Since 2017, MFFN has discussed the Project with federal and provincial government agencies during regular conference calls and meetings on various aspects of the Project planning phase, including timing of the provincial Project review process, data availability, alternative routes identification process and consultation activities, particularly as they relate to Indigenous communities. Government agencies that regularly attend Project Interagency Environmental Assessment Coordination meetings include (but are not limited to):

- ENDM;
- Ministry of the Environment, Conservation and Parks (MECP);
- Ministry of Transportation (MTO);
- Ministry of Natural Resources and Forestry (MNRF); and,
- IAAC; formerly the CEA Agency.

In addition to regularly scheduled Interagency Environmental Assessment Coordination meetings, MFFN has met with MECP, ENDM, MTO, and MNRF during the provincial Project review process and has met with IAAC during the development of the Initial Project Description and now this Detailed Project Description to seek input and guidance on specific aspects of federal and provincial Project review process.

In addition to the Interagency Environmental Assessment Coordination meetings, there has been wide circulation of Project notices to various government agencies, these groups are included in **Table 3-3.**

Table 3-3: Project Contact List of Government Agencies

Government / Agencies – Federal	• Canada Wildlife Service • CEA Agency – *Referred to as the Impact Assessment Agency of Canada as of August 28, 2019* • Crown-Indigenous Relations and Northern • Department of Fisheries and Oceans Canada • Employment and Social Development Canada • Environment and Climate Change Canada • House of Commons • Indigenous Services Canada • Infrastructure Canada • Innovation, Science and Economic Development • Natural Resources Canada • Transport Canada • Treasury Board of Canada Secretariat

Government / Agencies – Provincial	• Conservation Ontario • Hydro One Networks Inc. • Indigenous Affairs • Infrastructure Ontario • Ministry of Community Safety and Correctional Services • Ministry of Economic Development, Job Creation and Trade • Ministry of Energy, Northern Development & Mines • Ministry of Finance • Ministry of Municipal Affairs and Housing • Ministry of Natural Resources and Forestry • Ministry of the Environment, Conservation and Parks • Ministry of Tourism, Culture & Sport • Ministry of Transportation • Ontario Power Generation • Ontario Provincial Police
Government / Agencies – Municipal	• City of Thunder Bay • District of Cochrane • District of Thunder Bay Social Services • Kenora District Services Board • Municipality of Greenstone • Greenstone Economic Development

Table 3-4 highlights engagement with regulatory agencies to date.

Table 3-4: Summary of Engagement Activities with Government Agencies

Date	Topics Discussed
2017	▪ Alternative routes ▪ Terms of Reference process ▪ Aboriginal Engagement Plan
January – March 2018	▪ Voluntary agreement for a provincial Environmental Assessment and Application Order Under the *Far North Act, 2010* ▪ Federal / provincial Interagency Coordination and requirements – Bill C-69 Overview – Permits – Project Description ▪ Feedback from agencies on May 2017 MFFN Project Proposal ▪ Data Sharing Agreement with MNRF ▪ Winter baseline data collection and CAR route alternatives ▪ Availability of historical data relevant to the Project ▪ Designating a planning area ▪ Alternative routes – Duty to consult
April - June 2018	▪ Voluntary provincial Environmental Assessment Agreement update ▪ Updated Data Sharing Agreement with MNRF ▪ Comments on the 2017 MFFN Project Description Summary ▪ Federal-provincial impact assessment alignment / coordination ▪ Project Description clarification ▪ Regulatory review process and potential new legislation ▪ Update on Baseline Studies ▪ Update on winter field surveys ▪ Training / monitor programs for communities' members ▪ Consultation ▪ Impact assessment and regulatory review-process participation funding
August - October 2018	▪ Request for Proposal for consultant to undertake regulatory review processes for the Project ▪ Preparations for fall Baseline Studies ▪ Consultation update ▪ Coordinated federal-provincial regulatory review process timelines ▪ Data sharing agreement with MNRF ▪ ENDM, MFFN and MTO flight over the various proposed corridors

Table 3-4: Summary of Engagement Activities with Government Agencies

Date	Topics Discussed
November 2018	▪ Early list of Indigenous communities for engagement planning and 'Next Steps' ▪ Regulatory review alignment chart and regulatory review process consultation ▪ Upcoming Project Milestones submissions for the provincial regulatory review process (Initial Notification by Proponent and Crown, Notice of Commencement for the provincial regulatory review process) and Project Description submission for the federal regulatory review process
January 2019	▪ Project Update: Ring of Fire Symposium, notification letters update, website ▪ Regulatory review process Alignment Chart and impact assessment process consultation
February 2019	▪ Project Update: Notice of Commencement and Consultation plan ▪ Community/Industry engagement ▪ Notification letters to Indigenous communities ▪ Consultation workshop with agencies ▪ Project Description discussion
April 2019	▪ Presentation to the Municipality of Greenstone's Chief Administrative Officer and Mayor in Geraldton
May 2019	▪ CEA Agency teleconference to discuss Project Description draft and timing ▪ MECP and ENDM meeting to discuss the Consultation Plan, MFFN-provincial Memorandum of Understanding on Indigenous Consultation, and Overview of provincial regulatory review process the anticipated schedule for the process
June 2019	▪ CEA Agency meeting to discuss preliminary draft Project Description ▪ MECP meetings to discuss alternative assessments for Draft Terms of Reference, meetings to discuss consultation materials ▪ Circulation of Baseline Field Survey Workplan Review – Terrestrial Environment to the MNRF and MECP
July 2019	▪ Discussion with MECP and MNRF regarding caribou baseline and effects assessment ▪ CEA Agency meeting to discuss how CEA Agency's comments on the draft Project Description were address in the updated Project Description ▪ Submission of Project Description CEA Agency
August 2019	▪ *Canadian Environmental Assessment Act, 2012* is replaced by *Impact Assessment Act, 2019* ▪ IAAC meeting to discuss how the transition provisions of IAA will apply to project ▪ Re-posting of Project Description as Initial Project Description for review under Impact Assessment Act ▪ Circulation of the Draft Terms of Reference to MECP for completeness review for the provincial regulatory review process ▪ Circulation of Baseline Field Survey Workplan Review – Water and Geotechnical to the MNRF and MECP
September 2019	▪ IAAC meeting to discuss content requirements of Detailed Project Description ▪ MECP meeting on provincial Environmental Assessment Consultation Plan ▪ Circulation of Baseline Field Survey Workplan Review – Archaeology and Air Quality to the MNRF and MECP
October 2019	▪ Summary of Issues on Initial Project Description is sent to Project Team ▪ Circulation of Baseline Field Survey Workplan Review – Noise to the MNRF and MECP ▪ MECP and ENDM Meeting to discuss MFFN-Provincial Memorandum of Understanding on Consultation

Summary of Key Issues & Results of Engagement – Government

Table 3-5 provides a summary of feedback received from regulatory agencies prior to the submission of the Project Description, and during both the CEA Agency comment period and the IAAC comment period, including responses from the Proponent. Should an impact assessment be required by IAAC for the Project, government agency feedback will be considered and addressed as required within an Impact Statement document.

Table 3-5: Summary of Feedback from Regulatory Agencies

Agency	General Description of Comments
Ministry of Energy, Northern Development and Mines (Ontario)	▪ Consider climate change and species at risk when evaluating physical effects *Response: Project planning and design will consider climate change and potential Species at Risk impacts.*
Ministry of Transportation (Ontario)	▪ Include assessment of archaeology / heritage on preferred / final route alternative *Response: A Stage 1 archaeological assessment is currently underway. Additional assessment may be required (e.g. Stage 2 and 3) depending on the selected route and results of the Stage 1 assessment.* ▪ Consideration of MTO design criteria *Response: Yes - MTO design criteria are being considered as part of road design.*
Ministry of the Environment, Conservation and Parks (Ontario)	▪ Include assessment of surface water quantity and quality, changes in land cover, installation of water course crossings, groundwater, etc. and other biophysical features *Response: Project planning and design will consider the potential for impacts on environmental features such as waterways, ground cover, etc. Mitigation measures will be recommended and incorporated into the design where appropriate* ▪ In assessment, include ancillary infrastructure (i.e., construction camps, lay-down areas) *Response: Yes, as part of Project planning and design the need for and locations of ancillary facilities will be examined including possible related effects* ▪ Develop contingency measures and mitigation measures (based on proven and recognized best management practices, standard protocols for stream crossings, land clearing and / or working near water with machinery) as they are well understood for road construction *Response: Project planning and design will make mitigation recommendations that consider best management practices and standard approaches* ▪ Assessment of blasting activities, if required *Response: Project planning and design will consider the need for blasting* ▪ Adherence to provincial regulations, as required, for Project components *Response: Required regulations will be respected*
Ministry of Natural Resources and Forestry (Ontario)	▪ In assessment, address impact of hunting, fishing, other recreational activities, food security and provincial parks *Response: Changes to land use activities in nearby provincial parks will be assessed as part of project planning and design activities* ▪ In assessment, address need for type and volume of aggregate resources required *Response: Aggregate material needs for Project construction and source material locations will be assessed as part of Project planning and design activities* ▪ In assessment, address potential introduction and establishment of invasive species *Response: The potential for invasive species will be assessed as part of Project planning and design activities* ▪ Develop mitigation measures (based on proven and recognized best management practices, standard protocols for stream crossings, land clearing and/or working near water with machinery) as they are well understood *Response: Mitigation measures related to stream crossings will be recommended as part of Project planning and design activities*
Canadian Transportation Agency	▪ No authorization required in order for MFFN to construct the proposed roadway *Response: Acknowledged*

Table 3-5: Summary of Feedback from Regulatory Agencies

Agency	General Description of Comments
Employment and Social Development Canada	▪ Include the current socio-demographic characteristics of the economic sector work force of the Project *Response: Baseline socio-economic conditions will be* developed *and assessed as part of Project planning and design activities* ▪ Include the labour force characteristics by age, group and sex (If possible) of all impacted communities including the availability of skilled and unskilled workers, existing working conditions, wages and/or average salary range, full-time and part-time employment and training *Response: Labour force characteristics as noted will be described in the baseline conditions work* ▪ The anticipated number of jobs created, the type of skills and knowledge that could be required in support of the completion of the Project *Response: Estimated number of new jobs and skills required will be outlined* ▪ The main economic activities in the study area *Response: Current economic development activities will be described as part of the baseline work* ▪ Employment barrier to participation for local under-represented groups; and *Response: Barriers to Project participation by the local communities and measures to mitigate this will be examined as part of Project planning and design activities* ▪ Baseline conditions and projected impacts, as outlined in the Tailored Impact Statement Guidelines template *Response: Noted*
Environmental and Climate Change Canada	▪ Species at Risk Act (SARA) permits may be issued only if all reasonable alternatives to the activity that would reduce the impact on the species has been considered and the best solution has been adopted; all feasible measures will be taken to minimize the impact of the activity on the species or its critical habitat or the residences of its individuals; and if the activity will not jeopardize the survival or recovery of the species *Response: An evaluation of route alternatives is to be undertaken which will consider the potential for impact on Species at Risk* ▪ Provided examples of Project activities that could require a Species at Risk Permit *Response: Project activities potentially requiring a SAR permit will be described* ▪ Should a federal Impact Assessment be required, Environment and Climate Change Canada has specialists and expert information / knowledge on Wildlife and Habitat, Air Quality, Climate Change, Water Quality and Quantity, Environmental Emergencies, Contaminated Sites and Sediments *Response: Acknowledged* ▪ Advises that the Rusty Blackbird (Special Concern) under the Species at Risk Act also has potential to occur in the project area *Response: Acknowledged and included in this Detailed Project Description*
Innovation, Science and Economic Development – FedNor	▪ In 2015, FedNor provided funding for a community-led (Nibinamik, Webequie, Eabametoong, and Neskantaga First Nations), all-season road study. The study identified a number of potential routes, as well as additional issues that require further study (i.e., ownership, access, permitting, and jurisdictional issues. The issues identified for that study are likely to be the same for MFFN *Response: Acknowledged* ▪ Investment in North-South infrastructure corridor is a catalyst for regional development – need for provincial planning in collaboration with First Nations *Response: Acknowledged* ▪ Recommendations for working partnerships with Indigenous peoples to develop vibrant Indigenous economies in the area *Response: Acknowledged*

Table 3-5: Summary of Feedback from Regulatory Agencies

Agency	General Description of Comments
Fisheries and Oceans Canada	▪ It is not clear how the water bodies will be impacted during construction or operation of the CAR. Velocity changes and potential impacts to fish passage have not been assessed. Information regarding fish and fish habitat in the water courses has not been provided *Response: Impacts to water bodies will be described as part of future Project planning and design activities including mitigation recommendations* ▪ Mitigation measures are required for the Project on all activities that may result in adverse environmental effects without mitigation *Response: Acknowledged, mitigation measure recommendations will be made and incorporated into Project design*
Health Canada	▪ The potential for the Project to modify the surrounding peatland and wetland areas, and the potential to increase mercury methylation processes in the assessment *Response: The potential for impacts to peatlands from the Project will be considered* ▪ As a result of the Project connecting communities to the provincial road network and potentially to the mineral exploration area, the request of a detailed health impact assessment inclusive of other reasonably foreseeable future project would be appropriate to capture potential positive and adverse effects *Response: As part of Project planning and design, the potential for health changes to MFFN community members and possibly other community members will be examined*
Indigenous Services Canada	▪ Indigenous Service Canada's role at this time will be the issuance of permits for the on-reserve parts of the road, if required. *Response: Acknowledged*
Infrastructure Canada	▪ Infrastructure Canada provides federal funding for eligible projects through funding programs. At this time, Infrastructure Canada is not providing federal funding to this project. However, if this were to change, Infrastructure Canada would be responsible for meeting its Duty to Consult requirement and would therefore rely on the Impact Assessment process. *Response: Acknowledged*
Natural Resources Canada	▪ Details on construction pits and quarries and their impact when near esker deposits on caribou habitat *Response: Project planning and design work will define aggregate resource needs. Impacts related to aggregate extraction will be considered including the potential for impact on caribou habitat* ▪ Impact of the linear feature of the road on caribou habitat *Response: Project planning and design work will consider the potential for impact on caribou habitat* ▪ Use of roadside herbicides, including First Nations concerns related to impacts to medicinal and other plant species of concern as well as wetlands *Response: Impacts on plant species of interest from Project construction and maintenance activities will be considered as part of future Project planning and design* ▪ Extent to which the Project contributes to mining development in the area *Response: Potential economic development opportunities that could emerge such as mining will be examined as part of Project planning and design activities* ▪ Groundwater analysis, including temporary and localized impacts during construction and impact of impact of water crossings on hydrology (groundwater and surface water) *Response: Impacts on groundwater resources from road construction and operations will be examined as part of Project planning and design* ▪ Presence, distribution and impacts to permafrost *Response: Project planning and design will consider permafrost*

The Summary of Issues document compiled by IAAC reflects key issues raised by government groups. Responses to the IAAC Summary of Issues are provided in **Appendix 1**.

4. A summary of and the results of any engagement undertaken with Indigenous peoples of Canada, including:

- ***a list of the Indigenous groups that may be affected by the project, including those groups that identified themselves during the planning phase as being potentially affected; and***
- ***a description of how the proponent intends to address the issues raised in the Summary of Issues, including the perspective of Indigenous groups regarding any potential adverse impact that the project may have on the rights of the Indigenous peoples of Canada recognized and affirmed by section 35 of the Constitution Act, 1982.***

This section provides a summary of engagement activities with those Indigenous communities (i.e., neighbouring Indigenous communities*[*]) who may be potentially impacted by the Project, including the MFFN community (who is both a potentially impacted community and the Proponent of the Project.) The results of any engagement conducted up to the end of October 2019 are also provided.

As described in **Section 2**, the Project is being planned through a community-led process and has involved, and will continue to involve, frequent and meaningful engagement of MFFN community members in decision-making; so as to ensure MFFN traditions, traditional knowledge and land use are considered in a culturally appropriate manner throughout the Project. Engagement with neighbouring Indigenous communities, those who have been identified by IAAC and the provincial government as being potentially affected by the Project. Equal opportunities for engagement have been provided for all Indigenous Communities. More engagement activities have been held with MFFN than the other Communities as MFFN has been open to and supportive of multiple engagement events. The Proponent has been and continues to be open and accommodating to all requests for engagement by the neighbouring Communities.

Summary of Engagement – MFFN Community Members

The following Project consultation and engagement activities have been conducted to date with the MFFN community membership. Consultations and / or engagement conducted to date with neighbouring Indigenous communities are described further below in this section

MFFN has led numerous engagement activities with MFFN community members, the most directly impacted community in relation to the Project, in a variety of settings, including within the Marten Falls (Ogoki Post) community and in Thunder Bay and Geraldton for those members who do not live in the Community. The intent of these engagement activities was to provide community members with regular updates on the Project (progress and decisions made) and to gather input at key Project milestones to help guide the Project.

Table 4-1 below identifies the meetings that have been held to date both on and off-reserve with MFFN community members; each meeting was open to the members of MFFN. To ensure MFFN membership was aware of the planned meetings, notices were circulated in advance of each by direct email to those on the Project Contact List and through social media. For the June and October 2019 meetings, notices were also posted in the Band Office (in Marten Falls and Thunder Bay) identifying the date, time and purpose of each meeting.

In general, the purpose of each meeting was to provide community members an opportunity to learn about the Project including the federal and provincial Project review processes, to express concerns and issues regarding the Project (including those that relate to traditional values or land use), to provide feedback on the study area, alternative routes and to review the proposed engagement plan.

[*] *Neighbouring Indigenous Communities includes the 23 Indigenous communities identified for engagement by Federal and Provincial governments plus other community members who may have participated in engagement activities held to date. This is discussed more in* ***Section 4.***

Table 4-1: MFFN Community Member Engagement to Date

2017	♦ January: Project information and initial feedback from the community ♦ March: Description of potential routes and initial feedback from the community ♦ August: – Two-day community meeting held in Thunder Bay as an opportunity for MFFN Community members to meet the companies conducting exploration in the undeveloped and remote chromite and nickel belt in the Ring of Fire area. – Community meeting in Marten Falls to discuss the agreement with the province to conduct an Environmental Assessment related to the CAR and to introduce the idea that the road will be a multi-purpose road and not just for community use. ♦ November – December: Introduce the Environmental Assessment technical lead, discuss the regulatory review process and provide an update on Project activities (MFFN and Thunder Bay). ♦ Members of the Community Based Land Use Plan (CBLUP) team attended several meetings in 2017 following the initial information and gathering sessions: – MFFN – Henry Coaster Elementary School, January 17, 2017 – MFFN – Henry Coaster Elementary School, March 13, 2017 – MFFN – Henry Coaster Elementary School, March 28, 2017 – Geraldton – Hockey Arena, March 29, 2017 – Thunder Bay– Prince Arthur, March 30, 2017
2018	♦ February: Discuss environmental baseline studies, seek feedback on valued ecosystem components and potential route options. – MFFN – February 28, 2018 ♦ March: Discuss and plan provincial regulatory review process and baseline areas of interest. – MFFN – March 1, 2018 – MFFN – March 22, 2018 ♦ June: Review history of the CAR, present team structure and Project scope, outline deliverables and timelines, and discuss community interests. – MFFN – June 18, 2018 – Thunder Bay – June 19, 2018 ♦ September: Update on Project activities and status of environmental baseline studies, selection of community members to fulfill certain Project roles, consultant introduction, community involvement and training. – MFFN – September 11 and 20, 2018 ♦ November: Update on ongoing studies, review of mapping of four route alternatives with existing Indigenous Traditional Knowledge. – MFFN – November 12, 2018 – Thunder Bay – November 13, 2018 ♦ December: Strategic planning for the Project planned activities. – Thunder Bay – December 11, 2018 – MFFN – December 12, 2018
2019	♦ January: Discuss environmental baseline. – MFFN – January 14, 2019 – Thunder Bay – January 16, 2019 ♦ February: Update on Project activities. – Thunder Bay – February 14, 2019 ♦ March: Introduce the Project and discussed the provincial and federal regulatory review processes. – Thunder Bay – March 20, 2019 – MFFN (Including discussions with Youth)– March 21, 2019 ♦ May: Provide information on the alternative routes and next steps for consultation – Thunder Bay – May 6, 2019 – MFFN – May 7, 2019 – MFFN – May 8, 2019

Table 4-1: MFFN Community Member Engagement to Date

	♦ June: Discuss approach to alternatives evaluation and effects assessment, potential effects and impact management measures, regulatory review process and timing, and approach to consultation through the Environmental Assessment – Thunder Bay – June 25, 2019 – MFFN – June 26, 2019 ♦ October: Provide an update on the Project and provincial and federal regulatory review processes including an overview of the two identified alternative routes for further assessment in the Environmental Assessment. Also described status of ongoing consultation with other Indigenous communities. – Thunder Bay – October 17, 2019 – MFFN – October 18, 2019

The general format of the meetings was typically a short presentation followed by either small group discussions and / or individual discussions associated with the review of information provided on display panels and through interactive feedback gathering activities.

Summary of Key Issues and Results - MFFN Community

Considering that the Project is being developed to access the MFFN community and would primarily be located on MFFN traditional lands, this community has provided specific feedback related to the Project that is unique to their community. **Table 4-2** is a summary of the main issues of interest regarding the Project received to-date from the MFFN community members and responses to these issues by the Proponent:

Table 4-2: Summary Key Issues and Results – MFFN Community

Comments	Responses
Changes to water quality and flows;	*Project planning and design will consider the potential for changes on water quality and flows and propose mitigation to address any impacts.*
Waterway navigability;	*Project planning and design will consider the potential for changes on waterway navigability and flows and propose mitigation to address any impacts.*
Potential effects on wildlife habitat & corridors;	*Project planning and design, including route selection, will consider the potential for effects on wildlife habitat and corridors and propose mitigation to address any impacts.*
Potential impacts to fish and fish habitat;	*Project planning and design, including route selection, will consider the potential for effects on wildlife habitat and corridors and propose mitigation to address any impacts.*
Potential effects on MFFN community and environmental health, particularly related to the possibility of a supply road passing through the community (e.g., noise and impacts on sleeping);	*Project planning and design will consider the potential for changes the MFFN community including health related issues. Mitigation to address effects will be recommended and included as part of the Project design.*
Socio-economic changes both positive and negative, to MFFN community;	*Project planning and design will consider the potential for socio-economic changes to the MFFN community. Measures to enhance economic benefits will be recommended.*
Potential effects on culturally significant sites;	*Project planning and design, including route selection, will consider the potential for effects on identified culturally significant sites. Information related to cultural significant sites has been collected from the MFFN CBLUP process. Measures to mitigate potential effects will be recommended and included as part of the Project design.*
Potential effects of new access into MFFN territory (e.g., increased hunting pressure, impact on country-food supply);	*Project planning and design will consider the potential for effects on MFFN from possible increased hunting and fishing pressure as a result of new access into their territory.*

Table 4-2: Summary Key Issues and Results – MFFN Community

Comments	Responses
Potential for increased street / recreational drugs availability and use in the community;	*Project planning and design will consider the potential for effects on the MFFN community from the possible increase in access to drugs. Measures to mitigate this will be recommended.*
Visual / landscape changes;	*Project planning and design, including route selection, will consider the potential for visual impacts.*
Concerns with possible future use of the road for industrial supply purposes;	*The Project may be used in the future for industrial purposes (i.e. as an industrial supply road). The planning and design of the Project is taking this into account.*
The interest in a federal impact assessment;	*The preparation of this Detailed Project Description responds to the possible need for a federal impact assessment to be completed.*
Queries on ownership, access to and final location of the CAR;	*Options for road ownership, maintenance activities and liability are being considered in discussion with the Province The route for the access road is to be determined through Project planning and design activities. The MFFN community will be engaged as part of this process.*
Queries on future use of road / access to the region from non-community members;	*The planning and design of the Project is considering possible public access of the road and how that might be controlled and/or monitored. Measures to address effects that could result from public access will be recommended.*
Queries on how the Project will and could connect with other access roads;	*At this time, there are no other roads proposed to be connected to the Project. This will be monitored during the planning and design process.*
Queries on how the Project will impact future generations;	*The planning and design of the Project is considering impacts on future generations.*
Queries on how MFFN is working with other communities;	*MFFN is engaging with 23 Indigenous communities as part of Project planning and design activities. The form and frequencies of engagement is dependent on the interests of the individual community.*
Queries on whether provincial funding will be available to other communities to participate in the Project;	*Yes, the Province has notified other Indigenous communities regarding the availability of Project participant funding.*
The need for community members to be more involved with study decision making, and;	*Acknowledged*
Questions around how Anishinabek Knowledge will be collected and considered in the regulatory review processes.	*MFFN Indigenous knowledge previously collected to support the CBLUP process has been collected. Discussions are underway regarding the collection of additional Indigenous Knowledge specific to the Project, to fill-in knowledge gaps. MFFN is also in discussion with other neighbouring communities regarding their interest to participate in traditional knowledge collection activities.*

Table 4-3 includes comments that were received from the MFFN community relating to Project benefits and responses to these comments by the Proponent.

Table 4-3: Comments on Project Benefits and Responses to – MFFN Community

Comments	Responses
General interest in increased economic development and business opportunities and increased job creation, including those relating to new resource extraction activities;	*Project planning and design will consider the potential for socio-economic changes to the MFFN community. Measures to enhance economic benefits will be recommended including for example the need for training of community members.*
Reduction in costs to education, health services, and freight charges;	*It is anticipated that the Project will result in the reduction in cost and improvements to education and health services. This is an anticipated project benefit.*
Increased availability of goods and services;	*It is anticipated that the Project will result in the reduction in cost of goods and services in the community. This is an anticipated project benefit.*

Table 4-3: Comments on Project Benefits and Responses to – MFFN Community

Comments	Responses
Increased potential for recreation activities and increased participation in cultural activities;	*It is anticipated that the Project will result in new and improved recreation opportunities. This is an anticipated Project benefit.*
Queries on how MFFN community members living outside of MFFN may have opportunities for business development;	*As part of Project planning and design activities, recommendations will be made to enhance Project related economic development opportunities including for those that don't currently live in the community.*
Queries on how the community will benefit from the development of the CAR while preserving the environment and Indigenous rights;	*As part of Project planning and design activities, recommendations will be made to enhance Project related economic development opportunities. Project planning and design will also consider potential environmental impacts of the Project.*
Queries on how mining development opportunities could emerge from the CAR;	*The Project may result in new mining development opportunities in the region as a result of improved access. This will be examined as part of project planning and design activities. Any benefits resulting from this would need to be considered in balance with possible negative effects associated with industrial use of the access road.*
Suggestion that other communities should receive benefit from the Project; and	*Acknowledged. Opportunities for other community members to benefit from the project will be examined in the planning and design of the project.*
The need for the community to better prepare itself to take advantage of economic development opportunities as a result of the Project.	*Project planning and design will consider the potential for socio-economic changes to the MFFN community. Measures to enhance economic benefits will be recommended including activities such as training for community members.*

At the May and June 2019 meetings, community Members were asked to provide comment on potential alternative routes for the CAR. While attending community members indicated a preference for a CAR with shorter road lengths, community members were also generally supportive of the Project Team recommendation to focus the regulatory review process on the proposed western routes. At the October 2019 meetings, when presented with the decision to only carry forward the two western routes alternatives for further study during the regulatory review process (**Section 12a**), the attending community members did not provide further comment.

Opportunities for youth to participate were provided at the March 2019 and May 2019 community meetings in Marten Falls. This included a brief presentation to grade school students at the Henry Coaster Elementary School, followed by group discussion to obtain feedback.

Identification and Engagement - Neighbouring Indigenous Groups

Fifteen neighbouring Indigenous communities have been identified by IAAC; 14 of which were identified on November 13, 2018 by CEA Agency (now IAAC) on their 'Preliminary List of Indigenous Communities for Proponent Engagement on the Marten Falls Access Road,' and one (1) additional Indigenous community identified through IAAC's subsequent update to this list **(Figure 4-1)**. Fourteen of these communities, plus an additional eight (8) communities, were also identified by the MECP to be consulted on the basis that they have or may have constitutionally protected Aboriginal or Treaty Rights that may be impacted by the Project or may be interested in the Project. The 23 Indigenous communities identified by both IAAC and MECP to be consulted through the regulatory review process is listed in **Table 4-4** of this Detailed Project Description. As stated earlier, equal opportunities for engagement have been provided for all Indigenous Communities. More engagement activities have been held with MFFN than the other Communities as MFFN has been open to and supportive of multiple engagement events. The Proponent has been and continues to be open and accommodating to all requests for engagement by the neighbouring Communities. Multiple attempts have been made to reach out and contact all communities to determine their interest in the Project and interest in being engagement with. The Proponent has met with all communities who have expressed an interest in meeting and learning more about the project. The Proponent is continuing efforts to engage with all interested communities.

Kitchenuhmaykoosib
Kasabonika
Kingfisher Lake
Wunnummin Lake
Nibinamik First Nation
Summer Beaver
Webequie
Webequie First Nation
Attawapiskat First Nation 91
James Bay
Attawapiskat
Attawapiskat First Nation 91A
Fort Albany First Nation
Kashechewan First Nation
Neskantaga First Nation
Lansdowne House
Eabametoong First Nation
Fort Hope
Marten Falls First Nation
Albany River
Pickle Lake
Osnaburgh House
Mishkeegogamang First Nation
599
Armstrong
Aroland First Nation
643
Nakina
Lake Nipigon
584
Animbiigoo Zaagi'igan Anishinaabek First Nation
Greenstone
Geraldton
Jellicoe
Beardmore
Macdiarmid
527
585
628
582
Long Lake 58 First Nation
Longlac
11
Ginoogaming First Nation
Caramat
Hillsport
Constance Lake First Nation
Calstock
Hearst
Mattice
Jogues
Opasatika
Harty
Val Rita
Kapuskasing
583
634
Hornepayne
Manitouwadge
Oba
614
631
17
627
586
589
102
587
590
130
588
595
593
61
Thunder Bay
Lake Superior
519
101
651
547

Manitoba
Ontario
Quebec
U.S.A.
Fort Severn
Attawapiskat
Fort Albany
Moosonee
Marten Falls First Nation
Kenora
Sioux Lookout
Nakina
Geraldton
Hearst
Kapuskasing
Atikokan
Thunder Bay
Timmins
Sault Ste. Marie
Sudbury
North Bay
Ottawa
Owen Sound
Toronto
Hamilton
London
Windsor
Map Location

Legend

Route Alternatives
- Alternative 1
- Alternative 4

Neighbouring Indigenous Communities
- First Nation Reserve
- Metis Nation of Ontario, Region 2

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

Marten Falls First Nation All Season Community Access Road Project

Neighbouring Indigenous Communities Identified by IAAC

0 10 20 40 60 80 100
Kilometres
Datum: NAD 1983 UTM Zone 16N

Data Sources:
Derived by KBM Resources Group n.d.
MNRF, MMAH, NRCAN, MLAS

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Figure 4-1

Map location: P:\60593122\900-CAD_GIS\920-929 (GIS-Graphics)\Design\01_Reports\DetailedProjectDescription\MXD_2019-11-19_Fig4-1_IndigenousCommunities_R01_60593122.mxd
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Table 4-4: Neighbouring Indigenous Communities

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

*Notes: '**a**' Communities recommended by IAAC*
*'**b**' Communities recommended by MECP*
***'ab'** Communities recommended by both IAAC and MECP*

MFFN led early engagement and consultation efforts with a number of neighbouring Indigenous communities. Some of this early effort was completed through the planning activities related to the MFFN CBLUP under the *Far North Act* on how areas under the *Act* might be developed.

In 2018, meetings with some adjacent Indigenous communities including Aroland First Nation Chief, Staff and Advisors; Eabametoong First Nation Councillors and representatives, and Webequie First Nation representatives - were held to discuss the Project, including how best to work together.

Project-related information was also provided to Indigenous communities in advance of early engagement with IAAC and official commencement of the provincial Environmental Assessment process for the Project. A summary of engagement activities completed in the 2017-2018 period, prior to the receipt of the list of communities to be engaged as directed by IAAC (i.e., December 2018) regarding the Project is in **Table 4-5**.

Table 4-5: Summary of Early Project Engagement Activities with Indigenous Communities and Groups

Community/Date	Description
Aroland First Nation	
August 1, 2017	■ Meeting in Geraldton to discuss update on north-south corridor, relationship and agreement with mining companies.
August 8, 2017	■ Meeting in Thunder Bay to provide an update on the all-season road development planning and current status of negotiations with the Province.
January 24, 2018	■ Letter regarding baseline studies ■ Updated notice for bird surveys on May 14, 2018
March 7, 2018	■ Meeting to provide a Project update and discussion of how the two First Nations can work together.
March 10, 2018	■ Letter from community to MECP regarding Project concerns
April 19, 2018	■ Letter to community regarding MFFN discussions with ENDM and support for community to lead Painter Lake to Highway 643, and the impact assessment and regulatory review process. Refer to Part C for additional details on Painter Lake Road and Aroland First Nation's involvement.

Table 4-5: Summary of Early Project Engagement Activities with Indigenous Communities and Groups

Community/Date	Description
May, 2018	■ Notice for avian surveys ■ Notification for re-scheduled avian surveys ■ Letter to community regarding the impact assessment and regulatory review process for the Project
November 7, 2018	■ Meeting to exchange information. MFFN providing information on the impact assessment and regulatory review process for the Project and Aroland First Nation discussed its work planning for a project to realign forestry access roads between Painter Land and provincial highway system.
November 30, 2018	■ Letter to community leadership confirming that a draft agreement to collaborate on the environmental review process for the Project is being drafted. ■ MFFN will lead the impact assessment process for the Project and provide regulators with required documentation for the regulatory review process.
December 5, 2018	■ Letter from community to MFFN detailing concerns and requesting meetings with the government departments involved in the Project review and approval process.
Attawapiskat First Nation	
May 2018	■ Notice for avian surveys ■ Notification for re-scheduled avian surveys ■ Letter to community regarding the impact assessment and regulatory review process for the Project
Constance Lake First Nation	
May 2018	■ Notice for avian surveys ■ Notification for re-scheduled avian surveys ■ Letter to community regarding the impact assessment and regulatory review process for the Project
Eabametoong First Nation	
November 13, 2017	■ Meeting to inform Eabametoong First Nation that MFFN is gathering data to decide what the next steps would be for the road plan and will meet with Eabametoong First Nation again early in the new year.
January 24, 2018	■ Letter regarding baseline studies
February 26, 2018	■ Correspondence letter outlining Project-related concerns
February 27, 2018	■ Correspondence letter outlining Project-related concerns
May, 2018	■ Notification letter for avian surveys ■ Notification for re-scheduled avian surveys ■ Letter to community regarding the regulatory review process for CAR
Fort Albany First Nation	
May 2018	■ Notice for avian surveys ■ Notification for re-scheduled avian surveys ■ Letter to community regarding the impact assessment and regulatory review process for the Project
Ginoogaming First Nation	
May 2018	■ Notification letter for avian surveys ■ Notification for re-scheduled avian surveys ■ Letter to community regarding the impact assessment and regulatory review process for the Project
Kashechewan First Nation	
May 2018	■ Notice for avian surveys ■ Notification for re-scheduled avian surveys ■ Letter to community regarding the impact assessment and regulatory review process for the Project
Long Lake 58 First Nation	
May 2018	■ Notice for avian surveys ■ Notification for re-scheduled avian surveys ■ Letter to community regarding the impact assessment and regulatory review process for the Project

Table 4-5: Summary of Early Project Engagement Activities with Indigenous Communities and Groups

Community/Date	Description
Matawa First Nations Management	
March 13, 2018	■ Letter to community requesting Environmental Assessment conference internal report
July 31 to August 2, 2018	■ CAR Fact Sheet provided to all Matawa Chiefs
Neskantanga First Nation	
January 24, 2018	■ Letter to the community regarding baseline studies
May 3, 2018	■ Follow-up letter to community regarding baseline studies ■ Response letter received May 5, 2018 outlining concerns with the impact assessment process for the Project and open dialogue with community
May 8, 2018	■ Letter indicating MFFN's voluntary agreement with MECP on an Individual Environmental Assessment
May 14, 2018	■ Updated notice for avian surveys ■ May 15, 2018 response letter received to suspend studies and open dialogue with community
June 7, 2018	■ Request for a meeting to discuss the Project ■ June 19, 2018 acceptance for June 28, 2018 meeting
September 25, 2018	■ Response letter to community's request to review archaeological information
November 9, 2018	■ MFFN response to community accepting their request to delay meeting and attempt to secure funding for community involvement in the impact assessment and regulatory review process for the Project
Nibinamik First Nation	
May 2018	■ Notice for avian surveys ■ Notification for re-scheduled avian surveys ■ Letter to community regarding the Environmental Assessment process for CAR
Webequie First Nation	
November 14, 2017	■ Discussion on moving forward with all development, roads and mining, and possible ways of collaboration
December 12, 2017	■ Discussed principals of cooperation, update on road development and discussion on next steps
January 24 2018	■ Letter to community regarding baseline studies
March 5, 2018	■ Meeting between the road study teams for Webequie First Nation and MFFN. Commitment was made to look for approval from Chief and Councils to share information and collaborate between roads study teams.
May, 2018	■ Notification letter for avian surveys ■ Notification for re-scheduled avian surveys ■ Letter to community regarding the impact assessment and regulatory review process for the Project

Results to Date of Engagement - Neighbouring Indigenous Communities

A focus of outreach and engagement efforts with Indigenous communities in late 2018 and 2019 (to end of October) was to: confirm with the 22 identified communities whether they may have an interest in the Project; to identify how they would like to be engaged throughout the Project; and to identify issues or concerns they may have in regards to the Project. An introductory letter was sent by MFFN on December 13, 2018 to each of the 22 communities, and to Mishkeegogamang First Nation on July 15, 2019. Subsequent Project correspondence sent to or received from neighbouring Indigenous communities includes:

Correspondence to Communities

- Letter from MECP to Indigenous communities regarding the Project – December 19, 2018
- Notice of Commencement letters – March 4, 2019
- Follow-up letters to Indigenous communities regarding Notice of Commencement – April 4, 2019
- Follow-up letters to four communities (i.e., Ginoogaming First Nation, Long Lake 58 First Nation, Webequie First Nation, Neskantaga First Nation) – July 15, 2019

- Project introduction letter to Mishkeegogamang First Nation – July 15, 2019
- Letter from ENDM to MFFN regarding provincial funding – August 16, 2019
- Meeting request response to Neskantaga First Nation – October 24, 2019

Correspondence from Communities

- Letter from Aroland First Nation to CEA Agency recommending a federal environmental assessment and request for participation – June 19, 2019
- Letter from Neskantaga First Nation to MFFN regarding Duty to Consult and requesting a meeting with the Crown (i.e., government to government) – July 16, 2019
- Letter from Aroland First Nation to IAAC providing comments on the Initial Project Description – August 29, 2019
- Letter from Fort Albany First Nation to IAAC providing comments on the Initial Project Description – September 20, 2019
- Letter from Eabametoong First Nation to IAAC providing comments on the Initial Project Description – Posted on the Project Registry, September 26, 2019
- Letter from Fort Albany First Nation to IAAC providing comments on the Initial Project Description – September 20, 2019
- Letter from Webequie First Nation to IAAC providing comments on the Initial Project Description – September 30, 2019
- Letter from Animbiigoo Zaagi'igan Anishinaabek to IAAC providing comments on the Initial Project Description – October 1, 2019
- Letter from Attawapiskat First Nation to IAAC providing comments on the Initial Project Description – October 1, 2019
- Letter from Fort Albany First Nation to IAAC providing comments on the Initial Project Description – October 1, 2019
- Letter from MFFN to IAAC providing comments on the Initial Project Description – October 1, 2019
- Letter from Nibinamik First Nation to IAAC providing comments on the Initial Project Description – October 1, 2019

In addition to the mailed correspondence listed above, a minimum of four calls have been made to the communities since mid-April 2019 to gauge level of interest in the Project and to schedule meetings, when interest is expressed; voicemail messages were left in cases where no one answered the phone and a voicemail system was active. Based on contact made and correspondence received, the following provides a summary of which communities have expressed interest in the Project by the end of October 2019.

- **Twelve (12) communities** have to date expressed some degree of interest in the Project and meetings have been held with seven of these communities including MFFN (asterisked below):
  - MFFN*
  - Aroland First Nation*
  - Attawapiskat First Nation*
  - Neskantaga First Nation
  - Eabametoong First Nation (Fort Hope)*
  - Fort Albany First Nation*
  - Ginoogaming First Nation
  - Animbiigoo Zaagi'igan Anishinaabek
  - Constance Lake First Nation

  - Kashechewan First Nation
  - Webequie First Nation*
  - Kitchenuhmaykoosib Inninuwug First Nation*

- **Ten (10) communities** have expressed interest in receiving Project materials and will contact the Project Team if they would like to meet in the future, MFFN will continue to engage with communities on the Project:

  - Wunnumin Lake First Nation
  - Wapekeka First Nation
  - Wawakapewin First Nation
  - Nibinamik First Nation
  - Weenusk First Nation
  - Kingfisher Lake First Nation
  - Métis Nation of Ontario, Region 2
  - Kasabonika Lake First Nation
  - Long Lake 58 First Nation
  - Red Sky Independent Métis Nation

Further to the above, no response has been received by Mishkeegogamang First Nation regarding the Project introductory letter sent in July 2015, MFFN will engage should the community express future interest.

A summary of the attempts made to date to engage the Communities is outlined in **Table 4-6**. A summary of the meetings held to date with six neighbouring communities, comments made at the meetings, and the Proponent's responses is provided in **Table 4-7.**

On October 9, 2019, the MFFN Project Team also attended the trade show at the Northern Ontario First Nations Environment Conference on to raise awareness about the proposed Project. As a result of the MFFN Project Team's attendance at that conference, 19 new email addresses were added to the electronic mailing list. MFFN also submitted an advertisement in September 2019 to be published in the November 2019 issue of the Assembly of First Nations' official semi-annual publication, *The Circle*. *The Circle* has a circulation of 3,500 and is distributed at assemblies, trade shows, meetings and other events across Canada. The advertisement provided contact information and, summary of the Project and directed readers to the website for more information including MFFN contact information.

Current and Future Engagement Opportunities - Indigenous Groups

Responses to the IAAC Summary of Issues are provided in **Appendix 1** and include MFFN responses to issues related to Indigenous community-raised issues. The issues raised related to Indigenous Community consultation, Indigenous Knowledge, use of land, economic benefits, health and social issues and Indigenous rights. Responses to these issues and how each will be considered in the Project planning process are provides in **Appendix 1**. It is anticipated that additional engagement will be required to seek clarity on some of these issues. The issues will guide information releases to the Indigenous communities, the design of future engagement activities, future effects assessment work and mitigation and follow-up programs for the Project.

The level of future engagement is expected to vary by community and is being confirmed as part of the ongoing outreach activities with neighbouring Indigenous communities. Determining the appropriate level of engagement may require an initial in-person meeting with communities who indicate a desire to be more involved and may result in the creation of a community-specific consultation plan. Any such plan will be developed in consideration of the community's consultation and Indigenous Knowledge protocols, if available.

Table 4-6: Indigenous Community Engagement Summary Table

Indigenous Community	Community Representative Spoken with Someone from the Community *(e.g., band office / Chief) (Y/N)?*	Expressed Interest in Meeting?	Estimated Timing for an In-Person Meeting	Next Steps / Actions
Have expressed interest in the Project				
Marten Falls First Nation	Yes	Yes	Four (4) rounds of meetings held to date, with the latest being held in mid-October. Community meetings will be ongoing throughout the regulatory review process.	Next meeting anticipated in association with draft provincial Environmental Assessment Terms of Reference release and Detailed Project Description finalization. Circulate notices to community members for upcoming meetings.
Aroland First Nation	Yes	Yes	One (1) Chief and Council and community meeting held to-date and a follow-up call held (October 2019) to plan second community meeting for late November 2019.	Work with band office and Shared Value Solutions to organize a follow-up in-person meeting with Chief and Council and the broader community in late November 2019.
Attawapiskat First Nation	Yes	Yes	Meeting held with a community representative. Potential interest in future community meetings (one after the draft Terms of Reference is circulated and one after the Proposed Terms of Reference is circulated). To be confirmed with Attawapiskat First Nation.	Work with band office and Chief's administration to organize an in-person meeting with Chief and Council and the broader community once draft Terms of Reference (and Proposed Terms of Reference) is released.
Neskantaga First Nation	Yes	Yes	No meeting planned, will continue to engage to determine interest in follow-up meeting.	Chief Achneepineskum is working with Chief Moonias to organize an in-person meeting as per Chief Moonias's expressed interest. Letter sent by MFFN to NFN in October 2019 in response to their letter to the Province requesting that consultation be government to government.
Eabametoong First Nation	Yes	Yes	One (1) meeting held with Chief and Council and larger community. Follow-up meeting to be planned with a focus on Indigenous Knowledge information collection.	Continue outreach with Chief to confirm interest in a follow up meeting. In addition, a letter will be sent shortly to inform of opportunity to discuss relevant Indigenous Knowledge.
Fort Albany First Nation	Yes	Yes	One (1) meeting held with Chief and community representative.	Keep community informed of Project. No follow-up meeting planned at this time.
Kitchenuhmaykoosib Inninuwug (KI)	Yes	Yes	One (1) meeting held with Chief and Council.	Interest in a follow-up meeting to be confirmed. Continue to provide project update information.

Table 4-6: Indigenous Community Engagement Summary Table

Indigenous Community	Community Representative Spoken with Someone from the Community *(e.g., band office / Chief) (Y/N)?*	Expressed Interest in Meeting?	Estimated Timing for an In-Person Meeting	Next Steps / Actions
Webequie First Nation	Yes	Yes	One (1) meeting held with Chief and Council and community.	Interest in a follow-up community meeting to be confirmed. Agreed to hold frequent project update calls.
Animbiigoo Zaagi'igan Anishinaabek	Yes	Yes	To be confirmed with Animbiigoo Zaagi'igan Anishinaabek, no potential meeting date has been identified to-date.	Work with band office and Chief's administration to organize an in-person meeting.
Ginoogaming First Nation	Yes	Yes	To be confirmed with Ginoogaming First Nation; no potential meeting has been identified to-date.	Work with the band office and Chief's administration to organize an in-person meeting once interest is confirmed.
Constance Lake First Nation	Yes	Yes	To be confirmed with Constance Lake First Nation; no potential meeting has been identified to-date.	Chief Allen expressed interest in funding / resources for Constance Lake First Nation involvement. Province sent letters to all communities on the list advising of a project participant funding program.
Kashechewan First Nation	Yes	Yes	To be confirmed with Kashechewan First Nation; no potential meeting has been identified to-date.	Follow-up with Chief Friday to determine timing for a meeting.
Have expressed interest in receiving information on the Project				
Wunnumin Lake First Nation	Yes	No	NA	Wunnumin Lake First Nation will contact MFFN Chief if there are questions / comments or interest in arranging a meeting.
Wapekeka First Nation	Yes	Not at this time	NA	Ongoing follow-up with the band office and Chief Sainnawap to determine potential interest in the Project.
Wawakapewin First Nation	Yes	Not at this time	NA	Wawakapewin First Nation will contact MFFN Chief if there are questions / comments or interest in arranging a meeting.
Nibinamik First Nation	Yes	Not at this time	NA	Nibinamik First Nation will contact Project Team if they wish to meet
Weenusk First Nation	Yes	Not at this time	NA	Weenusk First Nation will contact MFFN if there are questions / comments or if they want to arrange a meeting
Kingfisher Lake First Nation	Yes	Not at this time	NA	Ongoing follow-up with the band office and Chief Mamakwa to determine interest in the Project.
Métis Nation of Ontario, Region 2	Yes	Not at this time	NA	Métis Nation of Ontario will contact MFFN if there are questions / comments or if they want to arrange a meeting.

Table 4-6: Indigenous Community Engagement Summary Table

Indigenous Community	Community Representative Spoken with Someone from the Community *(e.g., band office / Chief) (Y/N)?*	Expressed Interest in Meeting?	Estimated Timing for an In-Person Meeting	Next Steps / Actions
Kasabonika Lake First Nation	Yes	Not at this time	NA	Ongoing follow-up with the band office and Chief Anderson to determine interest in the Project.
Red Sky Independent Métis Nation	Yes	Not at this time	NA	To be confirmed with Red Sky Independent Métis Nation, no potential meeting date has been identified.
Long Lake 58 First Nation	Yes	Not at this time	NA	Work with the band office and Chief's administration to organize an in-person meeting
Interest in Project Not Yet Confirmed				
Mishkeegogmang First Nation	No	Not at this time	To Be Determined	MFFN to confirm Mishkeegogamang First Nation interest in the Project

Table 4-7: Summary of 2019 Meetings/Discussion to Date with Neighbouring Communities and Responses from MFFN

Community / Date*	Description	Key Comments and / or Issue Raised by MFFN
Animboogoo-Zaagi'ian Anishinaabek First Nation (AZA)	Project team has discussed the Project with Kyla Morrisseau on multiple occasions to provide updates and confirm interest in meeting. In discussions with AZA, Kyla noted interest in any provincial or federal funding to support their review of Project documents / reports. The CAR Project Team will continue to follow-up on an ongoing basis to provide updates and confirm interest in meeting with MFFN. At this point, no specific interest has been communicated with respect to a Chief and Council or broader Community meeting and no specific concerns or issues have been brought forth.	■ Lawrence Baxter (MFFN Community Advisor) spoke with Kyla from AZA the week of September 25, 2019. Kyla confirmed that AZA provided a comment on the Project Description noting it was positive in nature: AZA supports the community access road to the MFFN community; any concerns relate to values in the Aroland area not related to the CAR Project. *Response: Lawrence provided the website information and offered to present the Project to the broader community. Kyla noted she would be in touch if the community is interested. Lawrence noted MFFN would follow-up again as well.*
Aroland First Nation **May 23, 2019**	A meeting was held with the Aroland First Nation Chief and Council and the community to introduce the Project and provincial Project review process. The community meeting provided an update on the Project, including a look at alternative routes and outlining items to be presented in the provincial Project review process. Preceding the community meeting a meeting was held with Aroland First Nation Chief and Council.	■ Aroland First Nation is interested in participating in the MFFN regulatory review process. Aroland First Nation has traditional territory that extends into the southern limits of the Project. *Response: MFFN will provide opportunity to Aroland First Nation in the future planning, approval and design process.* ■ Attendees expressed support for the MFFN Community Access Road. They did not express support for the extension to the Ring of Fire at this stage and required more internal consultation on this. *Response: Acknowledged.* ■ The relationship and overlap of the Aroland First Nation's Painter Lake Road upgrade project and the MFFN Community Access Road was discussed. *Response: MFFN and Aroland First Nation have committed to future discussions to confirm how the planning and design of the two projects can be coordinated where applicable.* ■ Indigenous communities need to be included and benefit from any development that happens as a result of the road (e.g., mining forestry, tourism). *Response: Acknowledged. Future Project planning will consider and examine opportunities for Project benefits to Indigenous communities. MFFN is committed to local benefits as a result of the Project, including Indigenous community members and businesses.* ■ The environment needs to be protected / managed responsibly (for seven generations). *Response: Future Project planning and design will endeavour to consider and minimize impacts on the environment.*

* *Dates are provided for specific events only*

Table 4-7: Summary of 2019 Meetings/Discussion to Date with Neighbouring Communities and Responses from MFFN

Community / Date*	Description	Key Comments and / or Issue Raised by MFFN
		■ One attendee expressed concerns with the top down approach and lack of involvement at the community level, also was frustrated at the pace of development. *Response: Acknowledged. MFFN intends to hold future community meetings in Aroland First Nation to provide project information and receive feedback from community members.* ■ There is interest in future community meetings regarding the MFFN impact assessment and regulatory review process. *Response: Acknowledged. MFFN intends to hold future community meetings in Aroland First Nation to provide project information and receive feedback from community members.*
Aroland First Nation **October 23, 2019**	A conference call was held with representatives of MFFN and the Aroland First Nation. The purpose of the call was to update Aroland First Nation on the status of the Project and for Aroland First Nation to update MFFN on the Painter Lake Road upgrade project.	■ Aroland First Nation continues to have interest in the Project. *Response: Acknowledged. MFFN is committed to ongoing engagement with Aroland First Nation as part of future project planning and design activities.* ■ That monthly update calls will be scheduled. ■ *Response: MFFN will present an update to the Aroland First Nation community in late November 2019 after the Aroland First Nation elections.* ■ That MFFN will provide an outline of the Community Consultation Coordinator position. *Response: Acknowledged.* ■ That the two communities will hold future discussions on how Indigenous Knowledge collection can be coordinated for the two road projects. *Response: Acknowledged. MFFN is committed to ongoing engagement with Aroland First Nation as part of future Project planning and design activities.*
Attawapiskat First Nation **August 13, 2019**	A meeting was held with a representative of the Attawapiskat First Nation to provide an update on the MFFN Community Access Road Environmental Assessment.	■ The possibility of a Memorandum of Understanding was discussed to guide Attawapiskat First Nation involvement during the MFFN impact assessment process. *Response: The potential for a Memorandum of Understanding on the Project will be discussed as the interests of Attawapiskat First Nation are better understood by MFFN.* ■ It was also asked if participant funding would be available. *Response: There are some project funds available to support Communities in engagement program participation and to support the collection of Indigenous Knowledge. The Federal Government and Province of Ontario have also identified the availability of participant funding.* ■ There is interest in receiving future Project documents and the potential for future meetings will be determined as the impact assessment progresses. *Response: MFFN will continue to provide notices regarding the availability of Project documents for review and commenting.*

Table 4-7: Summary of 2019 Meetings/Discussion to Date with Neighbouring Communities and Responses from MFFN

Community / Date*	Description	Key Comments and / or Issue Raised by MFFN
Constance Lake First Nation	Project team has spoken with Chief Allen to confirm interest in a meeting with MFFN. CLFN indicated interest in the Project and requested funding to support their involvement / review. In discussion with Chief Allen he noted that CLFN will contact ENDM regarding any funding to support their review of Project documents.	■ Chief Allen noted that CLFN would require funding to support their review of Project documents; CLFN Chief and Council and broader community members would prefer to meet after this funding is in place. *Response: MFFN provided updates to Chief Allen with respect to funding/ resources for CLFN involvement as per ENDM guidance. MFFN will continue outreach to determine interest in a meeting to discuss the Project and receive input. Project information will continue to be provided.* ■ In letter to IAAC noted concerns regarding Constance Lake First Nation's lack of engagement by MFFN concerning the development of the proponent's Project Description. *Response: MFFN will continue to engage with Constance Lake to determine their interest in meeting with Chief and Council and the broader community as per CLFN consultation protocol.*
Eabametoong First Nation **August 7, 2019**	A meeting was held at the Eabametoong First Nation community. A meeting with Chief and Council was first held followed by a presentation to the larger community. The purpose of the meeting was to introduce the Project, including discussing specifics regarding the provincial Project review process and content, alternative routes, and to understand the potential interest that Eabametoong First Nation may have in the Project.	■ That there may be interest in Eabametoong First Nation participating in the MFFN impact assessment and regulatory review process. *Response: MFFN will continue to engage with Eabametoong First Nation to confirm its desired level of involvement in the planning and design of the Project.* ■ Interest in the formation of a relationship agreement so that MFFN works together with Eabametoong First Nation as the communities share the river, have shared history and a shared family lineage. *Response: MFFN is following up with Eabametoong First Nation regarding the development of a possible relationship.* ■ It was asked whether a Regional Strategic Environmental Assessment including the road to the Ring of Fire would be considered. *Response: MFFN is not planning to undertake a Regional Strategic Environmental Assessment as part of the planning and design of the Project* ■ Question about the type of impact assessment being completed was asked. *Response: At this time a provincial Individual Environmental Assessment is committed to. If required by IAAC, MFFN would also undertake a federal Impact Assessment.*

Table 4-7: Summary of 2019 Meetings/Discussion to Date with Neighbouring Communities and Responses from MFFN

Community / Date*	Description	Key Comments and / or Issue Raised by MFFN
Fort Albany First Nation **August 2, 2019**	A meeting was held in Thunder Bay with Chief Metatawabin and a community advisor. The purpose of the meeting was to provide an update on the MFFN Community Access Road, including the provincial Project review process and content, alternative routes, and to understand the potential interest that Fort Albany First Nation may have in the Project.	■ No specific concerns were expressed about the Project. ■ Interest was expressed on how the MFFN might control access and the flow of people and goods into the community. *Response: MFFN will consider the need and viability to control public access on the roadway as part of future planning and design activities.* ■ MFFN was encouraged to prepare an economic development plan in association with the Project. *Response: MFFN will examine changes to their economy including future development opportunities as a result of the Project.* ■ Fort Albany First Nation is hoping that a relationship with MFFN continues considering that the two communities are on the same river system. The alignment of the two communities is important. *Response: MFFN is interested in maintaining a relationship with Fort Albany First Nation and looks forward to future discussions.*
Ginoogaming First Nation (GFN)	Project Team has spoken with GFN to confirm interest in the Project, as well Chief Echum sent a letter to MFFN on January 24, 2019 indicating their interest in the Project. Currently waiting to hear back regarding timing for a meeting and review of Project documents. Project Team will continue to follow-up with Peter Rasevych and Chief Echum on an ongoing basis and provide Project information. At this time no specific issues / concerns have been identified.	■ None expressed at this time
Kasabonika Lake First Nation (KFN)	Project team has continued outreach to KFN to discuss the Project, and will continue following up to provide Project information and to determine interest in being engaged/ consulted on the MFCAR Project. At this time no specific issues / concerns have been identified.	■ None expressed at this time
Kashechewan First Nation	MFFN to continue discussions with Chief Friday to determine timing and interest in an in-person meeting with Chief and Council and the broader community. At this time no specific issues / concerns have been identified. Project information will continue to be provided.	■ None expressed at this time
Kingfisher Lake First Nation (KLFN)	MFFN has discussed the Project with Mike Mamakwa, at this time there has been no interest expressed to meet with MFFN and no issues or concerns have been brought forward. MFFN will continue providing Project information and following up with Mike to determine any interest and receive input.	■ None expressed at this time

Table 4-7: Summary of 2019 Meetings/Discussion to Date with Neighbouring Communities and Responses from MFFN

Community / Date*	Description	Key Comments and / or Issue Raised by MFFN
Kitchenuhmaykoosib Inninuwug First Nation **September 6, 2019**	The purpose of the meeting was to introduce the Project, gather input on the Project and present next steps and future engagement activities. The presentation content included an outline of specifics regarding the provincial Project review process and alternative routes.	■ Questions were asked about Marten Falls and where the community and proposed CAR are located. *Response: Figures 1-1 and 1-2 of the Detailed Project Description contain Project route alternatives* ■ It was noted that some Kitchenuhmaykoosib Inninuwug community members hunt caribou and there is interest in learning how the regulatory review process will assess the potential for impacts on Caribou including migration paths. MFFN will keep the community informed on impact assessment process effects assessment work related to caribou movement. *Response: MFFN is undertaking caribou related studies and will assess potential effects on caribou from the Project as part of future planning and design activities. MFFN will inform Kitchenuhmaykoosib Inninuwug on the results of this work and seek their input.*
Long Lake #58 First Nation (LL 58)	Project team has discussed the Project with LL 58, and they noted interest in being kept informed of the Project with potential for an introduction meeting with Chief Veronica Waboose and Council and the broader community. At this time no meeting dates have been discussed and no issues or concerns have been identified. Project information will continue to be provided.	■ None expressed at this time
Neskantaga First Nation	The Project Team contacted Chief Moonias to enquire about interest in meeting and the Chief replied noting he would work with MFFN Chief Achneepineskum to find a meeting date. Subsequently, Neskantaga indicated they would prefer to consult with Ontario on a government to government basis. On October 24, 2019 MFFN Chief Achneepineskum sent a follow-up letter to Chief Moonias providing an overview of the engagement process to date as well as an update on the Project. MFFN also reiterated their interest to meet with Neskantaga if they are interested.	■ Chief Chris Moonias sent a letter to Chief Bruce via email that stated Neskantaga First Nation "object to the delegation by Ontario for consultation obligations for this Project to MFFN". As the Project proceeds Neskantaga FN would like to "consult with Ontario on a government to government basis". *Response: MFFN Continue to engage with Neskantaga for the Project and provide support to the government (in a procedural manner).*
Nibinamik First Nation (NFN)	Project team has discussed the Project with Lias Yellowhead with NFN. Lias noted NFN's interest in being kept informed of the Project but at the time had no interest in a Chief and Council or broader community meeting. Project information will continue to be provided.	■ None expressed at this time
Wapekeka First Nation	MFFN has discussed the MFCAR Project with Chief Sainnawap and Chris A. from Wapekeka First Nation. MFFN will continue to follow-up with Wapekeka and provide Project information on an ongoing basis. At this time no interest to meet was expressed.	■ None expressed at this time

Table 4-7: Summary of 2019 Meetings/Discussion to Date with Neighbouring Communities and Responses from MFFN

Community / Date*	Description	Key Comments and / or Issue Raised by MFFN
Wawakapewin First Nation	Project team has reached out to Wawakapewin First Nation and discussed the Project with Crystal S in the band office. MFFN will continue to follow-up with Wawakapewin and provide Project information on an ongoing basis; at this time no interest to meet was expressed.	■ None expressed at this time
Webequie First Nation August 9, 2019	A meeting was held at the Webequie First Nation with members of Council. The purpose of the meeting was to provide an update on the Project, including discuss specifics regarding the provincial Project review process and content including alternative routes, and to understand the potential interest that Webequie First Nation may have in the Project.	■ Questions were asked about how the CAR would be constructed including sources of aggregate material. *Response: Aggregate material is expected to be sourced in the vicinity of the access road. This Detailed Project Description document provides further details about this.* ■ It was asked if capacity funding would be available for participation in the Marten Falls impact assessment and regulatory review process. *Response: There are some Project funds available to support communities in engagement program participation and to support the collection of Indigenous Knowledge. The Federal Government and Province of Ontario have also identified the availability of participant funding.* ■ It was noted that there could be opportunities for consistent information collection regarding Indigenous Knowledge as the two projects have some common communities to engage with. ■ *Response: MFFN is following up with Webequie First Nation regarding their interest in the participation of Indigenous Knowledge collection.* ■ Questions about planned baseline water studies for both projects were raised. *Response: MFFN will have future discussions on whether shared baseline studies are possible and desirable.* ■ Interest was expressed on having regular calls to update each community on the MFFN and Webequie road impact assessment and regulatory review process. *Response: MFFN is interested in holding regular calls with Webequie First Nation to share project experiences.* ■ The two communities are to explore a future meeting regarding the sharing of Indigenous Knowledge. *Response: MFFN is following up with Webequie First Nation regarding their interest in the participation of Indigenous Knowledge collection.*
Weenusk First Nation	MFFN has discussed the Project with Linda Hunter from Weenusk to provide an update on the Project, answer any questions and receive input. At this time no interest to meet has been expressed, MFFN will continue to follow-up with Linda and Chief Hunter, and provide Project information, on an ongoing basis to gauge interest and receive any input.	■ None expressed at this time

Table 4-7: Summary of 2019 Meetings/Discussion to Date with Neighbouring Communities and Responses from MFFN

Community / Date*	Description	Key Comments and / or Issue Raised by MFFN
Wunnumin Lake First Nation (WLFN)	MFFN has continued outreach to WLFN Chief Sam Mamakwa and Deputy Chief Glidday to discuss the Project. In early July 2019 ENDM noted to the Project Team that Deputy Chief had expressed an interest in the Project and for MFFN to follow-up with him. MFFN has attempted to follow-up with Deputy Chief Glidday several times with no success. MFFN will continue outreach with WLFN to determine interest in a meeting. At this time Chief Mamakwa has expressed no issues or concerns with the Project and that he will contact Chief Achneepineskum if he wishes to meet or has any issues / concerns. Project information will continue to be provided.	■ None expressed at this time
Métis Nation of Ontario, Region 2 (MNO)	MFFN has discussed the Project with MNO to gauge their interest and to answer any questions and receive input. At this time MNO noted no interest to meet and does not have any issues or concerns. MFFN will continue to follow-up with MNO and provide Project information on an ongoing basis.	■ None expressed at this time
Red Sky Independent Métis Nation (RSIMN)	The Project Team has discussed the Project with Dean Whelan from RSIMN and were able to meet with Dean at a Project PIC. Dean noted general interest in the Project and for MFFN to keep providing Project documents and any updates. At this time no concerns or issues have been identified. Project information will continue to be provided.	■ None expressed at this time

5. Any study or plan relevant to the project, that is being or has been conducted in respect of the region where the project is to be carried out, including any regional assessment that is being or has been carried out under section 92 or 93 of the Act, or by any jurisdiction, including by or on behalf of an Indigenous governing body, if the study or plan is available to the public.

No regional studies (cumulative effects studies at a regional scale), as defined under Section 93 of Canadian Impact Assessment Act *2019*, have been or are currently being conducted in the Project area.

The following past studies were completed and have been considered as part of this Project's development:

- Winter Road Realignment Study (Neegan Burnside Ltd. 2009)
- 2011 MFFN Winter Road Realignment / All Weather Road Project, Feasibility Analysis and Business Plan Report (W. L. Lees & Associates Ltd. and Marten Falls Logistics-LP. 2011), commonly referred to as the 2011 Bill Lees Report
- 2011-2012 MFFN Winter Road Realignment (KBM Resources Group n.d.)
- 2011-2013 Industrial North-South Proposed Road Corridor, Cliffs Chromite Project Environmental Assessment, Technical Supporting Document, Project Alternatives Assessment (Cliffs 2013)
- MFFN Community Based Land Use Plan (CBLUP) Terms of Reference (MFFN and MNRF 2013) and ongoing planning
- 2017 MFFN All-Season Community Access Road – Project Proposal (MFFN 2017)
- Webequie Supply Road Initial Project Description (Webequie First Nation 2019)

These reports have provided historical Project development information, a general understanding of the Project region and a basis for many of the sections within this document. No other federal Environmental Assessment reports were used by the Project team other than the Cliffs Chromite Project Environmental Assessment; information was used in the preparation of this Detailed Project Description.

Much of the Project is expected to occur on lands regulated under the *Far North Act, 2010, S.O. 2010, c. 18*. The *Far North Act* is the legislative foundation of land use planning in the Far North of Ontario (Government of Ontario 2014). The purpose of the Act is to provide for CBLUPs in the Far North. The entire length of the road corridor is expected to occur in an area covered by the Marten Falls CBLUP which has not yet been finalized. Portions of the CBLUP may consider areas set aside for protection and other areas for economic development opportunities. The CBLUP team is in support of the Project (MFFN 2017).

Baseline studies have been initiated by MFFN to identify natural environment, human health, cultural heritage and archaeological aspects that will be considered in the design, construction and operation/maintenance of the Project.

6. Any strategic assessment, relevant to the project, that is being or has been carried out under section 95 of the Act.

MFFN is not aware of any strategic assessment, relevant to this Project, that is being or has been carried out under section 95 of the Act.

Part C: Project Information

7. An updated statement of the purpose of and need for the project, including any potential benefits.

The proposed Project includes the construction, operation and maintenance of a two-lane gravel all-season multi-purpose CAR.

The MFFN community is currently accessible year-round by air and by seasonal winter road. The MFFN community typically receives between 2.5 and 3.0 tonnes of supplies per capita annually. The winter road system provides for vehicular access to the community, but it has been determined to be insufficient for community and other transportation needs primarily due to the limited reliability of open winter road access. In addition, MFFN must establish the winter road each year.

Since the mid-1990s, MFFN has received provincial and federal funding to maintain 140 km of winter road to MFFN. The period of useful and safe availability of a winter road system is dependent on weather. The winter road system to the MFFN community is typically operational about six to eight weeks annually between the months of February and March. With winters increasingly becoming warmer, the use of the winter roads has reduced the period of safe travel, including travel restrictions at night.

In 2011, MNRF approved the construction of an upgraded winter road from Nakina to Marten Falls to provide more reliable access, reduce the cost of transporting supplies, increase safety of winter road travel and to provide the community with economic opportunities associated with mineral developments in MFFN territory or near the Project, including the Ring of Fire area. The development of these mineral deposits could offer considerable employment opportunities and other benefits to surrounding Matawa First Nations communities, including MFFN (W. L. Lees & Associates Ltd., & Campbell 2011). Currently, no all-season ground access exists to the Ring of Fire mining claims or mining claims of interest north of the community.

The use of a winter road system has led to travel and environmental concerns:

- Operational issues associated with terrain constraints (i.e., land that is rocky, uneven, steep, muskeg, temporary water course crossings) and a short period for safe operational use;
- Potential for environmental effects due to, but not limited to, fuel spills, equipment use in challenging conditions and water course crossings; and
- Speed and safety concerns associated with narrow, winding roads with sharp curves and water course crossings.

As a result of issues related to winter road use, the community has had to become more reliant on-air transportation of the goods needed to sustain community life. This has led to an increase in cost to ship goods and materials, food and fuel to the community. Interests and concerns of the community have identified a strong desire for improved all-season community access. The Project is community-led and this has been a vision and a desire of the community for many years.

The Project is proposed to provide reliable all-season multi-purpose ground access between MFFN and the provincial highway network. Reliable ground access is expected to increase travel safety, reduce the price of food, fuel and supplies, and provide the community with future economic development opportunities. Although the primary use of the CAR will be to service MFFN, provincial interest is for one road to serve both community access

and future mineral exploration development needs. Therefore, the Project will be for a multi-purpose road built to meet commercial / industrial use specifications. The Project will provide substantial benefits to MFFN regardless of if a future link to potential northern mine development areas may become viable. While there are ongoing discussions and studies related to roads leading to the Ring of Fire area, timing, ownership, funding and feasibility of those potential future roads are all unknown and therefore a future road or roads to the Ring of Fire area would be separate from this Project (i.e. not proposed as part of this Project).

MFFN understands that improvements to Painter Lake Road are expected to be completed by Aroland First Nation as necessary to allow for access to the MFFN CAR Project. It is understood that Aroland First Nation has received an agreement for funding from the Province of Ontario to initiate the required planning and design study and regulatory review process.

The construction and subsequent annual maintenance will also provide opportunities for MFFN to develop equipment, operations and project management skills that would be transferable to other community and industrial projects in the region.

8. The provisions in the schedule to the Physical Activities Regulations describing the project, in whole or in part.

The Project is listed under the Physical Activities Regulations, SOR/2019-285, *Impact Assessment Act* 2019 (*Impact Assessment Agency of Canada 2019)* as a designated project because the Project meets the definition of a physical activity for transportation projects set out in the regulation as follows:

> ***s 51*** *The construction, operation, decommissioning and abandonment of a new all-season public highway that requires a total of 75 km or more of new right of way*

The Project is independent and not a component of a larger project.

9. A description of all activities, infrastructure, permanent or temporary structures and physical works to be included in and associated with the construction, operation, decommissioning of the project, including their purpose, size and capacity.

Project engineering is currently at the conceptual level. Responsibility of the construction, operation and maintenance of the CAR will be determined through the ongoing negotiations between MFFN and the Province of Ontario. Project components for the CAR are anticipated to include:

- Between 190 km to 230 km of all-season gravel road, depending on the preferred route;
- Approximately 50 bridge and / or culvert installations for river and stream crossings;
- Culverts for water flow connectivity and to balance water levels;
- Borrow areas;
- Temporary access roads and construction of temporary crossings; and
- Temporary work areas and camps.

Project component details, including finalized locations will be revised based on the results of the ongoing engineering design, environmental studies, Indigenous Knowledge and engagement. The MNRF has provided recommended practices for the construction of access roads on Crown Land in their publication *Environmental Guidelines for Access Roads and Water Crossings.* Additionally, the detailed design will consider the results of baseline environmental currently being conducted to avoid or minimize potential effects on natural features such as

wildlife habitat, wetlands and peatlands. Should an impact assessment be required by IAAC for the Project, additional information regarding proposed locations of these components along a proposed CAR alignment, and an assessment of both positive and adverse effects, will be conducted and mitigation measures to avoid or minimize potential adverse effects of the Project will be proposed and included in an Impact Statement document.

The following sections provide additional information on the main Project components.

Road

The CAR will be built within a 100 m right-of-way cleared to a width of 60 m for permanent use with additional temporary clearing occurring in certain locations for construction to accommodate activities such as aggregate sources (e.g., quarries), temporary contractor laydown areas, and debris and / or timber stockpiles. Vehicles anticipated to use the CAR include personal vehicles (e.g., cars, vans, small trucks, motorcycles), and commercial vehicles including larger trucks up to the legal road limits on weight and size. The number of anticipated vehicles to use the CAR is not known at this time. The CAR will be designed using an Annual Average Daily Traffic amount of up to 400 and in accordance with the Ministry of Transportation's (MTO) Highway Classification, Design Speed (i.e., 80 km/hr), Geometric Design Standards Manual for Ontario Highways (MTO 1985) and the Canadian Highway Bridge Design Codes (Canadian Standards Association 2014). The predominant building materials will be blasted rockfill and composite excavation material capped with granular surface material. The majority of blasted rockfill will be obtained from rock outcrops within and / or adjacent to the right-of-way. The road will be designed and built to approximately 1 m to 1.5 m above the original ground elevation. The cross-section will have a 10 m top width and recoverable side slopes of 4:1.

Borrow Areas

Rock quarries and borrow areas will be developed to provide crushed rock and granular materials (aggregates) for the construction of the road and temporary access roads. Rock and granular material required for the construction of the CAR, temporary roads, and staging areas will be obtained from sources both within and outside of the final proposed CAR right-of-way. Potential sources for aggregates are shown in **Figure 1-1 and Figure 1-2.** Temporary access roads will be established to connect the various Project components as required and will be limited in length to the extent feasible. The total area for quarries and borrow materials will be contingent upon the final route selection and quality of quarries and borrow areas identified. However, given the existing resources available, none of the borrow areas are anticipated to be of size and volume thresholds regulated by Section 18 (f) and Section 19 (f) of the federal *Physical Activities Regulations: SOR/2019-285* (IAA, 2019). Final route selection and associated borrow materials required will be determined during the impact assessment and regulatory review process, and Project detailed design, including potential effects evaluation and Indigenous Knowledge and information obtained through engagement activities.

Final details regarding the exact location of quarry pits and work camps (ancillary structures; see below) will be determined as studies are completed and the detailed design is prepared. Studies being conducted include areas along each alternative route that take advantage of existing aggregate materials to minimize the need for sourcing materials further from construction areas.

Bridges and Culverts

Bridges will be required over the various waterways to provide grade separation with sizes ranging from single span to multi-span bridges. Crossing structures will range from one metre in diameter (small culverts) up to 350 m for longer, multi-span bridges (refer to **Figures 13-1** and **13-2** for proposed crossings). They will be designed to carry two lanes of traffic with appropriate shoulder widths. The foundation support for the bridge abutments are expected to consist of steel H-piles with concrete cast-in-place caps driven to refusal.

Equalization culverts will be installed at locations where it is determined that spring-melt or storm runoff needs to pass from one side of the CAR to the other to prevent flooding and / or erosion. The purpose of equalization culverts is to maintain the existing surface water drainage patterns in the area. Culverts will be put in place as construction progresses along the preferred route.

Culverts will range from small diameter corrugated steel pipes for overland water drainage to large concrete box or steel arch culverts for smaller waterways. Small diameter corrugated steel pipe culverts will be a minimum of 600 millimetres (mm) in diameter, large concrete box culverts will be an approximately 3 m to 4.5 m square, and large steel arch culverts will range from approximately 3 m up to 8 m in diameter with a semi-circular shape.

Table 9-1: Estimated Number of Culvert and Bridge Water Course Crossings

Description	Alternative 1	Alternative 4
Major Crossings (i.e., long-span bridges)	3	3
Minor Crossings (i.e., short-span bridges and culverts)	43	44
Total Crossings	**46**	**47**

Ancillary Infrastructure Including Worker Camps

Temporary access roads may be required to access the right-of-way. The purpose of the temporary access roads is to facilitate emergency access, equipment and personnel access, and to provide access to and from quarries and borrow sites. Most of these temporary roads will be developed within the right-of-way of the CAR with the exception of those required for access to the quarries and borrow sites. The temporary access roads will be cleared, but not grubbed, and will be approximately 10 m wide to accommodate equipment movement. Upon completion of construction, the temporary access roads will either be decommissioned, or blocked to discourage public use but facilitate access for ongoing road maintenance.

Temporary construction camps and staging areas will be established at various locations along the right-of-way to support crews, store equipment, vehicles, materials and supplies.

Once the final recommended proposed CAR route is determined and after the detailed design is completed, temporary worker camps will need to be established during construction at strategic locations along the final CAR alignment. The number of worker camps required will be determined in discussion with construction contractors. It is anticipated that at least two worker camps of approximately 20 to 50 workers will be active at any one time during the CAR construction; one camp near the start of the CAR route and the next camp located further along the CAR route at the first major water crossing so that the water crossing structures can be constructed to accommodate road construction vehicles and machinery required for the next segment of CAR to be constructed. The sequencing of CAR construction, and therefore the number of temporary worker camps in operation at any one time, will be determined after the detailed design is completed. The distance of temporary worker camps from the active CAR construction sites will be a maximum of approximately 30 km to provide a practical travel distance for the works. If the CAR will be constructed simultaneously in a south to north direction from Painter Lake road, and from a north to south direction from the Marten Falls community, then at least four worker camps may be in operation at any one time. In that scenario, construction equipment could be brought to the Marten Falls community during the winter via winter road to start construction of the north end of the CAR at the same time the south end of the CAR starts construction. Alternatively, the CAR could be constructed only from south to north from Painter Lake road and at least two temporary worker camps would be operational at any one time. To minimize the amount of natural area needing to be cleared to accommodate worker camps, the number of temporary worker camps will be minimized to the extent feasible and will be sequentially decommissioned, and the areas revegetated, once the worker camps are no longer required.

Construction Vehicles and Equipment

It is expected that multiple pieces of equipment will be required during the construction of the CAR, including but not limited to:

- Crushing Spreads;
- Hauling Trucks;
- Excavators;
- Loaders;
- Dozers;
- Graders;
- Packers;
- Water Trucks;
- Backhoes;
- Half Tons; and
- Fuel tanks.

During construction, the Contractor will be responsible for maintaining the temporary access roads, quarries and other related elements of construction activities. Fuelling will occur at pre-determined locations within the right-of-way and will not be located closer than 100 metres (m) of waterbodies. Secondary containment and spill response materials will be provided at fuelling locations to ensure hazardous materials are not introduced to the environment. Equipment will be maintained to ensure noise and air emissions are minimized.

10. An estimate of the maximum production capacity of the project and a description of the production processes to be used.

The CAR will be designed using an Annual Average Daily Traffic amount of less than 400 and in accordance with the Ministry of Transportation's (MTO's) Highway Classification, Design Speed, Geometric Design Standards Manual for Ontario Highways (MTO 1985) and the Canadian Highway Bridge Design Codes (Canadian Standards Association 2014). The primary use of the CAR is to service the community of MFFN.

11. The anticipated schedule for the project's construction, operation, decommissioning, and abandonment, including any expansions of the project.

The proposed Project will be executed in three main stages. Their estimated schedule, subject to pending regulatory approval, and final financing arrangements and agreements, is provided:

- Planning and Design (2018-2021)
- Construction (2021-2031)
- Operation and Maintenance (2031+)

The proposed construction period reflects information acquired from studies related to the Project region (**Section 5**) and from discussions with the Province regarding funding opportunities. MFFN is optimistic that construction will be completed within three years; however, should funding terms result in a longer development period, 10 years has been selected as a conservative time frame for completion. MFFN is committed to engaging stakeholders and communities with respect to their interest and potential involvement in the Project and will continue to seek their input as the Project moves forward.

Currently, there are no plans for decommissioning the CAR should it be constructed. Decommissioning of temporary components that are no longer required, once construction of the CAR is complete, will occur as a part of the construction phase of the Project. These temporary components include: access roads, quarries, borrow areas, and construction staging areas not required to maintain the CAR once it is built.

Should decommissioning activities eventually be considered for some or all Project components, decommissioning will be planned and conducted in accordance with the relevant standards and regulatory requirements in effect at

that time. If decommissioning activities are required, a detailed review of the potential environmental effects and mitigation measures will be conducted.

It is expected that the existing winter road will no longer be maintained once the CAR is commissioned and it will be allowed to revegetate naturally.

Phase 1: Planning and Design

Planning and design of the proposed CAR has involved identifying and examining multiple route options, as broad corridors **(Section 12a)** as part of the early Project engagement activities with federal and provincial regulators, neighbouring Indigenous communities* and during the provincial regulatory review process. A preliminary road alignment and associated design is to be developed as part of the regulatory review process. A formal detailed design process is expected to begin once the Project has received regulatory approval and additional funding has been secured.

The planning process includes the development of a Project Consultation Plan with a MFFN community-led approach in mind and will allow for communication and engagement with neighbouring Indigenous communities. Feedback from members of MFFN, neighbouring Indigenous communities, the public, and other stakeholders will be gathered and incorporated through a variety of methods, including the federal regulatory review process and publication of this Detailed Project Description. The federal government has funding available which supports Indigenous groups, individuals and non-profit organizations interested in participating in the Project review process through an application and eligibility process.

The preliminary design process is occurring concurrently with the impact assessment and regulatory review process and will include surveying, and geotechnical investigations and baseline environmental investigations.

This planning and design phase of the Project began in 2018 and will take approximately three to five years.

Phase 2: Construction

A detailed construction schedule will be prepared as part of the Project application process and will consider potential environmental constraints including conducting Project construction work to avoid sensitive seasonal timing windows and to avoid or minimize Project effects on breeding birds, including migratory birds, and other wildlife species.

The planning of construction activity details will be developed as part of the Project feasibility study, in order that the establishment of quarries and borrow areas, temporary access roads and temporary construction staging areas can be done during the construction stage. All construction supplies will be transported to the Project site along the temporary access roads and stored at the temporary construction staging areas. Once these preliminary site preparation activities have been completed, the proposed CAR, bridges and culvert crossings will then be constructed.

It is anticipated that the construction will be undertaken in several phases starting from the south near Painter Lake and working northward towards Marten Falls. Key construction activities will include: clearing and grubbing, construction of temporary roads and staging areas, establishment of construction work camps, development of quarries and borrow areas, construction of the CAR, bridges and culverts, decommissioning of temporary works and demobilization activities once construction is complete.

It is anticipated that the construction phase of the Project will be approximately three to ten years. This wide proposed construction phase timeline is needed to accommodate a variety of construction methods that could be

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* *Neighbouring Indigenous Communities includes the 23 Indigenous communities identified for engagement by Federal and Provincial governments plus other community members who may have participated in engagement activities held to date. This is discussed more in Section 4.*

employed dependant on weather conditions, the routing circumstances and funding. Planning and design will continue into construction to allow work to commence on the implementation of the Project as the design is finalized in phases, taking into consideration the most up to date conditions encountered in the field. Construction activities will occur during frozen and non-frozen conditions. CAR construction work involving rock is typically done during winter when the ground is frozen for ease of construction with heavy rock materials, whereas construction work involving aggregates (e.g. sand, clay) is typically done during non-winter months.

Clearing and Grubbing

Clearing and grubbing involves removing and disposing of trees, shrubs, fallen timber and other surface refuse. Vegetation clearing will be required for both temporary and permanent Project components. To avoid or minimize adverse effects to wildlife and fish species, including migratory birds, vegetation clearing, and in-water work will occur outside of the sensitive seasons for wildlife and fish species as required by government legislation and regulatory guidelines. Clearing will be undertaken by local clearing crews using hydro-axes, dozers and power saws where required. Merchantable timber will be stacked along the right-of-way and made available for the communities and / or piled and burned or buried within the right-of-way. Organic materials stripped from the surface will be stockpiled and / or graded on the backslopes within the right-of-way. Where required, stumps and roots will be grubbed out and separated from the soil and buried. Non-salvageable material such as brush, roots, and limbs will be piled and burned or buried.

After clearing and grubbing of the right-of-way is complete, the subgrade will be graded and prepared for the road embankment which will be predominately comprised of rock fill or composite material. Ditching and drainage excavation will be undertaken using best practices for fire mitigation and erosion control measures.

To minimize environmental effects as a result of accidental spills or leaks from clearing equipment, petroleum products to be used at the site will be stored in double-walled tanks in accordance with the National Fire Code of Canada, Storage and Handling of Petroleum Products and Allied Products Regulation. Sanitary and solid waste will be collected and transported to licensed or approved waste disposal and treatment facilities.

Constructing the CAR and Ancillary Components

Construction activities will begin with the clearing and grubbing of temporary construction staging areas including construction work camps. Temporary access roads will be built to access borrow and quarry sites both within and outside the CAR right-of-way depending on where the rock and aggregate resources are located. For rock and aggregate sources not located within the CAR right-of-way, a minimum 30 metre natural vegetation buffer will be left between the rock and aggregate sources and the CAR right-of-way. The rock quarries will be cleared, grubbed, drilled and blasted. The actual locations of the borrow and quarry areas are being developed as a stand-alone aggregate report under the preliminary engineering scope of the Project.

The CAR right-of-way will be cleared, grubbed and rock outcrops will be blasted as required. Organic materials will be stripped, stockpiled and used along the road back slopes. Materials, including rock fill, aggregate and composite material will be loaded, hauled, dumped, spread, graded, compacted, trimmed, and shaped before final surfacing with gravel. A geotextile fabric will be placed in wet areas to improve the integrity of the CAR. Roadway signs will be installed, sedimentation control measures will be implemented, and disturbed areas will be prepared for re-vegetation or will be seeded, as required. If drill cuttings are produced, they will be captured, treated and disposed of in an environmentally responsible manner as per regulations listed in **Section 18** (**Table 18-1**) in this Detailed Project Description.

The subgrade for culvert foundations will be excavated, prepared, and compacted to design grade-line. Given the nature of the terrain and high potential to encounter wetlands, dewatering may be required as part of construction activities. If required, dewatering activities will adhere to applicable regulations, as outlined in **Table 18-1**. Any

dewatering activities and discharge will be captured, treated and disposed of in an environmentally responsible manner. A geotextile will be installed and a suitable bedding material (sand or culvert gravel), will be placed and compacted to provide uniform support prior to installing the culverts. The culverts will be assembled, placed to the design grade and alignment and backfilled in compacted lifts. Culverts will be designed in accordance with provincial standards and federal fish passage requirements.

It is anticipated that road and bridge embankment construction activities will be undertaken for most of the year including during the winter.

During construction, the Contractor will be responsible for maintaining the temporary access roads, quarries and other related elements of construction activities.

Decommissioning and Demobilizing from the Project Site

Construction equipment and vehicles will be demobilized once construction is complete. Work areas including temporary access roads, staging areas and construction work camps that are no longer required, will be decommissioned. The quarry and borrow areas and associated temporary access roads used during construction and not required for CAR maintenance will be decommissioned when they are deemed to be completed. Some quarries may remain for future use in maintenance. Aggregate materials from these access roads will be salvaged and stockpiled in the appropriate areas for further crushing, if needed, and re-used as future maintenance material. Borrow pits will be excavated as uniformly as possible and will be levelled and trimmed when excavation is complete. Disturbed areas will be restored by spreading stockpiled topsoil and seeding and / or planting as required.

Phase 3: Operation and Maintenance

Maintenance activities will occur throughout operation of the CAR. These include: routine grading; topping the road with additional gravel; managing vegetation; and cleaning out culverts, when required. In winter, snow clearing activities will be carried out using ploughs, graders, loaders, and dump trucks. Dust suppression will be applied to road surfaces during the summer months, if required. Dust suppression activities and materials will be in accordance with provincial standards. Materials used will be applied as specified by the manufacturer, and only where necessary. Aggregate materials will be sourced from the existing borrow areas and rock quarries previously utilized during construction, or new aggregate sources will be located on provincial Crown Land. Aggregate materials will be deposited on the road surface using dump trucks, dozers, and graders.

MFFN, under funding arrangements with the Province of Ontario, is managing all phases of the Project development, which will include Project design to accommodate commercial / industrial use, and Project construction and operation. MFFN will make decisions on the CAR under the leadership of MFFN Community Member Advisors, MFFN Chief and Council, and with support of technical advisors. Options for road ownership, maintenance activities and liability are being considered in discussion with the Province.

12. A description of potential:

a) Alternative means of carrying out the project that the proponent is considering and that are technically and economically feasible, including through the use of best available technologies; and,

MFFN is currently assessing alternative routes for the Project. Alternative routes were previously identified by MFFN in consultation with federal and provincial agencies and documented in the 2017 *Preferred Route Selection and Preliminary Environmental Work Project Proposal* report (MFFN 2017). MFFN proposed these routes based on

years of studies and consultation. The routes lie primarily above the Far North Boundary and to the south of the community of MFFN. The *Far North Act* is the legislative foundation of land use planning in the Far North of Ontario. Far North land use planning is about working with Indigenous communities to identify where development can occur and where land is dedicated to protection in the Far North, which covers 42% of Ontario's land mass (Government of Ontario 2012). Development of the route alternatives considered information from a number of historical studies that included helicopter reconnaissance, aerial photogrammetry and satellite imagery methods (W. L. Lees & Associates, & Campbell 2011), as well as consultation with the MFFN community in March 2017.

Using this information, four initial alternative routes were identified in the Initial Project Description. Each of the proposed four alternative routes were based on desktop information located within a 5 km wide corridor. The locations of the alternative routes were identified in consideration of the following criteria:

- Avoid areas of muskeg and bog deposits
- >200 m from the Ogoki River and >1 km from the Albany River, except for water course crossing location
- Minimize the number and size of water course crossings
- Maximize high ground location
- Shortest length to the community

Additional community consultation and outreach on these initial four alternatives was undertaken following submission of the 2017 Project Proposal, as described in **Section B**. Field investigations were undertaken to further characterize the existing environment and consultation occurred to seek input on values and features of importance to the community. Routing adjustments were made to the alternative routes identified in the 2017 Project Proposal (MFFN 2017) based on comments received, Indigenous Knowledge of the area, and in consideration of dedicated protected areas identified through CBLUP development. Portions of routes were changed to avoid environmental and socio-economic features, while other portions of routes were removed completely as route options for the Project.

Since the submission of the Initial Project Description to IAAC, MFFN has reduced the number of alternative CAR routes from four to two. Feedback received during winter and spring 2019 consultations confirmed that Alternative 2 and Alternative 3 (eastern alternative routes) are not considered to be acceptable alternatives for the Project based on the concerns raised by MFFN community members and Chief and Council. Specifically, MFFN signed a Band Council Resolution on July 31, 2019 to only consider the western alternative routes (Alternative 1 and Alternative 4) in the impact assessment process because the eastern routes are only considered viable if the road is built as a dedicated MFFN community access road, and not also as an industrial supply road (i.e., a multi-use road). Reasons for this decision include safety, health and well-being impacts to the community related to industrial traffic travelling through the community as well as a high span bridge that would be required in close proximity to the community. The funding arrangement with the Province requires that the road be built to accommodate both community access as well as future potential mineral development related traffic ("industrial").

Both Alternative 1 and Alternative 4 start at Painter Lake Road and run north before turning eastward toward MFFN roughly following the west / north side of the Albany River. The routes are based generally on the proposed north-south corridor developed by Cliffs Natural Resources for an all-season access road from Painter Lake Road to the Ring of Fire (Cliffs 2013). The two alternative routes parallel, overlap and cross each other at multiple locations. The key distinguishing points of the two alternative routes are described below.

Alternative 1: ..... This alternative has a longer route length, avoids crossing the Ogoki Provincial Park, and the northern portion of the route is aligned along higher ground and sources of aggregate around an area of large mining claims before connecting east-west to MFFN.

Alternative 4: ..... This alternative has a more direct (i.e., shorter) route, crosses the Ogoki Provincial Park, and is aligned further east to avoid sensitive areas near the Albany River crossing before connecting east-west to MFFN. Sensitive areas near the Albany River needing to be avoided were identified through Indigenous Knowledge feedback received through the Project engagement and consultation process.

Considering the Project is proposed as a multi-purpose CAR built to meet industrial use specifications, the eastern alternative routes shared during the early consultation process are not considered reasonable alternative methods for the Project and will not be further considered. Additional information on the development and identification of alternative routes for the CAR, including issues, concerns and decisions made that influenced what is considered a reasonable alternative for the Project, is provided in the *Marten Falls First Nation Community Access Road Supporting Document - Alternatives Development Document* (AECOM 2019*). Feedback from MFFN's ongoing engagement program and the federal and provincial consultation process regarding this Project will be considered in the determination of the final CAR route.

Improvements to Painter Lake Road, south of the CAR and connecting to the provincial highway network (Highway 643) are being undertaken by Aroland First Nation. Improvements to Painter Lake Road will be required for the proposed CAR to be constructed. Aroland First Nation has received an agreement for funding from the Province of Ontario to initiate a planning and design study for the Painter Lake Road improvements as an independent project to the MFFN CAR.

b) Alternatives to the project that the proponent is considering, that are technically and economically feasible and directly related to the project

Ontario's Infrastructure Plan (MOI 2018) acknowledges that the communities and urban centres in Northern Ontario need of a multimodal transportation system and that the North is especially vulnerable to the impacts of climate change, particularly in communities that rely on seasonal winter roads. The proposed Project is identified in the Infrastructure Plan, which states that the province is working with MFFN to plan and construct an all-season access road connecting the community to the existing provincial highway network, Highway 643 west of Nakina. Building the Project is part of the provincial government's commitment in Ontario's Infrastructure Plan to create jobs, provide long-term benefits and improve the quality of life for people in the region.

To address the problem of unreliable community access to MFFN, the provincial government has provided funding for permitting and approval of an all-season multi-purpose CAR Since the proposed Project has already been identified in the provincial Infrastructure Plan, MFFN is not conducting an assessment of alternatives to the undertaking. It is understood that the government would have considered the alternatives to the proposed Project when committing to provide funding for an all-season access road. To reach the decision of proceeding with a CAR, consideration of a range of alternatives to the CAR that are within MFFN's ability to implement would have been determined less preferable. Additionally, an all-season access road to MFFN has been identified in Ontario's Long-term Infrastructure Plan 2017 (MOI 2018). Therefore, MFFN is not considering different types of transportation provision projects (such as rail) as alternatives to the Project.

Although the Project is for a CAR, with the primary purpose to service the community of MFFN, the need for a supply road to mining claims in the region has been previously identified by industry and government (i.e., Ontario Infrastructure Plan). It is possible that a supply road would be constructed from a point along the CAR to the mining claims north of MFFN, including the Ring of Fire area. Provincial interest is for one road to be built to serve both community access and industrial supply needs (i.e., multi-functional use). Therefore, the proposed CAR may be used by private, commercial and industrial interests, and may provide a means of transportation for potential future mining

* *Document will be available for review on Ontario.ca registry for the Marten Falls Community Access Road Project in December 2019.*

activities. If all-season ground access is not provided, the lack of affordable hauling may create a barrier to the development of existing and future industrial opportunities (e.g., full potential of resource is underutilized due to haul costs or lack of access impedes resource exploration). Since resource development in the region may provide employment, skills development and economic benefits, missed opportunities are likely if the CAR is not constructed.

Not proceeding with the Project does not address the problem of unreliable community access to MFFN and limits industrial opportunities and resulting benefits to MFFN and others in the region. The ’do nothing ‘alternative highlights the benefits of proceeding with the Project, which include addressing the problem, expected improvement to travel safety, and providing socio-economic benefit to the community.

Part D: Location Information and Context

13a. Its proposed geographic coordinates including, for linear development projects, the proposed locations of major ancillary facilities that are integral to the project, and a description of the spatial boundaries of the proposed study corridor.

The northern termini geographic coordinates for alternative routes are as follows:

For Alternatives 1 and 4:

- Latitude: 51.654969
- Longitude: -85.920411

The southern termini geographic coordinates for the alternative routes are as follows:

For Alternative 1:

- Latitude: 50.812382
- Longitude: -86.55977

For Alternative 4:

- Latitude: 50.734075
- Longitude: -86.656762

The study area, currently being considered within the scope of the ongoing provincial regulatory review process, includes the area within 2.5 km either side of the centreline of each alternative route. The 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 proposed Project engineering is currently at the conceptual level and the assessment process of the two alternative routes, towards determining a final route, is ongoing. Final details regarding the exact location of the final route alignment and associated watercourse crossings, and major ancillary features including aggregate sites, quarry pits and work camps, will be determined as studies are completed and the detailed design is prepared. Studies being conducted include areas along each alternative route that take advantage of existing aggregate materials to minimize the need for sourcing materials further from construction areas. The detailed design will also take into account the results of baseline studies currently being conducted in order to avoid adverse effects of the Project, including major ancillary facilities, on natural features such as wildlife habitat, wetlands, and peatlands. Information regarding proposed locations of major ancillary facilities along a proposed CAR alignment will be provided once a proposed CAR alignment is determined through ongoing studies and feedback from the ongoing engagement program. Key steps of the ongoing engagement program that are intended to obtain feedback on the two proposed Project alternatives towards determining the final CAR alignment and locations of major ancillary features are summarized as follows:

1. Send letters introducing the proposed Project to Neighbouring Indigenous Communities and key stakeholders
2. Hold meetings with Neighbouring Indigenous Communities and select members of those communities (e.g., Elders, hunters, trappers)
3. Provide Project update information and opportunities for feedback using a variety of communication tools to Neighbouring Indigenous Communities and key stakeholders (e.g., Project website; social

media, notices in local newspapers and on the radio, newsletters, email updates), including letters seeking feedback on locations of Project components including major ancillary facilities

4. Keep records on input received and provide updates using communication methods described above on how feedback has influenced the Project design

Additional information regarding the Project engagement and consultation process is provided in Part B: Planning Phase Results. MFFN is committed to engaging communities that may be potentially impacted by the Project, or those communities who have expressed interest on the Project as whole. These efforts and communications with respective groups will be considered in the preferred route selection and microsite selection of ancillary infrastructure components.

13b. Site maps produced of an appropriate scale in order to determine the project's proposed general location and the spatial relationship of the project components.

The two Project alternative routes, reflecting consultation done to date, are illustrated in **Figure 1-1 and Figure 1-2**. The figures provide an overview of the major water course crossings and waterbodies, existing winter road access, existing aggregates available for use, First Nation reserve lands, federal lands, existing infrastructure (e.g., road and power), land use planning areas, and proximity to any known or publicly available information on seasonal or temporary residences. Temporary access roads will be defined in the future based upon further site analysis and detailed engineering design taking into consideration environmental and cultural heritage / archaeological constraints as well as Indigenous Knowledge. Site photographs are not available at this time.

13c. The legal description of land to be used for the project, including, if the land has already been acquired, the title, deed or document and any authorization relating to a water lot. The level of detail should be appropriate for the project type.

The entire Project lies within unorganized territory of Ontario and within the three districts (**Figure 1-1**) of Cochrane, Kenora and Thunder Bay. The majority of the Project is on Unpatented Crown Land. Mining claims that overlap the Project are identified in **Figure 1-1**. Withdrawal Orders for surface and mining rights, requested by the MNRF, were signed by the Ministry of Northern Development and Mines (now ENDM) in 2012 (to support a transportation corridor) and in 2018 (to support the MFFN CBLUP). These Orders withdraw the land from prospecting, staking out, sale or lease. Where the Project is proposed to cross any mining claims, consent to dispose of the surface rights by the claim holder will be required through submission of the Consent to the Disposition of Surface Rights to Ministry of Northern Development and Mines (now ENDM) for each occurrence.

Provincial Parks and other conservation and management areas in the Project region are illustrated in **Figure 13-1** and **Figure 13-2**. The Albany River Provincial Waterway Park is located to the west of MFFN, along the Albany River, and lies partially within / intersects with the Project alternative routes. The Ogoki River Provincial Park is located to the southwest of MFFN and lies partially within / intersects with the Project alternative routes. The Little Current River Provincial Park is located to the south of the existing winter access road and the proposed Project. The Park is along the Little Current River and Percy Lake, which the winter access road was moved from as the Park was developed (MFFN 2017). Agencies (e.g., MECP) responsible for provincial parks and other conservation and management areas will be consulted throughout the Project to share ongoing updates and any relevant Project materials for their review.

13d. The project's proximity to any permanent, seasonal or temporary residences and proximity to the nearest affected communities.

The proposed Project is currently in the planning phase. Therefore, a final CAR alignment route has not yet been determined. The current alternatives for the CAR route alignment are within two Western Corridor (Alternative 1 and Alternative 4) which originates in the south approximately 43 km and 32 km south from Aroland First Nation (for Alternatives 1 and 4, respectively), and terminate at MFFN, which are the closest population centres to the CAR Western Corridor Alternative routes (Figure 4-1). Currently, the closest known trapper cabin to the Project alternative routes is a cabin located 34 km and 28 km southeast of Alternatives 1 and 4, respectively. Within the two Project alternative routes, most land is used for resource harvesting and tourism. Therefore, the land traversed by the Project routes is remote and largely undisturbed.

Determination of the final CAR route will be undertaken based on feedback from the ongoing engagement and consultation process, including Indigenous Knowledge, previous studies, and information that is currently being gathered through ongoing desktop studies, and field studies within the proposed alternative route corridors which will confirm the locations of permanent, seasonal and temporary residences to the extent feasible. Information regarding the proximity of permanent, seasonal and temporary residences will be considered in the determination of the final CAR route and alignment.

13e. The project's proximity to:

- ***Land used for traditional purposes by Indigenous peoples of Canada;***
- ***Land in a reserve as defined in subsection 2(1) of the Indian Act,***
- ***First Nation land as defined in subsection 2(1) of the First Nations Land Management Act***
- ***Land that is subject to a comprehensive land claim agreement or a self-government agreement; and***
- ***Any land set aside for the use and benefit of Indigenous peoples of Canada***

First Nations Reserves

The two alternative routes for the Project occur primarily on provincial Crown land outside of the MFFN boundaries and are part of the ancestral, historical and traditional lands of neighbouring Indigenous communities (MFFN 2017). Alternative 1 and Alternative 4 originates approximately 43 km and 32 km, respectively, south from Aroland First Nation and terminate north within MFFN reserve land. A maximum of 5% of the CAR is to be located on MFFN Reserve land with approximately 47 hectares of reserve land potentially intersected for route Alternatives 1 and 4 **(Figure 1-1).**

Traditional Use Areas

Traditional and cultural understanding among First Nations is that shared land use and wide spread travel by First Nation people was customary. This Project falls within the traditional territory of MFFN, and potential Project-related impacts to those traditional lands of neighbouring Indigenous communities*, including those identified by both the Province and the Agency, will be confirmed and considered as part of the Project planning and design and regulatory review process. To date, the only neighbouring Indigenous community that has clearly indicated that their traditional territory extends into the Project study area is Aroland First Nation. Mapping that identifies the traditional territories of other neighbouring First Nation communities is not readily available. Other Indigenous communities may identify that their traditional territories extend into the Project study area as a result of future

* *Neighbouring Indigenous Communities includes the 23 Indigenous communities identified for engagement by Federal and Provincial governments plus other community members who may have participated in engagement activities held to date. This is discussed more in Section 4.*

planned engagement activities with these other communities. This information may be shared with MFFN in the future as a result of planned engagement activities.

Based on maps available from the CBLUP activities, undertaken prior to and in parallel with this Project and information provided as a result of Project consultation activities to date, the traditional territory of Aroland First Nation exists to the south of the Project, Eabametoong First Nation (Fort Hope) to the west, and Constance Lake First Nation to the east. Land use, if applicable and as indicated by these high-level public maps will be confirmed with the Indigenous communities during the impact assessment and regulatory review process.

Traditional lands and potential Project-related impacts to those traditional lands of neighbouring Indigenous communities, including those identified by early engagement activities by both the province and IAAC (refer to **Part B**), will be confirmed and considered as part of the Project impact assessment and regulatory review process. Indigenous communities typically do not publicly publish maps that specifically identify their traditional territory, other than the CBLUP maps noted. Additional details on the Consultation Plan for the Project and incorporation of traditional lands are presented in **Part B**.

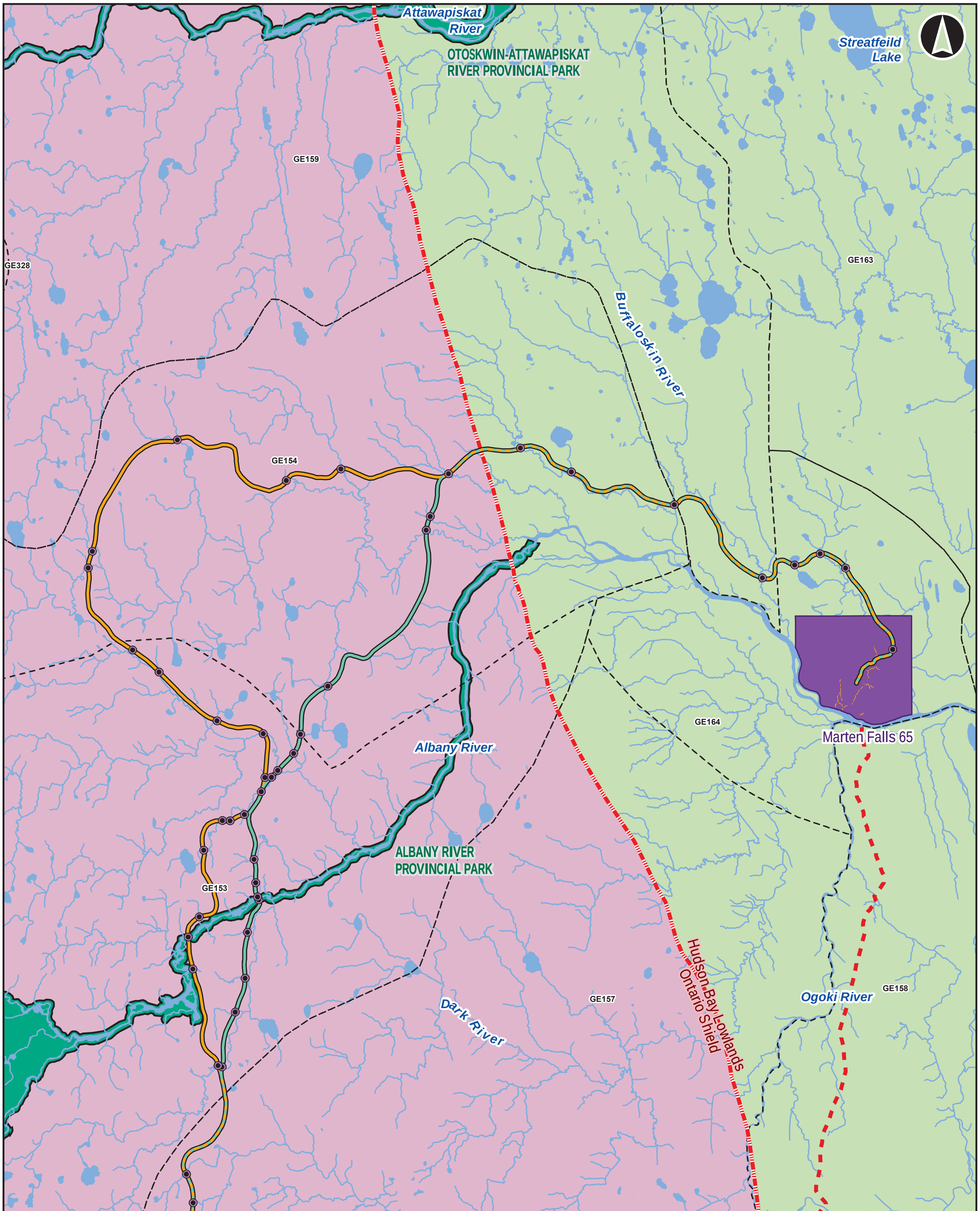
Common land use activities include resource harvesting that are protected under Indigenous Rights and Treaty Rights under Section 35 of the *Constitution Act* (Government of Canada, 1982b). Common harvesting activities undertaken by Indigenous communities, based on initial consultation efforts and related feedback in the area of the Project include: hunting, fishing, and gathering. Presence and location of known, publicly available trapline areas are presented in **Figure 13-1** and **Figure 13-2**. These activities may take place throughout the year and are not bound by the provincial harvest seasons and regulations. Ecologically important areas such as moose calving areas or fish spawning areas are important to traditional land and resource use due their role in producing the harvested resources. These harvested resources are also utilized for cultural practices.

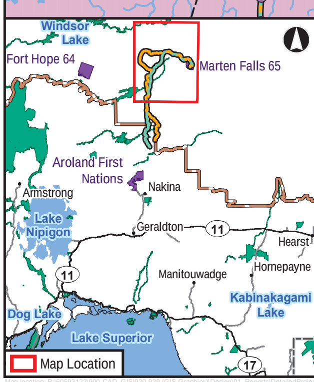
Transportation pathways and features may be utilized to support traditional use of the land. Trails and paths within the area of the Project may be used to access hunting, trapping, fishing and gathering areas by Indigenous community members within and beyond the area of the Project. Trails may be accessed on foot, using all-terrain vehicles, trucks or snowmobiles depending on the physical characteristics of the trail. In addition, waterways are used as linear access features to travel between harvest areas and other communities. The Albany River is an important waterway within the area of the Project due to its frequent use by MFFN.

13f. The project's proximity to any federal lands.

The closest federal protected area to the Project is the Lake Superior National Marine Conservation Area, located in Nipigon, Ontario, proposed route alternatives for the CAR are approximately 214 km from this conservation area.

As indicted in **Section 13e**, Alternative 1 and Alternative 4 originates in the south approximately 43 km and 32 km, respectively, south from Aroland First Nation and terminate within MFFN reserve land. These First Nation reserves are the closest federal lands to the Project. A maximum of 5% of the CAR is to be located on MFFN Reserve land with approximately 47 hectares of reserve land potentially intersected for route Alternatives 1 and 4 **(Figure 1-1)**.





Legend

Route Alternatives
- Alternative 1
- Alternative 4
- Trail
- Existing Winter Access Road
- Trapline Area
- Ecozone Boundary
- First Nation Reserve
- Far North Boundary
- Provincial Park
- Proposed Water Crossing

Ecoregion Name
- Big Trout Lake
- James Bay

Marten Falls First Nation
All Season Community Access Road Project

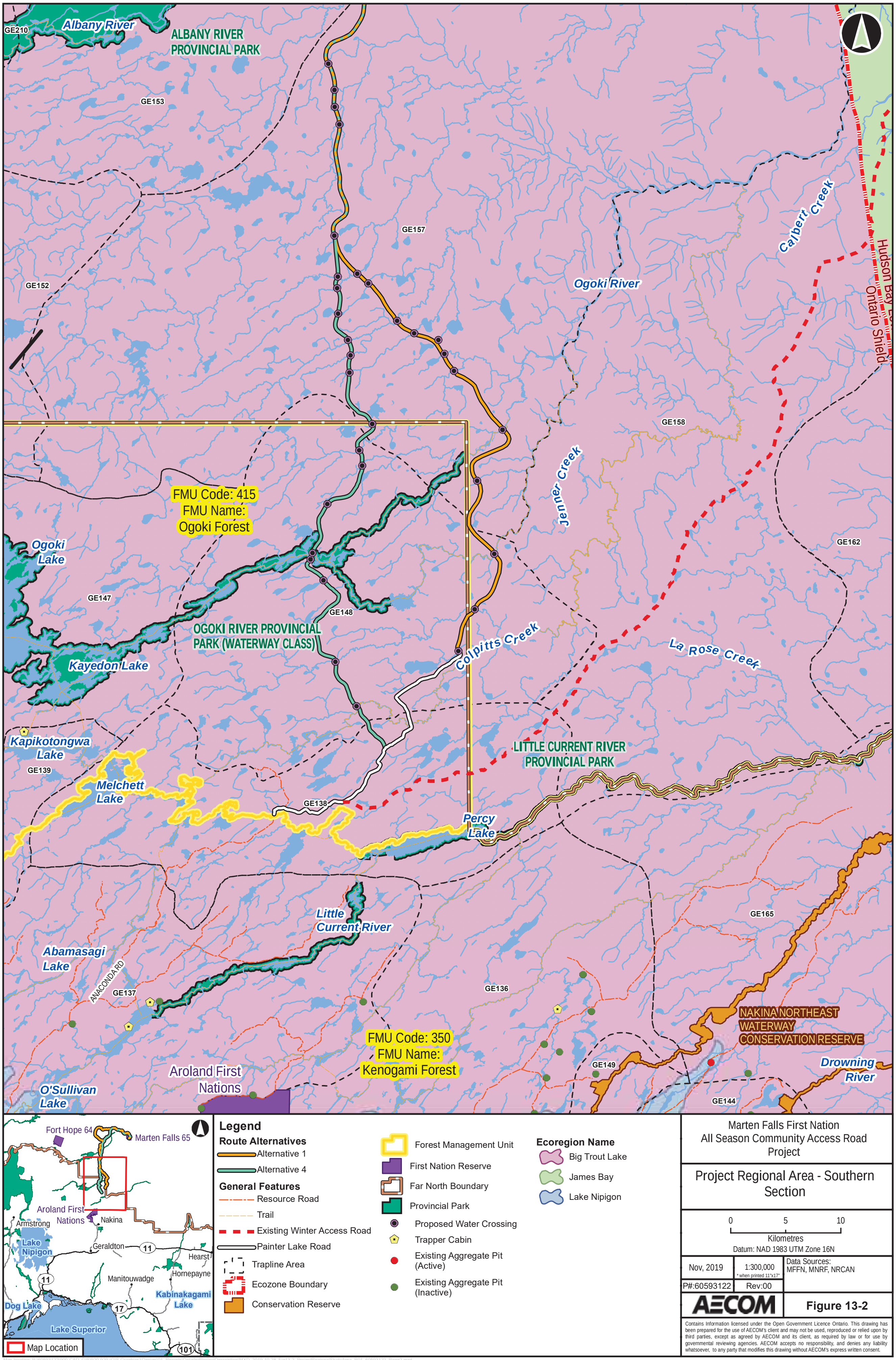
Project Regional Area - Northern Section

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

Nov, 2019	1:300,000 * when printed 11"x17"	Data Sources: MFFN, MNRF, NRCAN
P#:60593122	Rev:00	

AECOM

Figure 13-1


Albany River
ALBANY RIVER PROVINCIAL PARK
GE210
GE153
GE157
GE152
GE158
GE162
GE147
GE148
GE139
GE138
GE137
GE136
GE165
GE149
GE144
Calbert Creek
Hudson Bay Lowland
Ontario Shield
Ogoki River
Jenner Creek
FMU Code: 415
FMU Name:
Ogoki Forest
Ogoki Lake
OGOKI RIVER PROVINCIAL PARK (WATERWAY CLASS)
Kayedon Lake
Colpitts Creek
La Rose Creek
Kapikotongwa Lake
Melchett Lake
LITTLE CURRENT RIVER PROVINCIAL PARK
Percy Lake
Little Current River
Abamasagi Lake
ANACONDA RD
FMU Code: 350
FMU Name:
Kenogami Forest
NAKINA NORTHEAST WATERWAY CONSERVATION RESERVE
Drowning River
Aroland First Nations
O'Sullivan Lake
Fort Hope 64
Marten Falls 65
Aroland First Nations
Armstrong
Nakina
Lake Nipigon
Geraldton
11
Hearst
Hornepayne
Manitouwadge
11
Kabinakagami Lake
Dog Lake
17
Lake Superior
101
Map Location
Legend
Route Alternatives
Alternative 1
Alternative 4
General Features
Resource Road
Trail
Existing Winter Access Road
Painter Lake Road
Trapline Area
Ecozone Boundary
Conservation Reserve
Forest Management Unit
First Nation Reserve
Far North Boundary
Provincial Park
Proposed Water Crossing
Trapper Cabin
Existing Aggregate Pit (Active)
Existing Aggregate Pit (Inactive)
Ecoregion Name
Big Trout Lake
James Bay
Lake Nipigon
Marten Falls First Nation
All Season Community Access Road Project
Project Regional Area - Southern Section
0 5 10
Kilometres
Datum: NAD 1983 UTM Zone 16N
Nov, 2019
1:300,000
*when printed 11"x17"
Data Sources: MFFN, MNRF, NRCAN
P#:60593122
Rev:00
AECOM
Figure 13-2
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14. A description of the physical and biological environment of the project's location based on information that is available to the public.

The Project alternative routes span the Big Trout Lake Ecoregion within both the Ontario Shield Ecozone and the James Bay Ecoregion within the Hudson Bay Lowlands Ecozone. The Ontario Shield Ecozone is characterized largely by forest, followed by treed bogs and fens, open water, and other wetlands. There is an abundance of black spruce. Fire plays an important ecological role in the Ontario Shield Ecoregion. In contrast, the Hudson Bay Lowlands Ecozone forms the core of the third largest wetland in the world. This area is characterized largely by treed bogs and fens, followed by forest, other wetlands, and open water. Given the abundance of wet organic substrates and a cool humid climate in this Ecozone, fire plays a less significant role in this area.

The community of MFFN is located in northern temperature zones characterized by short warm summers and long cold winters. Air quality and noise levels are affected primarily by natural sources (such as wind, forest cover and occasional forest fires) and to a much lesser extent, by limited development in the general area.

The general area of the proposed Project route alternatives is dominated by wetlands (i.e., bogs, fens, swamps and marshes) of the Albany River watershed and several of its sub watersheds. Surface water moves generally in a north direction, towards James Bay. The Albany and Ogoki River systems have both been altered from their original state because of hydroelectric development activity in the region between 1943 and 1950(MFFN 2017).

The fish community composition and use of these waterbodies will vary because of factors such as availability of suitable habitat (spawning, overwintering, rearing, and feeding) and connectivity to other waterbodies. Over 20 species of fish, primarily of cool and cold-water thermal regimes, are known to inhabit the waters in the area and are part of, or support, a commercial, recreational, or Indigenous fishery.

The Project alternative routes provide suitable habitat for a variety of small and large mammals, as well as various amphibians, reptiles, birds and insects that are found in the Boreal Forest. The area is characterized by: i) open and treed wetlands dominated by species such as black spruce, mosses and shrubs and ii) upland terrestrial habitat comprised of mixed forests with species such as jack pine, white spruce, and several poplar species. These areas also host wildlife species of conservation concern.

Atmospheric Environment

For the purpose of this document, atmospheric environment includes climate and air quality.

The community of MFFN is in northern temperature zones characterized by short warm summers and long cold winters, with average temperatures ranging from 16 degrees Celsius during summer to -20 degrees Celsius in winter. Average precipitation in the winter ranges from 200 to 250 millimetres (mm) and 450 mm in the summer (MFFN n.d.). The nearest Environment Canada weather station is in Geraldton, ON, approximately 200 km away. Climate normals at this station include data from 1981 to 2010. Temperatures ranged from -1.4 degrees Celsius to -25.1 degrees Celsius during the winter with precipitation ranging from 23.8 mm to 38.0 mm (Government of Canada 2018c).

Existing air quality conditions are determined by both regional and local source influences. Regional air quality is affected mainly by a combination of long-range pollutant transport and meteorological conditions. Except for emissions related to traffic at MFFN, local air quality influences are similar to regional influences. Air emissions related to aviation doesn't contribute significantly to the existing air quality due to the infrequency of the source.

Acoustic Environment

Noise sources in the area of the Project are primarily ambient, natural noises of wildlife present in the forest and vegetated areas which surround the Project, and noise related to traditional land use activities such as hunting, fishing, trapping and canoeing. Industrial and transportation noise sources are either very limited or not located within the Project area. There is no commercial forestry or large industrial activities within much of the area surrounding the Project. The Ogoki and Kenogomi forests include active commercial forestry operations, but these activities are located at considerable distance from MFFN. Current access to the area is limited and transportation activities likely have little influence on existing ambient sound levels.

The expected natural baseline ambient sound levels in the regional Project area are not expected to exceed the MECP noise guideline of 40 A-weighted decibels (dBA) sound level limit for outdoor locations in rural areas (Government of Ontario 2013b) or the Alberta Utilities Commission noise guidelines assumed ambient sound level of 35 dBA for rural areas (Alberta Utilities Commission 2017). Based on this information, existing ambient sound levels of 30 to 40 dBA may be expected in the Project area and are mainly due to wildlife and other natural sources (e.g., rustling vegetation). Noise related to aviation sources don't contribute significantly to the background noise levels due to the infrequency of the source.

Physiography, Geology, Terrain and Soils

The Project alternative routes lie within the Hudson Bay Lowlands physiographic region, which is characterized by low lying, poorly drained terrain dominated by muskeg and bog. The thickness and distribution of unconsolidated (Quaternary) sediments are the result of extensive glacial activity which took place during the Great Ice Age (*Pleistocene Epoch*). This period was marked by the advance and retreat of massive, continental ice sheets. During the latter part of the Pleistocene (Late Wisconsinan Substage), the ice mass advanced, depositing till ground moraine. As the ice sheet stagnated, major sand and gravel deposits were laid down, including eskers and ice-contact deposits. Post-glacial erosional and depositional processes have been of relatively minor importance in modifying the physiography of the area (Ontario Geological Survey 1984). Glacial features such as eskers, moraines, drumlins and kame deposits are commonly found along the Project alternative routes.

The community of MFFN is underlain by organic deposits (peat, muck and marl). MECP water well records near the community of MFFN suggest that sand and gravel fluvial deposits range from 6 m to over 40 m in thickness. The surficial overburden geology across northern and eastern portions of the Project alternative routes away from the community of MFFN is mainly comprised of organic deposits (peat, muck and marl) with isolated occurrences of undifferentiated till. The till in the area is characterized as a matrix of sand to silty sand that is commonly high in clasts and low total matrix carbonate content. Instances of this till material also are identified within the southwest and southern portions of the Project alternative routes.

A second, finer-grained undifferentiated till also is described as occurring along the western and southern portions of the Project alternative routes. This till material is comprised of a matrix of silty clay to silt that is typically clast poor and high in matrix carbonate content. The till occurs as a discontinuous veneer atop the bedrock surface, with instances of exposed rock occurring frequently throughout the area.

East of Albany River Provincial Park limited occurrences of glaciofluvial ice-contact deposits are reported in association with the present-day alignment of the Albany River and its tributary. These deposits are typically coarser-grained, comprising gravel and sand with minor till.

In the southwestern component of the Project alternative routes, instances of glaciolacustrine deposits are noted; being representative of nearshore and beach deposits. Given their higher energy depositional processes, the deposits are coarser-grained, comprising sand, gravelly sand and gravel.

Under the Canadian System of Soil Classification, where topsoil is present, Podzolic and Brunisolic soils are the dominant types within the Project alternative routes. Podzolic soils are acidic with a B horizon containing accumulations of amorphous materials composed of humified organic matter associated with aluminum and iron. They develop most commonly in sandy materials in areas of cold, humid climate under forest or shrub vegetation. Water moving downward through the relatively porous material leaches out basic elements (e.g., calcium), and acidic conditions develop. Soluble organic substances formed by decomposition of the forest litter attack soil minerals in surface horizons, and much of the iron and aluminum released combines with this organic material. Brunisolic soils include soils that do not quite meet the criteria of the other forested soil orders. Brunisolic soils can be viewed as a stage in an evolutionary sequence that begins with an unweathered parent material (Regosolic soils) and ends with development of a mature forested soil of the Podzolic or Luvisolic orders (Agriculture and Agri-Food Canada 1998).

Bedrock geology around the community of MFFN and along the northeastern portion of the Project alternative routes is comprised of Upper Ordovician aged shale, limestone, dolostone and / or siltstone of the Red Head Rapids Formation and Churchill River Group. Comparatively, the central, western and southern portions of the Project alternative routes are underlain by various bedrock types of Proterozoic and Archean age. Rock types within this area include mafic / ultramafic to intermediate metavolcanic rocks, metasedimentary rocks, foliated tonalilte, gneissic tonalite, and massive granodiorite to granite. Mafic, ultramafic and related intrusive rocks (diabase dikes) of the Mackenzie swarm, Marathon swarm, Matachewan and Hearst swarms also are reported within the area (ENDM 2017a; ENDM 2017b).

Vegetation

The Project alternative routes span Ecoregion 2W (Big Trout Lake Ecoregion) within the Ontario Shield Ecozone and Ecoregion 2E (James Bay Ecoregion) within the Hudson Bay Lowlands Ecozone.

The Ontario Shield Ecozone largely consists of conifer-dominated boreal forests (Crins *et al.* 2009). Ecoregion 2W is characterized largely by forest (63.6%), followed by treed bogs and fens (14.5%) open water (13%), other wetlands (7.5%) and the remaining 1.3% is classified as other (Watkins 2011). More specifically, within Ecoregion 2W, there is an abundance of black spruce (*Picea mariana*) on both upland and lowland sites. Black spruce is often associated with jack pine (*Pinus banksiana*) and white birch (*Betula papyrifera*) in upland sites. Mixed stands of black spruce, balsam fir (*Abies balsamea*) and poplar (*Populus* sp.) are typically present along the shores of lakes and rivers. In lowland areas, fens and bogs with mosses, shrubs and graminoids are predominant (Crins *et al.* 2009). Fire plays an important role within Ecoregion 2W as large areas of forests in the ecoregion are considered recent burns (Watkins 2011).

The Hudson Bay Lowlands Ecozone is northernmost within Ontario and forms the core of the third largest wetland in the world (Crins *et al.* 2009). Ecoregion 2E is characterized largely by treed bogs and fens (43.3%), followed by forest (25.5%), other wetlands (25.3%), open water (5.6%) and the remaining 0.4% is classified as other (Watkins 2011). More specifically, Ecoregion 2E is comprised of stands of stunted black spruce and tamarack (*Larix laricina)* along with scattered fens and bogs. On well-drained soils and along the edges of streams and rivers, developed stands of coniferous and mixed wood forests are present (Crins et al. 2009). Given the abundance of wet organic substrates and a cool humid climate, fire plays a less significant role in Ecoregion 2E compared to Ecoregion 2W (Crins *et al.* 2009).

A review of the Natural Heritage Information Centre *Make-a-Map* (MNRF 2019) database resulted in no rare plants occurring within the Project alternative routes. No records of provincially or federally-designated terrestrial species at risk vegetation occurrences have been identified within the Project area.

Groundwater

The exposed bedrock of the Canadian Shield, which extends across much of Central and Northern Ontario, typically is moderately to highly fractured within the upper 10 m to 20 m (Sykes *et al.* 2009), resulting in the bedrock commonly being considered an aquifer unit. Within the Project alternative routes, the pattern of fractures in the bedrock aquifer will allow for the movement of groundwater; however, this secondary permeability generally decreases with depth (Sykes *et al.* 2009).

Within Marten Falls, sand and gravel fluvial deposits associated with the Albany River locally exceed 40 m in thickness (MECP Water Well Record #16003369) and are targeted for both domestic and public water supplies within the community. Groundwater resources within the upper bedrock, being identified as limestone on local well records, also are targeted by public well supplies within the community.

Topographic lows, such as river valleys, will have local effects on the rate and direction of groundwater movement. Groundwater flow paths frequently bend into river valleys and isolated topographic depressions, such as the Albany River and Ogoki River, as well as numerous other higher order water courses, water bodies (i.e., lakes, ponds, etc.), and deeper bedrock hollows and valleys within topographic lowlands. Given its remote location, groundwater use within the Project alternative routes is expected to be minimal.

Surface Water

The Project is located within the Hudson Bay Plains and Boreal Shield Ecozones, including areas of transition between the two (Natural Resources Canada 2019) and the James Bay drainage basin. Surface water moves generally in a north-easterly direction, towards James Bay.

The Project lies within two main watersheds: i) the Upper Albany – Makokibatan and ii) the Lower Ogoki. The primary water courses within the respective watersheds are the Albany River and the Ogoki River. The confluence of these two rivers is located near the community of MFFN. The Albany River is tied for the longest river in Ontario at 982 km long and ultimately discharges into James Bay. The Albany and Ogoki River systems have both been altered from their original state because of hydroelectric development activity in the region (MFFN 2017).

In addition to the Ogoki and Albany Rivers, numerous streams and rivers of various stream orders, large and small lakes, ponds and wetlands are prevalent throughout the Project alternative routes, notably Dusey River, Gourlie Creek, Wabassi River, Buffaloskin River and their tributaries (Natural Resources Canada 2019; **Figure 1-1**). As the land in the area generally falls from west to east there are fewer tributary streams east of the Ogoki River.

The general area of the Project is dominated by wetlands (i.e., bogs, fens, swamps and marshes) of the Albany River watershed and several of its sub-watersheds. The Hudson Bay Lowlands Ecozone is the northernmost ecozone in Ontario and forms the core of the third largest wetland in the world (Crins *et al.* 2009), where over 68% of its land cover consists of fens, bogs or wetlands. Comparatively, approximately 22% of the land cover in the Ontario Shield Ecozone consists of treed bogs and fens and wetlands (Watkins 2011). There are no provincially significant or other designated wetlands within the Project alternative routes **(Figure 22-1)**.

Wildlife

The range of habitats within the Project area support the requirements for a wide range of wildlife species, such as black bear, moose, woodland caribou, wolf, lynx, marten, fisher, muskrat, skunk, groundhog, snowshoe hare, otter, and fox. In addition, over 100 migratory bird species inhabit the Far North region.

The Ontario Reptile and Amphibian Atlas (Ontario Nature 2019) documents records of all reptile and amphibian species across the province. A review of the Ontario Reptile and Amphibian Atlas indicates the following species

may occur within the Project area: Eastern garter snake (*Thamnophis sirtalis*), red-sided garter snake (*Thamnophis sirtalis parietalis*), American toad (*Anaxyurus americanus*), spring peeper (*Pseudacris crucifer*), boreal chorus frog (*Pseudacris borealis*), northern leopard frog (*Lithobates pipiens*) and wood frog (*Lithobates sylvatica*). These are common and widespread species across northern Ontario. Red-sided garter snake (*Thamnophis sirtalis parietalis*) is also known to occur in the area. The red-sided garter snake and northern leopard frog are not afforded protection under federal or provincial legislation; however, are considered regionally significant (MFFN, 2017).

Woodland caribou occur extensively in peatland areas, such as black spruce bogs and treed fens, while generally avoiding upland areas throughout the year (Stuart-Smith *et al*. 1997). However, their habitat can vary in different landscapes depending on habitat availability (Ferguson and Elkie 2004). Telemetry data showed that in the Missisa and James Bay caribou ranges (which comprise part of the study area) woodland caribou were found to occur most frequently in peatlands, followed by coniferous forest, and they avoided deciduous forest (Ferguson and Elkie 2004). The location of winter ranges may be quite variable between years (Ferguson and Elkie 2004). Determining the population size or density of a wide-ranging low-density animal such as woodland caribou is often challenging and likely to be inaccurate. Since 2009, several research led studies by independent contractors and the MNRF have investigated woodland caribou and their habitat in areas crossed by the Project. The MNRF attached radio collars to a large number of woodland caribou across northern Ontario which were tracked by satellite between 2009 and 2014. Some of these caribou individuals were found within the Project area (April Mitchell 2019). Study results illustrated that caribou individuals were nomadic and may occupy different areas from one year to another but show stronger fidelity to calving areas. Herd population, habitat use and range level effects will be evaluated and considered as part of the impact assessment for the Project.

A preliminary review of background information suggests that several species listed under Schedule 1 in the federal Species at Risk Act, and species listed as Threatened, Endangered or Special Concern under the *Endangered Species Act, 2007* have the potential to occur within the Project area. These species include, but are not necessarily limited to, those species listed in **Table 14-1**:

Table 14-1: Species at Risk Potentially occurring within the Project Area

Common Name	Scientific Name	Federal Species at Risk Act (Schedule 1)	Provincial Endangered Species Act, 2007
Birds			
Bald Eagle	*Haliaeetus leucocephalus*	Not listed	Special Concern
Bank Swallow	*Riparia riparia*	Threatened	Threatened
Barn Swallow	*Hirundo rustica*	Threatened	Threatened
Black Tern	*Chlidonias niger*	Not listed	Special Concern
Canada Warbler	*Cardellina canadensis*	Threatened	Special Concern
Chimney Swift	*Chaetura pelagica*	Threatened	Threatened
Common Nighthawk	*Chordeiles minor*	Threatened	Special Concern
Eastern Whip-poor-will	*Antrostomus vociferus*	Threatened	Threatened
Evening Grosbeak	*Coccothraustes vespertinus*	Special Concern	Special Concern
Olive-sided Flycatcher	*Contopus cooperi*	Threatened	Special Concern
Peregrine Falcon	*Falco peregrinus (anatum / tundris)*	Special Concern	Special Concern
Rusty Blackbird	*Euphagus carolinus*	Special Concern	Special Concern
Short-eared Owl	*Asio flammeus*	Special Concern	Special Concern
Yellow Rail	*Coturnicops noveboracensis*	Special Concern	Special Concern
Mammals			
Little Brown Myotis	*Myotis lucifugus*	Endangered	Endangered
Northern Myotis	*Myotis septentrionalis*	Endangered	Endangered
Wolverine	*Gulo gulo*	Special Concern	Threatened
Woodland Caribou	*Rangifer tarandus caribou*	Threatened	Threatened

Fish and Fish Habitat

The general area of the Project includes a multitude of aquatic features throughout a landscape dominated by wetlands (i.e., bogs, fens, swamps and marshes) of the Albany River watershed and several of its sub-watersheds.

Numerous streams and rivers, large and small lakes, ponds and wetlands provide habitat for a variety of fishes and wildlife that are prevalent throughout the study area, notably the Ogoki River, Calbert Creek, Colpitts Creek, Dusey River, Gourlie Creek, Wabassi River, Buffaloskin River and their tributaries (Natural Resources Canada 2019). The fish use of these waterbodies will vary as a result of factors such as availability of suitable habitat (spawning, overwintering, rearing, and feeding) and connectivity to other waterbodies.

Over 20 species of fish, primarily of cool and cold-water thermal regimes, are known to inhabit these waters and are part of, or support, a commercial, recreational, or Aboriginal fishery. Species including Northern Pike (*Esox lucius*), Walleye (*Sander vitreus*), Lake Whitefish (*Coregonus clupeaformis*), Brook Trout (*Salvelinus fontinalis*), Yellow Perch (*Perca flavescens*), Cisco (*Coregonus artedi*) and Burbot (*Lota lota*) are target species of the communities inhabiting the region and by local and fly-in charter angling and hunting tourist outfitters. In addition to those species listed above, these fishes have the potential to occur within the Project area where suitable habitat is present (Eakins 2018):

- Northern Redbelly Dace (*Chrosomus eos*)
- Finescale Dace (*Chrosomus neogaeus*)
- Lake Chub (*Couesiius plumbeus*)
- Common Shiner (*Luxilus cornutus*)
- Northern Pearl Dace (*Margariscus nachtriebi*)
- Emerald Shiner (*Notropis atherinoides*)
- Blacknose Shiner (*Notropis heterodon*)
- Spottail Shiner (*Notropis hudsonius*)
- Mimic Shiner (*Notropis volucellus*)
- Bluntnose Minnow (*Pimephales notatus*)
- Fathead Minnow (*Pimephales promelas*)
- Longnose Sucker (*Catostomus catostomus*)
- White Sucker (*Catostomus commersonii*)
- Silver Redhorse (*Moxostoma anisurum*)
- Shorthead Redhorse (*Moxostoma macrolepidotum*)
- Trout-perch (*Percopsis omiscomaycus*)
- Brook Stickleback (*Culaea inconstans*)
- Ninespine Stickleback (*Pungitius pungitius*)
- Mottled Sculpin (*Cottus bairdii*)
- Slimy Sculpin (*Cottus cognatus*)
- Iowa Darter (*Etheostoma exile*)
- Johnny Darter (*Etheostoma nigrum*)
- Logperch (*Percina caprodes*)

All of the above-listed fish species potentially occurring within the Project area are common and widespread throughout Ontario.

In addition to the fish species listed above, the Project falls within the range of the Southern Hudson Bay-James Bay population of Lake Sturgeon (*Acipenser fulvescens*) which, is known to occur in the Albany River and its tributaries (Committee on the Status of Endangered Wildlife in Canada 2017). The Southern Hudson Bay-James Bay populations are designated as Special Concern under Schedule 1 of the federal *Species at Risk Act* and as Special Concern under the provincial *Endangered Species Act, 2007.*

15. A description of the health, social and economic context in the region where the project is located, based on information that is available to the public or derived from any engagement undertaken.

Social

The closest populated areas to the Project are the Indigenous communities of MFFN and Aroland First Nation. The Marten Falls First Nation is located in the Project area and inhabited by members of MFFN. MFFN has a population of 807 registered band members with roughly half (351) of community members living in Marten Falls (INAC).

Additional community members (469) live in urban centres such as Greenstone and Thunder Bay. The population is steadily increasing which is anticipated to continue in the future (MFFN 2014). Languages within the community include English and Ojibway. The designated service centre for the community is Greenstone (MFFN 2014).

MFFN is a member of the Matawa First Nations Management Inc., a regional tribal council consisting of nine Ojibway and Cree First Nation communities in the Nishnawbe Aski Territory of Northern Ontario. The Nishnawbe Aski Territory Political Territorial Organization provides political, social and economic support for all First Nation communities in the Treaty #9 geographic area (MFFN n.d.).

Matawa Tribal Council which includes Aroland First Nation, Constance Lake First Nation, Eabametoong First Nation, Ginoogaming First Nation, Long Lake 58 First Nation, MFFN, Neskantaga First Nation, Nibinamik First Nation and Webequie First Nation provides advisory and / or program services to member First Nations when requested. Marten Falls is governed by a Chief and up to seven councillors with elections held once every two years (MFFN 2014). Under the *Indian Act*, MFFN has the power to establish by-laws governing health, traffic and other areas. Federal statutes apply on reserve land and provincial statutes may apply if there is no existing by-law (MFFN 2014).

The community of MFFN has approximately 65 houses (Statistics Canada 2017a). Most housing is classified as band housing with approximately two-thirds of housing defined as suitable (Statistics Canada 2017a). Housing is predominantly in two subdivisions. One is older along the west shoreline of the Albany River. The second is a newer subdivision built paralleling the older subdivision (MFFN 2014).

MFFN has an airport 5 km from the community, which is maintained by the MTO. The only all-season access to the community is an air service occurring three times per week from an airport operated by Zam Air Service from Nakina, Ontario and, three times a week air service from Thunder Bay by North Star Air. Both airlines offer passenger and freight services. Seasonal access is also provided by the winter road (MFFN 2014). Electricity is provided to Marten Falls through Ontario Hydro Remote Services (MFFN 2014). Heating primarily occurs through wood burning for homes and oil furnaces for commercial properties. Despite having a water treatment plant, and water and sewer infrastructure, MFFN remains on a boil advisory as the water treatment plant undergoes service (MFFN 2017). The community has a landfill 3.5 km north of the community where residents can deposit solid waste (MFFN 2014). Bell Canada provides telephone service while KNET provides limited broadband internet services. Television is available through satellite. News to the community is provided by Wawatay bi-weekly and the Chronicle Journal daily (MFFN 2014).

Economy

Economic development in the area of the Project is undertaken predominantly by MFFN in partnerships with adjacent Indigenous communities and industry. When requested, Matawa Economic Development Advisory Services will assist member Indigenous communities to promote and foster sustainable economic development through the delivery of quality information products, capacity-building initiatives, and collaborative working projects (Matawa First Nations Management 2019). The closest Indigenous communities to the Project are MFFN and Aroland First Nation. These communities are likely to have the most economic interest in the Project. The Municipality of Greenstone is also likely to have economic interest in the Project due to its position as the primary service centre for these communities and its population of MFFN community members.

The primary economic activities in the region include mining, forestry and resource-based tourism. Mining exploration and development is expanding. The Agoke Development Corporation includes MFFN, Eabametoong First Nation and Aroland First Nation and was formed to manage the Ogoki forest management unit. The Agoke Development Corporation Limited has a partnership with Nakina Lumber Incorporated – the Agoke Lumber Limited Partnership. This Partnership and other Matawa communities have pursued the forestry industry, although the forestry industry in this region has been economically limited due to the downturn in the industry (MFFN 2014). A prohibitive factor to large development projects such as mining and forestry is transportation costs and

infrastructure access. The lack of electricity and a reliable transportation network increases costs which undermines the feasibility of enterprises.

Economic opportunity is limited within the MFFN. The unemployment rate is high at 18.8% with a low labour participation rate of 50% (Statistics Canada 2017a). Median income is also low at $14,944, which is well below the provincial average (Statistics Canada 2017a). Within the community there are a number of small private businesses including a convenience store, a grocery store, a fuel supply business and a lodging business. Resource based tourism operations are also operated by community members. The cost of living in the community is high due to the lack of access with high costs for electricity and goods due to the transportation costs of fuel and goods.

Currently, small businesses operate within Aroland First Nation including a gas bar, convenience store, taxi company and tourist outfitters (Matawa First Nations Management n.d.). Aroland First Nation has similar labour market conditions to MFFN with low labour participation and high unemployment (Statistics Canada 2017b). Aroland First Nation's primary employment sectors include primary industries, retail, administration, education, health care, recreation, accommodation and food services (Statistics Canada 2017b).

Greenstone has a more diversified economy than MFFN with a greater variety of people employed in different sectors (Municipality of Greenstone 2015). Greenstone has an unemployment rate of 10.6% with a labour force participation rate of 57.4%, both higher than the provincial averages (Statistics Canada 2017c). Forestry, tourism and mining are key components of the Greenstone economy with Long Lake Logging and Premier Gold as major private sector employers (Municipality of Greenstone 2015).

Community Health Services

Health Canada funds the Muskeg Thunder Clinic which operates 5 days per week in the community of Marten Falls. Health staff provide nursing services, health promotion and community health programs. Emergency medical services are provided in Greenstone with medivac aircraft utilized for transportation. Specialized medical services are provided in Thunder Bay at the Thunder Bay Regional Health Centre. Community health programs focus on mental health, addiction, prenatal and maternal health. Matawa, Nishnawbe Aski Nation and the Ontario government provide family support, prevention and intervention programs within the community. Child welfare and family services programs are provided out of Sioux Lookout, while one person is employed locally in the community.

The diet in the region relies on traditional subsistence harvesting despite access to modern foods (Gamble 2017). The high cost of living and transportation may contribute to this as goods are more expensive.

Marten Falls is policed by the Nishnawbe-Aski Police Service. Tactical and emergency responses are managed jointly with the Ontario Provincial Police. Provincial court services are operated within the community regularly. Legal representation is provided by Nishnawbe Aski Nation legal services. The MNRF provides forest fire protection services within 16 km of MFFN. No fire trucks are present within the community.

Visual Aesthetics

The remote wilderness aesthetics are important components of the visual environment in the area of the Project as related to the tourism industry, and residents of the local communities. Visual aesthetics of the Project region are largely influenced by natural processes such as wildfires, and limited human influences such as the existing local communities and winter roads (**Figures 1-1 and 1-2**).

Part E: Federal, Provincial, Territorial, Indigenous or Municipal Involvement and Effects

16. A description of any financial support that federal authorities are, or may be, providing to the project.

In 2016 ENDM confirmed financial support for the planning and regulatory permitting of the Project (MFFN 2017). There is currently no confirmed federal financial support for construction of the Project, only provincial funding.

17. A description of any federal land that may be used for the purpose of carrying out the project.

As indicated in **Section 13f**, the CAR route alternatives that are proposed (Alternatives 1 and 4), terminate within MFFN reserve land. A maximum of 5% of the CAR is to be located on MFFN reserve land with approximately 47 hectares of reserve land potentially intersected for route Alternatives 1 and 4 (**Figure 1-1**). No other federal land is proposed to be used for the purpose of carrying out the Project.

18. A list of the permits, licenses, or other authorizations that may be required by jurisdictions that have powers, duties or functions in relation to an assessment of the project's environmental effects.

Regulatory Requirements

Federal

The Project is listed as a designated project under the *Physical Activities Regulations, SOR/2019-285*, *Impact Assessment Act 2019* (IAAC 2019) as per:

> ***s. 51*** *The construction, operation, decommissioning and abandonment of a new all-season public highway that requires a total of 75 km or more of new right of way*

This Project is completing a provincial environmental assessment and regulatory review process as further discussed below. At the time of the submission of this Detailed Project Description to IAAC, only the provincial regulatory review process has formally commenced. Therefore, reference within this Detailed Project Description to completion of activities for an environmental assessment focus primarily on the activities required for the provincial review process for the Project, but would also be relevant to federal interests should an impact assessment be required by IAAC (e.g., assessment of potential Project effects, feedback from consultation and engagement) Efforts pertaining to the regulatory review process are specifically indicated throughout this Detailed Project Description.

Provincial

The Project is subject to review under the Ontario *Environmental Assessment Act*. On April 25, 2018, MFFN signed an agreement with the MECP, thereby confirming an agreement to complete a provincial Individual Environmental Assessment. The first step of the provincial regulatory review process is to prepare a Terms of Reference document. The Terms of Reference sets out the framework MFFN must follow during preparation of the Individual Environmental Assessment. The Draft Terms of Reference is planned to be available for public, agency and Indigenous community review in fall 2019.

The provincial environmental assessment being prepared will include an evaluation of the two access road route alternatives and a comprehensive and cumulative impact assessment of the preferred route and design for the Project that addresses natural environment, cultural, socio-economic and technical considerations. The provincial environmental assessment will be supported by field studies and feedback from the engagement of Indigenous communities, the public, interest groups and government agencies. **Part F** describes the effects assessment work that will be undertaken in the provincial environmental assessment process to address the potential effects of the Project.

Should a federal impact assessment be required for the Project, under the Canada-Ontario Agreement on Environmental Assessment Cooperation, projects that require review under both federal and provincial environmental assessment legislation may undergo a single, cooperative assessment, meeting the legal requirements of both federal and provincial governments. Sections 6(1)(e) and Section 114 (1)(f) of *Impact Assessment Act 2019* include provisions for cooperation and coordinated action between federal and provincial governments, with the goal of having one coordinated project review. The Minister of Environment and Climate Change may also establish additional conditions as a prerequisite to the approval of the coordinated regulatory review process (Government of Canada 2018a).

Additional Regulatory Requirements

A preliminary list of federal and provincial legislation, and other jurisdictional permits and / or approvals applicable or potentially applicable to the Project are detailed in **Table 18-1** below.

Table 18-1: Applicable Federal, Provincial and Jurisdiction Legislation

Approval Authority	Permit / Approval / Authorization	Applicability to the Project
Federal		
Impact Assessment Agency of Canada (IAAC)	Determination	■ Impact Assessment Agency to determine if the proposed Project will require a federal Impact Assessment under the Impact *Assessment Act, 2019* since the CAR is a designated project under the Act.
Transport Canada	Authorization	■ The transportation of dangerous goods (as defined by the *Transportation of Dangerous Goods Act*). Regulations mandated to promote public safety when dangerous goods are being handled, offered for transport or transported by road, rail, air, or water. Currently not anticipated for the Project given the nature of the CAR's design and construction.
	Approval	■ The *Canadian Navigable Waters Act* protects the public right to navigation. Owners of works who propose to construct, place, alter, rebuild, remove or decommission works that are in, on, under, through or across any navigable water may be required to apply to Transport Canada, for scheduled waterways, or go through the public resolution process, for unscheduled waters. The Navigation Protection Program is responsible for the administration and enforcement of the *Canadian Navigable Waters Act*. Works, including 'Major Works' (e.g., bridges) that may interfere with navigation in a waterbody listed in Schedule 1 of the act, or in any other navigable water must submit an application for approval to the Navigation Protection Program. No waterbodies within the Study Area are listed in Schedule 1 of the Canadian Navigable Waters Act.
Environment and Climate Change Canada	Permit	■ Permit under *Species at Risk Act,* if the proposed Project activities will occur on federal lands (including First Nations Reserve lands) and will destroy or remove a species at risk listed under the Act, or its habitat.
Environment and Climate Change Canada – Canadian Wildlife Service	N/A	■ Canada's *Migratory Birds Convention Act*, 1994 (MBCA) is intended to protect migratory birds, their eggs and their nests. The MBCA prohibits the possession, destruction and harm of migratory birds and / or their nests and prohibits the release of harmful substances in waters or areas frequented by migratory birds. The MBCA does not provide an avenue for a permit or authorization to contravene the Act (i.e., harm or destruction of an individual or active nest) for purposes other than human health and safety. However, technical guidance and direction is available and should be implemented to avoid harm or destruction of individuals and nests of birds protected under the MBCA.
Fisheries and Oceans Canada	Authorization	■ Authorization under Section 35 of the *Fisheries Act* for any work, undertaking or activity that results in the 'death of fish' other than by fishing and the 'harmful alternation, disruption or destruction of fish habitat'
	Permit or Letter of Advice	■ Permit or Letter of Advice if an activity will affect an aquatic species listed under Schedule 1 of the *Species at Risk Act.*
	Leases or crossing agreements	■ Leases or crossing agreements for roads, railways, or canals under the *Federal Real Property and Federal Immovables Act.*
Crown-Indigenous Relations and Northern Affairs Canada	Land Use Permit	■ Land use permit or equivalent under Section 28(2) of the *Indian Act* to use federal lands (i.e., to allow the crossing of First Nation reserves).
Natural Resources Canada	Permit	■ Permit under the *Explosives Act* for the use, storage or transportation of explosives.

Table 18-1: Applicable Federal, Provincial and Jurisdiction Legislation

Approval Authority	Permit / Approval / Authorization	Applicability to the Project
Provincial		
Ministry of Natural Resources and Forestry	Work Permit	■ Work Permit under the Public Lands Act, 1990 to authorize works on public lands and / or shore lands. Examples of works include geotechnical investigations, construction of roads and trails, and culverts / bridges. ■ Consolidated Work Permit under the Lakes and Rivers Improvement Act, 1990, for work planned on shore land and within water bodies including work and burn authorization for clearing and burning of cleared vegetation.
	Land Use Permit	■ Land Use Permit under the *Public Lands Act, 1990*, for rights to Crown land for construction of the CAR, and for construction access, temporary laydown and spoil areas.
	Forest Resource Licence (Cutting Permit)	■ Forest Resource License (Cutting Permit) under the *Crown Forest Sustainability Act, 1994* to harvest and / or cut timber on Crown lands.
	Burning Permit (only required if a restricted fire zone is in place)	■ Burning Permit under the *Forest Fires Prevention Act, 1990*, to enable burning of materials from forest clearing, if required.
	Aggregate Permit	■ Aggregate Permit under the *Aggregate Resources Act, 1990*, to extract aggregate on all Crown Land and also on private land in areas the province designated (identified) in the regulations.
	CBLUP Approvals	■ A Terms of Reference for MFFN to prepare a CBLUP has been approved. The CBLUP is under development.
	Letter of Advice or Permit	■ Letter of Advice or Permit under *Endangered Species Act, 2007* (S.O. 2007, c.6) (ESA), if the Project affects a species that is listed on the Species at Risk (SAR) in Ontario List as an extirpated, endangered or threatened species.
	Licence to Collect Fish for Scientific Purposes	■ Licence to Collect Fish for Scientific Purposes under the *Fish and Wildlife Conservation Act, 1997*, to facilitate capture and transfer of fish during in-water works, such as cofferdam construction or dewatering.
	Wildlife Scientific Collectors Permit	■ Wildlife Scientific Collectors Permit under the *Fish and Wildlife Conservation Act, 1997*, to facilitate capture and transfer of wildlife from one site to another.
	Approval under the *Fish and Wildlife Conservation Act, 1997*	■ Approval under the *Fish and Wildlife Conservation Act, 1997* will likely be required as it is expected that project activities such as clearing, grubbing, blasting, dewatering, and damming will result in the destruction of beaver dams, furbearer dens, black bear dens and / or bird nests and eggs.
	Permit/approval under the *Far North Act, 2010*	■ A significant portion of the proposed Project is located in Far North Ontario. Permits/approvals under the *Far North Act, 2010* may be required depending on the type of development and stage of completion of the CBLUP.
	Approval under *Lakes and Rivers Improvement Act, 1990*	■ Approval for water crossings, bridges, culverts and causeways.

Table 18-1: Applicable Federal, Provincial and Jurisdiction Legislation

Approval Authority	Permit / Approval / Authorization	Applicability to the Project
	Approval and amendment under the *Provincial Parks and Conservation Reserves Act, 2006*	■ Approval to cross Provincial Parks as per the *Provincial Parks and Conservation Reserves Act, 2006.* ■ Amendment to management direction for Provincial Parks and nature reserves under the *Provincial Parks and Conservation Reserves Act, 2006.* ■ Authorization to conduct research in Ontario protected areas for works required within a Provincial Park from the Park Superintendent.
Ministry of the Environment, Conservation and Parks	Approval	■ Approval of this Terms of Reference and subsequent Individual e under the *Ontario Environmental Assessment Act*.
	Environmental Compliance Approvals for wastewater, waste, air and noise (if temporary camps are required)	■ Environmental Compliance Approvals under the *Environmental Protection Act, 1990*, for the following activities: – to transport waste by haulers from the Project work site; – to enable emissions (e.g., air or noise) from on-site equipment; – to facilitate stormwater management; and – to facilitate temporary on-site sewage and water treatment facilities.
	Environmental Activity and Sector Registry or Permit to Take Water	■ Permit to Take Water under the *Ontario Water Resources Act, 1990*, if the construction of the proposed Project requires taking greater than 400,000 litres of water in a day from a lake, stream, river or groundwater source (e.g., dewatering); or ■ Registration of the water taking activity in the Environmental Activity and Sector Registry, if the water taking is less than 400,000 litres and greater than 50,000 litres in a day from the sources identified above.
	Approval	■ Approval under the *Health Protection and Promotion Act, 1990,* to facilitate provision of potable water, and on-site sewage treatment and disposal systems at temporary construction camp(s).
	Generator Registration	■ Generator Registration under *Ontario Regulation 347* of the *Environmental Protection Act, 1990*, in the event Hazardous and Liquid Industrial Wastes are generated during the construction of the proposed Project.
	Permit, Letter of Advice or Project Registration	■ The *Endangered Species Act*, 2007 prohibits killing, harming, harassment, capture or taking a live member of a species that is Extirpated, Endangered, or Threatened in Ontario. This Act also requires that habitat be protected. Regulatory review or registration of the Project may be required where species with the above-noted designations occur.
Ministry of Transportation	Various Permits	■ Following permits may be required as per the *Public Transportation and Highway Improvement Act, 1990*: – An Entrance Permit for proposed entrances onto provincial highways; – An Encroachment Permit for any work within, under, or over a provincial highway Right-of-way; – A Sign Permit for all signage erected within 400 m of the limit of a provincial highway; and, – A Land Use and Building Permit for construction occurring: • within 45 m of the Right-of-way limit of any provincial highway; • within 180 m of the intersection of a side road and a “King’s” highway; or • within 395 m of a controlled access highway.

Table 18-1: Applicable Federal, Provincial and Jurisdiction Legislation

Approval Authority	Permit / Approval / Authorization	Applicability to the Project
Ministry of Northern Development and Mines	Approval	■ Potential for the proposed Project to obtain Minister approval under the *Mining Act, 1990* for the withdraw from prospecting, mining claim registration, sale and lease of lands, mining rights or surface rights that are the property of the Crown.
Ministry of Tourism, Culture and Sport	Archaeological and Cultural Heritage Clearances	■ Archaeological Assessment(s) to be completed as part of the regulatory review process under the *Ontario Heritage Act, 1990,* and submitted to the Ontario Public Register of Archaeological Reports. Built Heritage and Cultural Heritage Landscape screening and, Heritage Impact Assessments, where required, submitted to the Ministry of Tourism Culture and Sport for review under the *Environmental Assessment Act*.
Ministry of Municipal Affairs and Housing	Letters of Conformity or Zoning Conformity Permits	■ Potential for the proposed Project to be located in unorganized territory. Letters of Conformity or Zoning Conformity Permits required for areas located in unorganized territories.
Ministry of Labour	Notice of Project	■ Filing of a notice of Project prior to construction under *Occupational Health and Safety At, 1990*.
Other		
Hydro One Networks Inc.	Permit to cross Hydro One transmission lines	■ Permit to cross existing transmission lines, if required.
Local Municipalities	Various Permits	■ Building Permit per the *Building Code Act*, 1992. ■ Permit to Injure or Remove Trees (woodlands/woodlots), as applicable based on municipal by-laws. ■ Noise By-law exemptions, as applicable, based on proposed work and municipal by-laws. ■ Conformance with local land use policy and zoning (e.g., Official Plan amendments and Site Plan Control Approval in accordance with the *Planning Act, 1990*). ■ Permits for open-air burning and fires, as applicable.
Canadian National (CN) Railway	Clearance Letter	■ Clearance Letter for crossing of CN rail line, if required.
Mining Claim and Crown Interest Holders	Consent	■ Consent from existing claim holders under the *Mining Act, 1990*.
Thunder Bay District Health Unit	Notice of Camp Opening under the *Health and Promotion Act, 1990*	■ Notice of Camp Opening under the *Health and Promotion Act, 1990*
	Permit for sewage holding tank under the *Building Code Act, 1992*.	■ Permit for sewage holding tank at construction camps under the *Building Code Act, 1992*.
Other Utility Companies	Permit to cross other utilities	■ Permit to cross other utilities (e.g., existing pipelines, fibre optics).

Part F: Potential Effects of the Project

19. A description of any changes that, as a result of the carrying out of the project, may be caused to the following components of the environment that are within legislative authority of Parliament

The following sections summarize potential effects of the Project on components of the environment under federal jurisdiction. As part of the Project planning and regulatory approval process, an effects assessment is being conducted which will include proposing mitigation measures that will be needed to avoid or minimize adverse effects such as effects to fish and fish habitat, species at risk, migratory birds, and potential effects on federal lands and Indigenous peoples. The assessment of Project effects will be done in consideration of existing information gathered through ongoing desktop studies, field studies and information gathered through Indigenous Knowledge sharing. A CAR route that would minimize potential adverse effects on components of the environment that are within federal legislative authority is one of the factors that will be considered in the determination of a final proposed CAR route.

Fish and Fish habitat as defined in subsection 2(1) of the Fisheries Act

Project-related effects on surface water quality and quantity may have consequential effects on fish and fish habitat. Deposition of deleterious substances, including sediment, in a waterbody can result in the loss of or alteration to habitat, alteration to baseflows or water temperatures, disruption of fish life processes or fish and egg mortality. No impacts are anticipated on marine plants, as defined by the *Fisheries Act*.

The construction of temporary (e.g., temporary bridges, cofferdams fords, corduroy, swamp mats, culverts, ice and snow crossings) and permanent (e.g., bridges, culverts) water crossings and structures, and blasting as required, have the potential to result in adverse effects to both fish and their habitat (i.e., water quality, flow, aquatic vegetation, riparian vegetation, substrate, debris, etc.). The potential effects associated with placement of structures in water includes disruption of life processes such as migration and spawning issues (fish passage), fish mortality due to equipment and machinery, changes in water quality (e.g., as a result of accidental release of contaminants, loss of vegetation, etc.), and the degradation, alteration or loss of (destruction) fish habitat and function. A negative alteration or degradation is generally considered to be any alteration to fish habitat that diminishes the ability of fish to use such habitat for one or more of their life processes (Fisheries and Oceans Canada 2012). This negative effect could therefore result from a variety of activities and stressors, such as changes to composition and abundance of aquatic vegetation, substrate and cover. The potential for these effects is higher during construction phase but remains during operations, maintenance and repairs as well. Ongoing erosion and sediment deposition and release of contaminants from spills, vehicle collisions, winter maintenance, etc. may negatively alter water quality, or change physical habitat features (such as loss of aquatic vegetation or changes to substrate composition). To mitigate potential adverse effects on fish and fish habitat, waterbody crossings and culvert installations will be designed, installed and maintained in accordance with applicable federal and provincial guidelines, codes of practice and standards to avoid the death of fish and the ‘harmful alternation, disruption or destruction of fish habitat.’

Blasting near waterbodies, if required may cause the release of blast residues, particles at high velocity, instant and significant pressure changes and exposed soils. This may result in fish and egg mortality and degradation, alteration or loss of habitat such as loss of aquatic vegetation, alteration to substrate, changes to water quality and flow.

The CAR will provide year-round access to the Far North, which is likely to increase access to waterbodies for recreational use. This has the potential to result in an increase in angling pressure to fish populations, higher risk of the introduction of invasive aquatic species, parasites and disease, and the accidental release of contaminants to waterbodies.

As part of the Project planning and regulatory approval process, an effects assessment is being conducted which will include proposing mitigation measures that will be needed to avoid or minimize adverse effects. The assessment of effects on fish habitat and wildlife habitat will be done in consideration of existing information gathered through ongoing desktop studies, field studies and information gathered through Indigenous Knowledge sharing. A CAR route that would minimize potential adverse effects on fish and fish will be one of the factors considered in the determination of a final proposed CAR route. The design and construction of the final CAR route will apply Fisheries and Oceans Canada (DFO)'s applicable codes of practice and guidelines measures to protect fish and fish habitat. Fish habitat offsetting measures will be implemented as required to mitigate adverse effects on fish and fish habitat. Mitigation measures to avoid or minimize effects on wildlife habitat will also be proposed. Should an impact assessment be required by IAAC for the Project, the Impact Statement document will include the scope and content as recommended within the IAAC's *Tailored Impact Statement Guidelines* which is expected to include effects assessments of the alternative CAR routes proposed in this Detailed Project Description, including but not limited to the assessment of effects on fish and wildlife habitat as described above, including mitigation measures.

Aquatic Species as Defined in the Species at Risk Act

No known distribution ranges of aquatic species listed in the federal *Species at Risk Act* occur within the Project area. Should an impact assessment be required by IAAC for the Project, the Impact Statement document will include the scope and content as recommended within the IAAC's *Tailored Impact Statement Guidelines* which is expected to include effects assessments of the alternative CAR routes proposed in this Detailed Project Description, including but not limited to the assessment of effects on fish and wildlife habitat as described above, including mitigation measures.

Migratory Birds as Defined in the Migratory Birds Convention Act

Potential Project effects on migratory birds listed under the *Migratory Birds Convention Act, 1994*, related to the construction, operation and maintenance of the Project include habitat alteration and / or loss, change in migratory bird mortality risk and change in migratory bird behaviour. These potential Project effects on migratory birds are as described for wildlife and wildlife habitat in **Section 22**. As part of the Project planning and regulatory approval process, an effects assessment is being conducted that will include proposing mitigation measures that will be needed to avoid or minimize adverse effects on migratory birds.

20. A description of any changes to the environment that, as a result of carrying out the project, may occur on:

Federal Land

If a portion(s) of the Project components or activities are required on federal land (e.g., First Nation reserve land), those components and/or activities may be subject to a separate federal environmental review outside of this Detailed Project Description and IAAC-lead review process that will be verified in discussion with MFFN, and Indigenous and Northern Affairs Canada (now Indigenous Services Canada and Crown Indigenous Relations and Northern Affairs Canada).

For the various alternative routes that are being considered to determine the preferred route, a maximum of 5% of CAR would be required to be located on MFFN Reserve land **(Figure 1-1)**. Potential effects to the environment as a result of the Project are the same as those discussed in **Section 19**.

21. With respect to Indigenous peoples of Canada, the description of any impact – that, as a result of carrying out the project, may occur in Canada and result from any change to the environment – on:

- ***physical and cultural heritage;***
- ***the current use of lands and resources for traditional purposes; and***
- ***any structure, site or thing that is of historical, archaeological, paleontological or architectural significance,***

based on information that is available to the public or derived from any engagement undertaken with Indigenous Peoples of Canada.

Feedback from the ongoing engagement and consultation program for this Project is currently being gathered to understand how the proposed Project may affect Indigenous peoples. While the potential Project effects to Indigenous peoples related to physical and cultural heritage, current land and resource use for traditional purposes and historical, archaeological, paleontological or architectural significance are dependent on the final Project route, they are likely to be primarily associated with increased all-season access to lands and resources used by MFFN and other potentially affected Indigenous communities.

The CAR could be used as access by both Indigenous and non-Indigenous people to hunt, fish and gather in areas not previously accessed without the Project which may affect fish, wildlife and other natural resources traditionally used by Indigenous peoples. These changes may affect both the physical and cultural heritage of potentially affected Indigenous people through increased public access to Indigenous traditional territories. Physical activities primarily related to the construction of the road (e.g. land clearing to construct the CAR and open new quarries and borrow pits) may potentially disturb or destroy structures, sites or things that are of historical, archaeological, paleontological or architectural significance to Indigenous peoples.

As indicated in **Part B; Section 3**, the entire length of a proposed CAR is expected to occur in an area covered by the CBLUP which is in the process of being finalized. Portions of the CBLUP may consider areas set aside for protection and other areas for economic development opportunities. Further, as indicated in **Part D; Section 13e,** the Project falls mostly within the traditional territory of MFFN, with a portion of MFFN traditional lands being shared with Aroland First Nation in the southern area of the proposed Project. MFFN and Aroland First Nation are in the process of establishing an Indigenous Knowledge Sharing Agreement, and a Memorandum of Understanding that will identify how they will work together regarding this Project. The CBLUP identifies protected lands, and traditional land use will be considered in the assessment of Project effects and evaluation of route alternatives.

In addition to the effects described above and in the following **Section 22**, effects to Indigenous communities are identified in **Section 4,** as a result of engagement. MFFN is committed to ongoing engagement to further understand potential effects to Indigenous communities. Determination of the final CAR route, and assessment of the potential Project effects on Indigenous peoples of the two alternative CAR routes being proposed, both adverse and beneficial, will be undertaken based on feedback from the ongoing engagement and consultation process, including Indigenous Knowledge, previous studies, and information that is currently being gathered through ongoing desktop studies, and field studies within the proposed alternative route corridors. The intention of MFFN is to propose a balance between maximizing community benefits, while minimizing adverse effects through an informed CAR route selection process, application of effective mitigation measures, and ongoing monitoring and follow-up programs as required.

22. A description of any change that, as a result of carrying out the project, may occur in Canada to the health, social or economic conditions of Indigenous peoples of Canada, based on information that is available to the public or derived from any engagement undertaken with Indigenous peoples of Canada.

Table 22-1 provides a preliminary list of changes (potential effects) of the Project that may occur, and therefore may also affect Indigenous peoples.

Table 22-1: Preliminary Identification of Potential Project Effects Related to Health, Social or Economic Conditions of Indigenous Peoples of Canada

Topic	Discipline	Potential Effect
Indigenous Knowledge	Indigenous and Treaty Rights	▪ Change to reserve lands ▪ Compatibility with land use planning
	Traditional Use of Land and Resources	▪ Change in ability to access land and resources used for traditional purposes ▪ Changes to subsistence hunting, fishing, gathering and trapping ▪ Change to cabins or camps and other resource use sites ▪ Changes to Indigenous landscape features ▪ Changes to the environmental conditions effecting traditional land and resource use
	Cultural Sites and Practices	▪ Change to cultural sites including ceremonial, grave, sacred, gathering and worship areas ▪ Change to access to cultural sites
Social, Economic and Built Environment	*Social*	▪ Change in population and demographics ▪ Change in availability and use of public services and infrastructure ▪ Changes to housing ▪ Changes to community well-being ▪ Changes to cultural activities and sites
	Economy	▪ Change in employment and income ▪ Change to the regional economy ▪ Change to government finances ▪ Change to industrial opportunities
	Land and Resource Use	▪ Changes to provincial parks and protected area lands ▪ Changes to existing industrial uses
	Recreation and Tourism	▪ Changes to recreational and commercial lands used for trapping, hunting, fishing and other activities
	Human Health	▪ Changes in air quality, noise levels and water quality ▪ Changes to public health and safety ▪ Changes to diet ▪ Changes to access to health and emergency facilities and care
	Visual Aesthetics	▪ Alteration of existing landscape and visual character of the area (i.e., scenic values and viewpoints)
Cultural Environment	*Cultural Heritage Resources*	▪ Damage to, or the loss of, archaeological or other heritage sites

As part of the Project planning and regulatory approval process, an effects assessment, including an assessment of cumulative effects, is being conducted which will include proposing mitigation measures that will be needed to avoid or minimize adverse effects. The effects assessment will consider, but will not be limited to, the potential for changes to the health, social or economic conditions of Indigenous peoples resulting from:

- Changes to economic conditions resulting from increased population;
- Changes to economic activities and opportunities;
  - Additional access may provide new opportunities for businesses, lower the price of goods and facilitate new development impacting the local economy;
  - New access may allow industry opportunities to become more feasible allowing for development (e.g., new mining and forestry activities).
- Changes to cost of living, social and cultural settings;
- Changes to the population may impact the availability of housing for Indigenous community members.
  - If population increases or demographics change, strain on public safety services may also occur which may affect the well-being of the community.
- Changes to the supply of fish and wildlife as a result of the loss and / or degradation of habitat from road construction and operation, and from the potential reduction in abundance of fish and wildlife from increased hunting and fishing activity as a result of new access opportunities, particularly if the CAR is open to public access;
- Changes to Indigenous people's safety due to increased access to the Project area and potential for traffic accidents on the CAR
- Effects related to in- and out-migration; and,
- Effects of the Project on vulnerable population groups (GBA+) such as women, disabled persons, elders and youth as a result of gender-based violence, human trafficking, resulting from the influx of male workers to the community.
  - These changes may be facilitated by additional year-round access to and from southern communities year-round and increased public access to Indigenous traditional territories.

The effects assessment that is being conducted for this project as a part of the Project planning and design process will also include potential Project related benefits that might result to the health, social or economic conditions of Indigenous peoples. Predicted benefits may include, but are not limited to:

- Reduced cost of living in the community
- Opportunities for employment including skills development and training
- Improved access to goods and services, such as education, training and health services
- Increase of band members living year-round in the community
- Access to improved health services

The effects assessment would be supported through data collection activities with members of the Marten Falls community and other neighbouring Indigenous communities. Should a federal impact assessment be required by IAAC for the Project, this information, as available, and will be documented in the federal impact assessment and will include an assessment of potential effects on Aboriginal and Treaty Rights.

With respect to the Webequie Supply Road project, mentioned in **Part B, Section 5** of this Detailed Project Description, although the proposed Webequie Supply Road project is well outside the MFFN Project study area, the potential for its inclusion in a cumulative effects assessment on Indigenous peoples will be considered.

The potential environmental effects identified below are based on the environmental features that may be affected by the proposed Project and therefore may also directly or indirectly affect the health, social or economic conditions of Indigenous peoples. The potential environmental effects identified below are currently being considered in an environment assessment as a part of the Project planning and design phase which will include measures to avoid or minimize potential environmental effects.

Potential Project Effects on Atmospheric Environment

Construction, operation and maintenance of the CAR has the potential to affect local air quality. Effects to the atmospheric environment from construction would be temporary and result from emissions of combustion products such as nitrogen oxides and carbon monoxide, and suspended particulate from the operation of machinery and equipment. Emissions from construction would be highly localized to the area of work during the specific time-frames planned for each section of highway development.

Following construction, the operation of the new roadway would contribute to changes in the local air quality from the likely increase in vehicular traffic volume (i.e., all-season availability compared to current use of winter road only) and likely reduction in air traffic volume as a result of the all-season road access. Determination of the final CAR route, and assessment of the potential Project effects of the two alternative CAR routes being proposed, including personal and commercial / industrial vehicle use, both adverse and beneficial, will be undertaken based on feedback from the ongoing engagement and consultation process, including Indigenous Knowledge, previous studies, and information that is currently being gathered through ongoing desktop studies, and field studies within the proposed alternative route corridors.

Vehicular exhaust emissions consist primarily of nitrogen oxides, carbon monoxide, sulphur dioxides, suspended particulates, volatile organic compounds, and greenhouse gas emissions **(Section 23)**.

Suspended particulates (dust) from vehicle movement along the gravel roadway would also affect local air quality.

As part of the Project planning and regulatory approval process, an effects assessment is being conducted which will include proposing mitigation measures that will be needed to avoid or minimize adverse effects. Should an impact assessment be required by the Agency for the Project, the assessment of effects being conducted, including effects on air quality, climate change risk and human health, and proposed mitigation measures to eliminate avoid or minimize potential adverse effects of the Project will be included in an Impact Statement document. Field studies are in progress to determine the baseline air quality condition for the Project alternative routes as described in the Detailed Project Description.

Potential Project Effects on Acoustic Environment

Project construction activities, including equipment and machinery use, have the potential to cause temporary noise and vibration effects at sensitive receptors. These effects are not anticipated to be long-term due to temporary nature of construction activities. However, once constructed, the CAR will provide a route for the transportation of people and supplies, and potentially industrial, forestry and mining sectors as well. Therefore, the CAR may accommodate a range of heavy and light vehicle types. These types of vehicles do not typically generate significant vibration levels, and it is expected that the CAR has a low potential for producing vibration effects. Given the rural nature of the area surrounding the Project, it is expected that ambient sound levels will be low and that traffic along the CAR has the potential to cause a perceptible change in the acoustic environment at nearby sensitive receptors.

As part of the Project planning and regulatory approval process, an effects assessment is being conducted which will include an assessment of effects due to noise and vibration, and mitigation measures to avoid or minimize potential adverse effects of the Project will be proposed. Should an impact assessment be required by IAAC for the

Project, the Impact Statement document will include effects assessments of the alternative CAR routes proposed in this Detailed Project Description, including but not limited to the assessment of effects as described above, including mitigation measures.

Potential Project Effects on Physiography, Geology, Terrain and Soils

Potential effects of road construction include changes to topography due to cut and fill for grading, blasting of bedrock and removal of overburden needed for the CAR, construction access roads and structures foundations. Aggregate is likely to be sourced locally, which will create pits and quarries (depressions where materials have been extracted) in the area of the Project. Changes to topography as a result of the Project may cause indirect effects, such as changes to surface water drainage and minor alterations of sub-catchment areas.

Blasting may result in areas of slope instability. Where unstable rock structures are encountered, design modifications (e.g., minor refinements to the route) may be implemented to minimize potential effects from erosion, settlement, slope instability, foundation failure or rock fall hazards that could occur as a result of construction.

Changes in soil quality and quantity may occur during construction due to increased potential for erosion, sedimentation, mixing and compaction resulting from vegetation clearing, excavation, use of heavy equipment and stockpiling of cleared materials. Changes in soil quality may also occur due to accidental release of contaminants during construction from the use of equipment and machinery (e.g., use of chemicals, explosives and fuel, equipment washing) and from vehicles during operation of the CAR (e.g., leaks and spills from road users). Maintenance activities during operations of a roadway do not typically involve the use, storage or handling of large quantities of potential contaminants other than equipment fuels / lubricants.

The Project will be designed in consideration of the most recent relevant standards and guidelines for roads in northern regions where permafrost occurs, such as the *Transportation Association of Canada's Primer on Developing and Managing Transportation Infrastructure in Permafrost Regions* (2010) and the federal government's *Northern Land Use Guidelines – Access: Roads and Trails.* Effects to permafrost will be considered in the overall project effects assessment and should an impact assessment be required by the Agency for the Project, the required Impact Statement document prepared will include effects assessments of the alternative CAR routes proposed in this Detailed Project Description, including but not limited to the assessment of effects as described above, including mitigation measures.

Potential Project Effects on Vegetation

Potential effects on vegetation and ecological communities resulting from the construction phase of the Project include changes to community diversity (including community loss), changes to wetland quantity and function, and changes to species diversity.

Activities related to the construction, such as vegetation clearing, stockpiling of materials, laydown areas, and excavation could result in the removal and degradation of vegetation, including forested and wetland areas. Direct (i.e., permanent vegetation removal) and indirect (e.g., changes to vegetation from erosion and sedimentation, surface water, groundwater and accidental release of contaminants) disturbances have the potential to change the form and function of the vegetation communities. This potential for effects as a result of accidental release of contaminants is highest during construction, but remains during the operational phase (e.g., spills from vehicle collisions and rollovers) and maintenance (e.g., application of dust or ice management products). The potential effects resulting from ongoing erosion and sedimentation as noted above may continue through the operational phase and during maintenance activities (e.g., road improvements and repairs as well as winter maintenance / sanding). Fragmentation of vegetation communities may also occur as a result of the construction of and permanent components of the Project.

Dust resulting from construction activities and ongoing vehicle use during operational or maintenance of the gravel CAR may damage plants primarily through physical effects such as cell destruction and blocked stomata (Spellerberg 1998). Dust accumulation on plants may also affect photosynthesis, respiration and transpiration, which are important processes required for plant survival (Farmer 1993).

Spread of invasive plant species could occur because of vegetation clearing and introduction of invasive seeds on equipment during the construction phase as well as equipment required for ongoing maintenance and repairs. Increase in travel and vehicles while the road is operational also may increase the potential for invasive plant species to be introduced.

As part of the Project planning and regulatory approval process, additional information regarding the operation phase of a proposed CAR alignment will be provided and mitigation measures to avoid or minimize potential adverse effects of the Project will be proposed , including effects of invasive species, effects on native vegetation, ongoing follow-up monitoring to check the effectiveness of revegetation, and site restoration efforts. Should an impact assessment be required by IAAC for the Project, the Impact Statement document will include effects assessments of the alternative CAR routes proposed in this Detailed Project Description, including but not limited to the assessment of effects as described above, including mitigation measures

Potential Project Effects on Groundwater

Construction activities such as dewatering, water use, and the creation of impervious surfaces have the potential to result in effects to groundwater. Where dewatering occurs, there may be a temporary lowering of the local water table. A lowering of the water table may result in changes in groundwater quantity, which could decrease baseflow to water courses, groundwater discharge to wetlands and groundwater flow patterns. These effects are typically confined to the zone of influence from dewatering activities and are temporary in nature. In addition, any private water wells located within the dewatering zone of influence may be temporarily affected by lower well yields and / or changes in water quality.

Blasting of bedrock that might be required to support construction of the Project also has the potential to change groundwater quantity. In rare cases, vibrations from blasting in bedrock can alter the fracture geometry, open new fractures, change the aperture of existing fractures, or permanently change local groundwater flow patterns. Groundwater quality may also be affected through agitation of subsurface conditions and the potential release of fine particulate and / or soluble substances. In the event a groundwater supply well is located within the area where ground vibration results from blasting activities occurs, groundwater supply wells may become physically damaged and result in a reduction in well yield and / or water quality.

Construction dewatering has the potential to change groundwater quality in areas of substantial groundwater recharge through the release of contaminated construction dewatering discharge. When not mitigated effectively, groundwater discharges may also result in erosion and deposition of soils along the discharge path, elevated suspended solids and potential release of contaminants to receiving waterbodies. Groundwater quality may also be affected by leaks and accidental releases of contaminants during construction and operations.

Potential Project Effects on Surface Water

Construction and operation of the Project will require permanent infrastructure crossings of water courses along the CAR and temporarily crossings along construction access roads. Water course crossings may include bridges, culverts, fords, corduroy, swamp mats, ice and snow crossings, which may result in changes to surface water quality and quantity. It is expected that effects to surface water would be primarily related to sediment and erosion, and potential introduction of contaminants from accidental releases. Changes to surface water quality and quantity can cause indirect effects to other environmental components (e.g., fish and fish habitat, wetlands).

Activities during construction, such as vegetation clearing, grading, excavation, equipment and machinery use, and stockpiling of materials may result in sedimentation into nearby waterbodies due to the creation of exposed and unstable soils. Erosion into surface water may result in changes to concentrations of sediment, baseflows and water temperatures. These activities may also affect surface water quality through the introduction of contaminants from blasting activities and equipment used during construction, and from maintenance activities (e.g., salt and sand application) and accidental releases from vehicles during the operation of the CAR.

Placement of stockpiles, soil compaction and impervious surfaces may change surface drainage patterns as well, which may result in effects to surface water quantity and quality. The placement of temporary and permanent structures in water courses has the potential to change stream dynamics and morphology, and cause erosion and sediment issues.

As part of the Project planning and regulatory approval process, additional an assessment of effects will be conducted, including effects on drinking water, surface water and groundwater quality and quantity, as well as effects on waterbodies, riparian habitat and wetlands including muskeg. Mitigation measures to avoid or minimize potential adverse effects of the Project will be proposed and included in an Impact Statement document should an impact assessment be required by IAAC for the Project.

Potential Project Effects on Wildlife and Wildlife Habitat

Potential effects on wildlife, which includes birds under the MBCA **(Section 19)**, and wildlife habitat during construction and operation of the road include habitat alteration and / or loss, change in wildlife mortality risk and change in wildlife behaviour.

The potential effects to vegetation may result in effects to wildlife where vegetation that provides suitable habitat will be lost or altered by the Project. This includes direct habitat loss, habitat degradation, and fragmentation during site preparation (e.g., vegetation clearing and site grading), stockpiling of materials, transportation of equipment and materials, and excavation activities. These activities may negatively affect wildlife habitat through increased erosion and sedimentation, soil removal, disturbance and compaction, and accidental release of contaminants. Wildlife may also be displaced during construction when habitat is removed (e.g., clearing and grubbing). Forested habitats are generally associated with a higher number of bird nests per hectare; therefore, the removal of these habitats would result in the displacement of more breeding pairs per hectare compared to other habitats such as grasslands or agricultural fields (Calvert *et al*. 2013). Also, the effects of dewatering, water-taking or water discharging activities, may negatively affect wildlife and wildlife habitat, particularly for species habitat dependant on surface water or groundwater (e.g., turtle overwintering habitat).

The Project construction and operation phases may result in a higher potential for accidental wildlife mortality through collisions with vehicles, equipment and machinery. Increased mortality risk is of particular concern during sensitive life stages (e.g., nesting season).

Noise, lights, and human presence have the potential to change wildlife behaviour through disturbance of wildlife. Disturbance to wildlife during site preparation (e.g., vegetation clearing) and other construction activities, may result in longer term effects (e.g., a decreased breeding success for nesting birds (Environment Canada 2014)). Operation of the CAR may result in continued disturbance and increased risk of mortality of wildlife species through vehicular collisions.

The CAR will provide year-round access to the Far North, which is likely to increase access for recreational use and resource use. This has the potential to result in an increase in hunting and angling pressure to wildlife populations, higher risk of the introduction of invasive species, parasites and disease, and the accidental release of contaminants to waterbodies.

As part of the Project planning and regulatory approval process, an effects assessment is being conducted which will include proposing mitigation measures that will be needed to avoid or minimize adverse effects. Should an impact assessment be required by the Agency for the Project, the assessment of effects being described as above, including effects on wetlands and other migratory bird habitat as well as direct effects to migratory birds, will be documented including mitigation measures to avoid or minimize potential adverse effects of the Project, in an Impact Statement document.

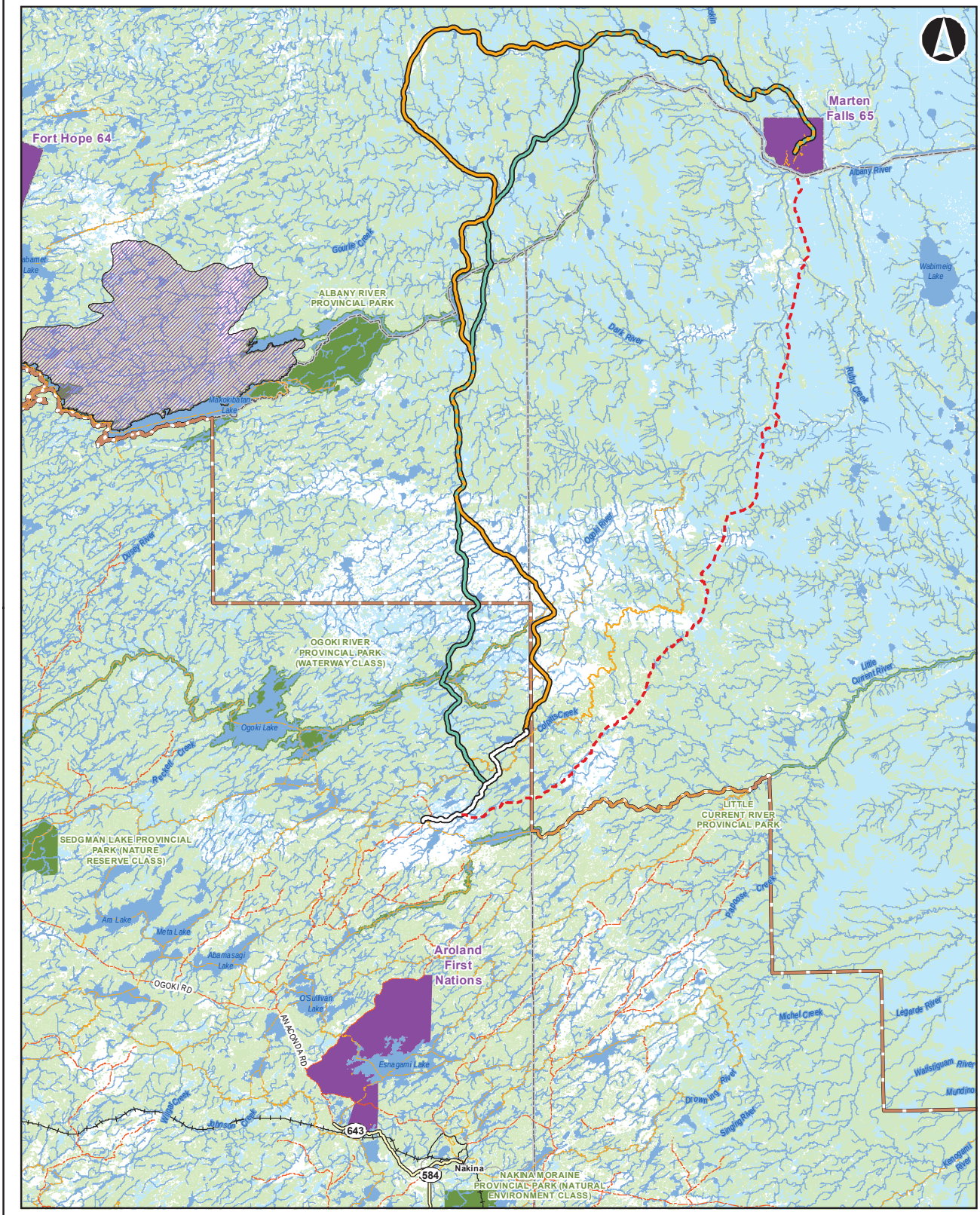
Potential Project Effects on Wildlife Species at Risk or Species of Conservation Concern

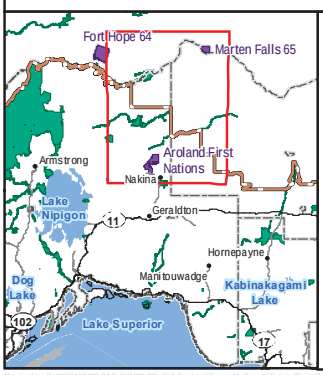
Species at Risk as listed under the federal *Species at Risk Act*, and other species of conservation concern listed under provincial legislation, have the potential to occur within the Project area are listed in **Section 14** of this Detailed Project Description. Potential effects to species at risk include those more broadly applicable to wildlife: increased mortality, harm and / or disturbance, displacement, and alteration or removal of species at risk habitat.

As part of the Project planning and regulatory approval process, an effects assessment is being conducted which will include proposing mitigation measures that will be needed to avoid or minimize adverse effects. To assist in the assessment of effects to wildlife species at risk, including those protected under the federal *Species at Risk Act*, information on the locations of known and potential critical habitat for species at risk will be used. This will include information from previous studies, ongoing baseline studies, Indigenous Knowledge and information provided by provincial regulatory authorities such as results of woodland caribou collaring data and locations of sensitive protected natural areas and critical wildlife habitat under the provincial *Endangered Species Act, 2007* (**Figures 22-1** and **22-2**). Should an impact assessment be required by the Agency for the Project, the assessment of effects being conducted as described above, including mitigation measures to avoid or minimize potential adverse effects of the Project, will be documented in an Impact Statement document.

23. An estimate of any greenhouse gas emissions associated with the project.

An initial high-level estimate of greenhouse gas emissions from the construction and operation phases of the Project has been completed and assumed the following sources of emissions: loss of ground cover (e.g., wetlands), loss of forest sequestration, vehicular traffic for the operation phase only, and construction and land clearing equipment for the construction phase only. Estimated annual construction emissions are between 20,500 tonnes carbon dioxide equivalent (CO_2e) and 35,500 tonnes CO_2e, based on a minimum road length of 190 km and a maximum road length of 230 km, respectively. The construction of the CAR is estimated to take between three and ten years, and annual construction emissions were conservatively estimated based upon five years of construction. Total annual operation emissions are estimated to be between 4,600 tonnes CO_2e and 8,200 tonnes CO_2e. This high-level assessment of operation emissions was performed with an assumed Annual Average Daily Traffic amount of 400, which is the design basis for the CAR. Should an impact assessment be required by IAAC, the detailed greenhouse gas emissions assessment will be included in an Impact Statement document that will provide further refinement of these numbers as well as consideration of additional sources and sinks within the Project boundary.





Legend

Route Alternatives
- Alternative 1
- Alternative 4

General Features
- Highway
- Collector Road
- Residential Road
- Resource Road
- Railway
- Trail
- MFFN Existing Winter Access Road
- Painter Lake Road
- Watercourse
- Indian Reserve
- Far North Boundary
- District Municipality
- Waterbody
- Provincial Park
- Candidate Area of Natural Scientific Interest, Earth Science
- Woodlands
- Wetlands

Marten Falls First Nation
All Season Community Access

Provincial ***Endangered Species Act, 2007***
Wetlands and Parks and Protected Areas

0 5 10 20 30
Kilometres
Datum: NAD 1983 UTM Zone 16N

Data Sources:
Derived by KBM Resources Group n.d.
MNRF, MMAH, NRCAN, MLAS

Nov, 2019	1:600,000 when printed at 11"x17"	P#:60593122	Rev:00

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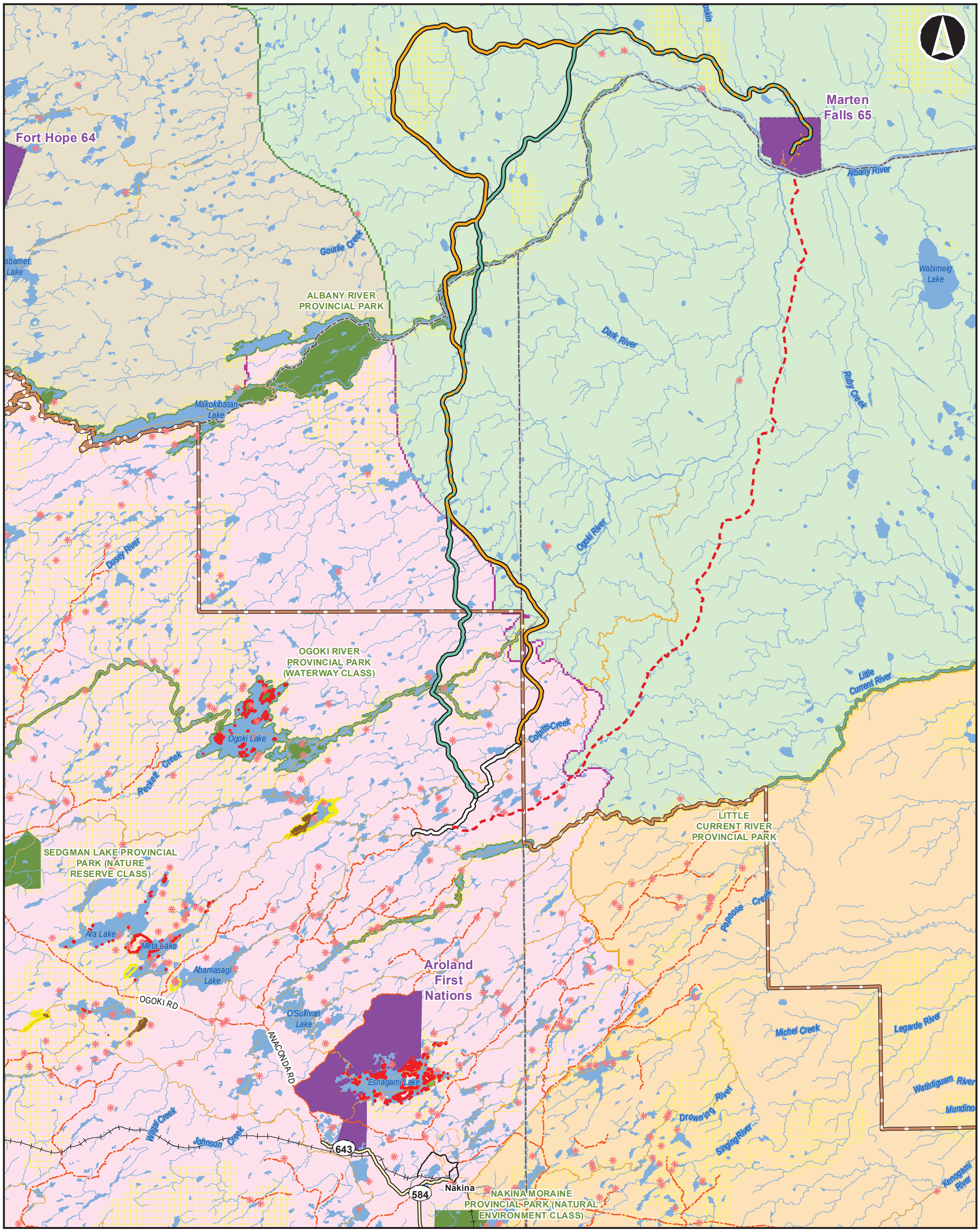
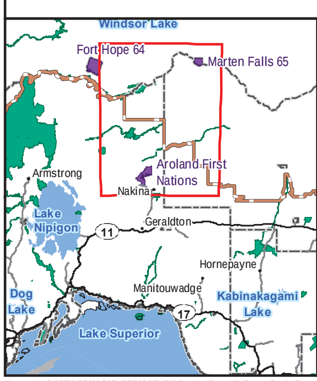
Figure 22-1





Legend

Route Alternatives
- Alternative 1
- Alternative 4

General Features
- Highway
- Collector Road
- Residential Road
- Resource Road
- Trail
- Railway
- MFFN Existing Winter Access Road
- Painter Lake Road
- Watercourse
- Indian Reserve
- Far North Boundary
- District Municipality
- Provincial Park
- Waterbody
- Species at Risk Observations (1km grid)
- Nesting Site
- Waterfowl Staging Area
- Waterfowl Nursery Area
- Caribou Calving Site
- Moose Calving Site

Caribou Range
- Missisa
- Nipigon
- Ozhiski
- Pagwachuan

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Marten Falls First Nation
All Season Community Access

Provincial ***Endangered Species Act, 2007***
Critical Habitat

0 5 10 20 30
Kilometres
Datum: NAD 1983 UTM Zone 16N

Data Sources:
Derived by KBM Resources Group n.d.
MNRF, MMAH, NRCAN, MLAS

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Figure 22-2

24. A description of any waste and emissions that are likely to be generated – in the air, in or on water, and in or on land - during any phase of the project and a description of the plan to manage them.

The intention of MFFN is to propose a balance between maximizing community benefits, while minimizing adverse effects related to emissions, discharges and wastes. Best management practices will be in place for the construction and maintenance phases of the CAR to minimize potential adverse effects of the Project and will be described in an Impact Statement should an Impact Assessment be required by IAAC for the project.

The Project is anticipated to result in the following emissions, discharges and wastes:

Emissions

During construction activities, atmospheric emissions including greenhouse gases will be created and released into the surrounding environment from on-site construction vehicles, equipment, machinery and activities to be used in the proposed Project. These contaminants will include sulphur dioxide, nitrous oxides, carbon dioxide, particulate matter and volatile organic compounds.

Fugitive dust emissions can result from movement of construction equipment and transport of materials to and from the construction site. Fugitive dust can be a problem during non-winter months when dry, windy conditions occur during construction activities.

Construction activities that may impact local air quality include, but are not limited to:

- Clearing and grubbing
- Potential burning brush piles from clearing of right-of-way
- Grading and rock blasting
- Road surfacing with gravel
- Storage of granular material
- Increased activity at local pits and quarries to provide construction material
- Mobile on-site equipment

Temporary construction camps will likely be established to provide dormitories, washroom facilities and mess hall access for workers during the construction phase. Generators will be required for electricity and their operation will result in the creation of combustion emissions which will temporarily impact air quality in the local area.

During the operation phase, an increase in vehicular traffic would be expected to impact local air quality due to the year-round access to the MFFN community. The impact would be due to increased vehicle traffic and associated emissions, elevated road dust generation and from road maintenance activities. However, emissions related to air traffic are expected to decrease with the implementation of the CAR.

Discharges

With the exception of dewatering discharges during construction, the Project will not involve processing streams or liquid discharges. During construction, there is the possibility of accidental leaks or spills from construction equipment. In preparation for construction, a Spill Management Plan will be developed to mitigate and manage accidental releases of hazardous substances. During operation of the CAR, traffic accidents may occur which could involve spills of hazardous substances. To reduce the probability of traffic accidents along the CAR, speed limits will be posted. During Project construction and maintenance, the handling, storage, transportation and disposal of hazardous substances will be done in accordance with relevant regulatory legislation, including spills management

and reporting. Therefore, the potential adverse effects of accidents, including hazardous substance spills associated with the Project, are expected to be mitigated to the extent feasible.

During the operation of CAR, traffic accidents may occur which could involve a discharge of hazardous substances. To reduce the probability of traffic accidents along the CAR, the Project will be constructed according to established design specifications and maintained according to relevant guidelines and regulatory requirements for the proposed purpose and location of the road.

Wastes

Waste management and disposal for the Project will be done in accordance with Ontario's *Environmental Protection Act, 1990*.

The Project's right-of-way clearing will involve removal of timber and grubbing. Usable timber will be segregated and collected for reuse. Unusable timber and material will be collected and burned at designated sites.

Domestic waste generated during construction will be collected in appropriate on-site containment material and disposed of at approved waste facilities. The closest waste management site to the Project is to the immediate southwest of the intersection of Anaconda and Ogoki Road, approximately 11 km northwest of Aroland First Nation.

Petroleum wastes produced during construction (e.g., oils, greases) will be properly collected, stored, managed and disposed or recycled at an approved licensed disposal facility. General Registration under *Ontario Regulation 347* of the *Environmental Act, 1990* will be adhered to with respect to hazardous waste and liquid waste management.

During Project construction and maintenance, the handling, storage, transportation and disposal of hazardous substances will be done in accordance with relevant regulatory legislation, including spills management and reporting. Therefore, the potential adverse effects of accidents, including hazardous substance spills associated with the Project, are expected to be mitigated to the extent feasible.

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Appendix 1

Summary of Issues Table

Appendix 1: Responses to Impact Assessment Agency of Canada (IAAC) Summary of Issues

During the Marten Falls First Nation (MFFN) engagement program and government consultation process conducted to date, requests for consideration of specific issues as part of Project planning and the Project approval process have been noted. Determination of the final CAR route, and assessment of the potential Project effects of the two alternative CAR routes being proposed, both adverse and beneficial, will be undertaken based on feedback from the ongoing engagement and consultation process, including Indigenous Knowledge, previous studies, and information that is currently being gathered through ongoing desktop studies, and field studies within the proposed alternative route corridors. The intention of MFFN is to propose a balance between maximizing community benefits, while minimizing adverse effects through an informed CAR route selection process, application of effective mitigation measures, and ongoing monitoring and follow-up programs as required.

Issue #	Key Issue Raised	Response	Location in Detailed Project Description for Additional Information
Accidents and Malfunctions			
1	Effects of accidents, including spills of hazardous substances.	During Project construction, there is the possibility of accidental leaks or spills from construction equipment. In preparation for Project construction, a Spill Management Plan will be developed to mitigate and manage accidental releases of hazardous substances. During Project operation of the community access road (CAR), traffic accidents may occur which could involve spills of hazardous substances. To reduce the probability of traffic accidents along the CAR, the Project will be constructed according to established design codes and standards and maintained according to relevant guidelines and regulatory requirements for the proposed purpose and location of the road. During Project construction and maintenance, the handling, storage, transportation and disposal of hazardous substances will be done in accordance with the federal *Transportation of Dangerous Goods Act, 1992* and the provincial *Dangerous Goods Transportation Act* (and respecting the Canada-Ontario *Agreement Respecting Administration of the Transportation of Dangerous Goods Act, 1992*), including spills management and reporting under the provincial *Environmental Protection Act*. MFFN will provide key community members with training and equipment in order to be prepared to respond accordingly, and in a timely manner, in the event of accidents, including spills of hazardous substances. Therefore, the potential adverse effects of accidents, including hazardous substance spills associated with the Project, are expected to be mitigated to the extent feasible.	**Part C: Project Information; Section 7; Section 11** **Part F: Potential Effects of the Project; Section 19; Section 22; Section 24**
Acoustic Environment			
2	Effects of noise and disturbance to animals and Indigenous peoples.	The proposed Project may potentially affect animals and Indigenous peoples due to noise and other Project related disturbances during Project construction, operation and maintenance. As part of the Project planning and regulatory approval process, an effects assessment is being conducted which will include proposing mitigation measures that will be needed to avoid or minimize adverse effects, including effects due to noise, and disturbance to animals and Indigenous peoples.	**Part D: Location Information and Context; Section 14** **Part E: Federal, Provincial, Territorial, Indigenous or Municipal Involvement and Effects; Section 18** **Part F: Potential Effects of the Project; Section 22**
Alternative Means of Carrying Out the Project			
3	Clarity on criteria used to assess potential road routes.	The Initial Project Description submitted to IAAC presented four potential alternative CAR routes that were identified based on historical studies, ongoing engagement with the MFFN community and discussions with provincial and federal agencies. The criteria used to assess potential CAR routing to determine the previously proposed four alternative routes included the following: • Avoid areas of muskeg and bog deposits • >200 m from the Ogoki River and >1 km from the Albany River, except for watercourse crossing location • Minimize the number and size of watercourse crossings • Maximize high ground location	**Part B: Planning Phase Results; Section 3; Section 4** **Part C: Project Information; Section 12** **Part D: Location Information and Context; Section 13a; Section 13d; Section 13e; Section 13f; Section 14**

Issue #	Key Issue Raised	Response	Location in Detailed Project Description for Additional Information
		• Shortest length to the MFFN community Prior to, and after the Initial Project Description was submitted to IAAC which included the four potential alternative CAR routes, MFFN continued to engage, at varying levels, with interested Indigenous community members, including neighbouring Indigenous communities[1], and other persons (the public) so that feedback was considered in the on-going Project decision-making process. Ongoing engagement efforts in winter and spring of 2019 confirmed that eastern routes located within the eastern corridor alternative routes (i.e. Alternative 2 and Alternative 3) are not considered to be reasonable alternatives for the Project based on the concerns raised by MFFN community members and Chief and Council. Specifically, MFFN signed a Band Council Resolution on July 31, 2019 to only consider the western corridor alternative routes (i.e. Alternative 1 and Alternative 4) in the Project environmental assessment process because the eastern routes are only considered potentially viable if the road is built as a dedicated CAR, and these two alternatives will be assessed in a future impact statement, should one be required. Considering the Project is proposed as a multi-purpose CAR built to meet industrial use specifications, the eastern alternative routes shared during the early engagement process are not considered reasonable alternative methods for the Project and will not be further considered. Feedback from MFFN's ongoing engagement program and the federal and provincial engagement process regarding this Project will be considered in the determination of the final CAR route.	
4	Effects assessment on alternatives to consider effects on fish habitat, wildlife habitat.	The proposed Project may potentially affect fish and wildlife habitat. As part of the Project planning and regulatory approval process, an effects assessment is being conducted on two western corridor alternative routes (Alternative 1 and Alternative 4) which will include proposing mitigation measures that will be needed to avoid or minimize adverse effects on fish habitat and wildlife habitat in consideration of existing information gathered through ongoing desktop studies, field studies and information gathered through Indigenous Knowledge sharing. These two alternatives will also be assessed in a future impact statement, should one be required. A CAR route that would minimize potential adverse effects on fish and fish habitat will be one of the factors considered in the determination of a final proposed CAR route. The design and construction of the final CAR route will apply Fisheries and Oceans Canada (DFO)'s measures to protect fish and fish habitat and applicable standards and codes of practice to the extent feasible. Fish habitat offsetting measures will be implemented as required to mitigate adverse effects on fish and fish habitat. Mitigation measures to avoid or minimize effects on fish habitat and wildlife habitat will include conducting ongoing monitoring and follow-up programs as required.	**Part B: Planning Phase Results; Section 3; Section 4** **Part D: Location Information and Context; Section 14** **Part E: Federal, Provincial, Territorial, Indigenous or Municipal Involvement and Effects; Section 18** **Part F: Potential Effects of the Project; Section 19; Section 22**
5	Effects assessment to consider important wildlife areas, such as higher ground, travel routes and den sites.	The proposed Project may potentially affect important wildlife areas, such as higher ground, travel routes and den sites. As part of the Project planning and regulatory approval process, an effects assessment is being conducted to determine potential adverse effects of the Project on important wildlife areas, including higher grounds, migration and travel routes, and den sites in consideration of existing information gathered through ongoing desktop and field studies, and information gathered through Indigenous Knowledge sharing. Mitigation measures to avoid or minimize potential adverse effects of the	**Part D: Location Information and Context; Section 14** **Part F: Potential Effects of the Project; Section 22**

[1] **Neighbouring Indigenous Communities** include 14 Indigenous groups identified by the Canadian Environmental Assessment Agency (CEA Agency) on November 13, 2018 in CEA Agency's 'Preliminary List of Indigenous Communities for Proponent Engagement on the Martin Falls Access Road' and the 22 Indigenous communities (including the 14 identified by CEA Agency) identified by the Ontario Ministry of the Environment, Conservation and Parks (MECP) who may be interested in the Project and who were officially notified of the commencement of the provincial review process for the Project, in addition to one other community identified by CEA Agency (now the Impact Assessment Agency of Canada [IAAC]) after November 13, 2018, totalling 23 Indigenous communities as listed in **Table 4-4** of the Detailed Project Description.

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		Project on important wildlife areas (e.g., important known wintering areas for caribou and moose, travel routes, den sites) will be proposed.	
6	Effects assessment to consider dedicated protected areas identified through the Community Based Land Use Plans (CBLUP) developed by Indigenous groups potentially impacted by the Project.	The entire length of a proposed CAR is expected to occur in an area covered by the Marten Falls Community Based Land Use Plan (CBLUP) which is in the process of being finalized. Portions of the CBLUP may consider areas set aside for protection and other areas for economic development opportunities. Further, the Project falls mostly within the traditional territory of MFFN, with a portion of MFFN traditional lands being shared with Aroland FN in the southern area of the proposed Project. MFFN and Aroland FN are in the process of establishing an Indigenous Knowledge Sharing Agreement, and a Memorandum of Understanding that will identify how they will work together regarding this Project. The CBLUP identifies protected lands, and traditional land use will be considered in the assessment of Project effects and evaluation of route alternatives (Alternative 1 and Alternative 4). MFFN will consider land use plans in the provincial environmental assessment process, and in a federal impact assessment, if required, from communities that choose to share land use plans whether they are formal/registered or not.	**Part B: Planning Phase Results; Section 4; Section 5** **Part C: Project Information; Section 12** **Part D: Location Information and Context; Section 13c; Section 13e** **Part E: Federal, Provincial, Territorial, Indigenous or Municipal Involvement and Effects; Section 18** **Part F: Potential Effects of the Project; Section 21**
Alternatives to the Project			
7	Consideration of alternatives to the Project, including rail as a means of transportation of nickel and chromite and an East-West road corridor from Pickle Lake to the Ring of Fire area.	The Project is being proposed as a multi-use all-season road and will therefore provide a means of transportation for potential future mining activities. An all-season access road to MFFN has been identified in *Ontario's Long-term Infrastructure Plan 2017.* Therefore, MFFN is not considering different types of transportation provision projects, including rail, as alternatives to the Project.	**Part B: Planning Phase Results; Section 3; Section 4** **Part C: Project Information; Section 12** **Part D: Location Information and Context; Section 13a; Section 13d; Section 13e; Section 13f; Section 14**
Atmospheric Environment			
8	Effects on air quality.	Potential adverse effects of the Project on air quality would mostly include changes to air quality from exhaust emissions and dust generation resulting from vehicles used during Project construction and maintenance, and vehicles using the CAR during Project operation. As part of the Project planning and regulatory approval process, an effects assessment of potential Project effects on air quality will be conducted and mitigation measures to avoid or minimize potential adverse effects of the Project on air quality will be proposed. Field studies are in progress to determine the baseline air quality conditions for the two Project alternative routes as described in the Detailed Project Description.	**Part D: Location Information and Context; Section 14** **Part F: Potential Effects of the Project; Section 22; Section 24**

Issue #	Key Issue Raised	Response	Location in Detailed Project Description for Additional Information
Birds, Migratory Birds and their Habitat.			
9	Effects on wetlands, which represent the habitat of migratory birds during breeding season and migration.	Potential adverse effects of the Project on wetlands (representing important migratory bird habitat) are described in the Detailed Project Description and would mostly include changes to wetland form and functions due to the footprint of the Project needing to traverse through some wetland areas. Effects to wetlands may also result from potential changes to surface water and groundwater flow, quantity and water quality which contribute to wetland form and functions. Potential effects to surface water (including wetlands) would be primarily related to sediment and erosion, and potential introduction of contaminants from accidental releases. Potential effects to groundwater would be primarily related to construction activities such as dewatering, water use, and the creation of impervious surfaces which have the potential to affect groundwater. A temporary lowering of the groundwater table during Project construction by required dewatering activities, as needed, may decrease groundwater discharge to wetlands. As part of the Project planning and regulatory approval process, an effects assessment of potential Project effects on wetlands will be conducted and mitigation measures to avoid or minimize potential adverse effects of the Project on wetlands will be proposed.	**Part C: Project Information; Section 9** **Part D: Location Information and Context; Section 14** **Part F: Potential Effects of the Project; Section 22; Section 23**
10	Effects from the creation of clearings in the uplands, which could attract migratory birds to areas with vehicular traffic, thereby increasing collision risk.	The proposed Project may potentially affect migratory birds due to the creation of clearings, including in upland areas. Potential adverse effects of the Project on migratory birds will include the potential for increased vehicle collision risk, including in upland areas, where vegetation must be cleared to accommodate Project construction. As part of the Project planning and regulatory approval process, an effects assessment of potential Project effects on migratory birds will be conducted and mitigation measures to avoid or minimize potential adverse effects of the Project on migratory birds will be proposed.	**Part C: Project Information; Section 11** **Part E: Federal, Provincial, Territorial, Indigenous or Municipal Involvement and Effects; Section 18** **Part F: Potential Effects of the Project; Section 19; Section 22**
Climate Change and Greenhouse Gas Emissions			
11	Effect on climate change and effects due to greenhouse gas emissions.	Potential adverse effects of the Project on climate change and potential effects due to greenhouse gas emissions may occur primarily from exhaust emissions from vehicles used during Project construction and maintenance, and vehicles using the CAR during Project operation. As part of the Project planning and regulatory approval process, an effects assessment of potential Project effects on climate change and potential effects due to greenhouse gas emissions will be conducted and mitigation measures to avoid or minimize potential adverse effects on climate change and effects due to greenhouse gas emissions will be proposed. It is expected that use of electric vehicles will increase throughout the operation phase of the CAR which would reduce the contribution of the Project to greenhouse gas emissions and potential effects on climate change.	**Part E: Federal, Provincial, Territorial, Indigenous or Municipal Involvement and Effects; Section 18** **Part F: Potential Effects of the Project; Section 22; Section 23; Section 24**
12	Effect on carbon sink due to the removal of wetlands and muskeg.	Potential adverse effects on the carbon sink due to the removal of wetlands and muskeg may occur during Project construction. As part of the Project planning and regulatory approval process, an effects assessment of potential Project effects on carbon sink due to the removal of wetlands and muskeg will be conducted and mitigation measures to avoid or minimize potential adverse effects on carbon sink will be proposed.	**Part F: Potential Effects of the Project; Section 22; Section 23**
Country Foods*			
13	Effects on quality and quantity of country foods, including fish, wildlife (including caribou) and plants, including medicines.	The proposed Project may potentially affect the quality and quantity of country foods, including fish, wildlife (including caribou) and plants, including medicines. As part of the Project planning and regulatory approval process, an effects assessment is being conducted which will include proposing mitigation measures that will be needed to avoid or minimize potential adverse effects on quality and quantity of country foods*, including fish, wildlife (including caribou) and plants, including medicines.	**Part B: Planning Phase Results; Section 3; Section 4** **Part C: Project Information; Section 7** **Part F: Potential Effects of the Project; Section 21**

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14	Effects on country foods from contaminants due to changes in water and soil quality, which could be absorbed by foods sourced through hunting, trapping, fishing, hunting, harvesting, or grown for subsistence or medicinal purposes.	The proposed Project may potentially affect country foods if water and soil quality are contaminated, and contaminants in water and soil are absorbed by foods sourced through hunting, trapping, fishing, hunting, harvesting, or grown for subsistence or medicinal purposes. As part of the Project planning and regulatory approval process, an effects assessment is being conducted which will include proposing mitigation measures that will be needed to avoid or minimize potential adverse effects on country foods*, including the potential for contamination of country foods due to changes in water and soil quality.	**Part B: Planning Phase Results; Section 3; Section 4** **Part C: Project Information; Section 7** **Part F: Potential Effects of the Project; Section 21**
15	Effects on peatland and wetland areas, which could increase the mercury methylation processes and be absorbed by people through country foods.	The proposed Project may potentially affect peatland and wetland areas. As part of the Project planning and regulatory approval process, an effects assessment is being conducted which will include determining the potential for the Project to increase mercury methylation processes in affected peatland and wetland areas, and the potential for mercury absorption by people to result through consumption of mercury contamination of country foods due to the potential for increased mercury methylation processes in peatland and wetland areas. The effects assessment will include proposing mitigation measures that will be needed to avoid or minimize potential adverse effects on country foods and people.	**Part C: Project Information; Section 9** **Part D: Location Information and Context; Section 14** **Part F: Potential Effects of the Project; Section 22; Section 23**
Cumulative Effects			
16	Cumulative effects from industrial uses of the road and from future infrastructure and projects facilitated by the road, such as mineral exploration activities and mines, in a previously pristine environment.	The proposed Project may potentially result in cumulative effects from industrial uses of the road and from future infrastructure and projects facilitated by the road, such as mineral exploration activities and mines, in a previously pristine environment. As part of the Project planning and regulatory approval process, an effects assessment, including an assessment of cumulative effects, is being conducted which will include proposing mitigation measures that will be needed to avoid or minimize adverse effects. As part of the cumulative effects assessment, the changes to the environment, health, social and economic conditions as a result of the Project's residual environmental, health, social and economic effects from other past, present and *reasonably foreseeable physical activities* that overlap with the Project study area will be included in the cumulative effects assessment. Mitigation measures to avoid or minimize potential adverse cumulative effects of the Project on the environment will be proposed.	**Part B: Planning Phase Results; Section 3** **Part F: Potential Effects of the Project; Section 22**
17	Cumulative effects on the environment and on Aboriginal and Treaty rights resulting from the Project and its potential expansions.	The proposed Project may potentially result in cumulative effects on the environment and on Aboriginal and Treaty rights. MFFN has no plans to expand the proposed Project. The Project is as described in the Detailed Project Description. As part of the Project planning and regulatory approval process, an effects assessment, including an assessment of cumulative effects, is being conducted which will include proposing mitigation measures that will be needed to avoid or minimize adverse effects. As part of the cumulative effects assessment, the changes to the environment, health, social and economic conditions as a result of the Project's residual environmental, health, social and economic effects from other past, present and *reasonably foreseeable physical activities* that overlap with the Project study area will be included in the cumulative effects assessment. Potential impacts on Aboriginal and Treaty Rights, which will focus on topics identified by Indigenous communities during ongoing engagement as potentially affecting Aboriginal and Treaty Rights, will be considered in the assessment of cumulative effects. Mitigation measures to avoid or minimize potential adverse cumulative effects of the Project on Aboriginal and Treaty rights will be proposed.	**Part B: Planning Phase Results; Section 4** **Part D: Location Information and Context; Section 13e** **Part F: Potential Effects of the Project; Section 22**
18	Cumulative effects on cultural, social, health and economic conditions.	The proposed Project may potentially result in cumulative effects on cultural, social, health and economic conditions. As part of the Project planning and regulatory approval process, an effects assessment, including an assessment of cumulative effects, is being conducted which will include proposing mitigation measures that will be needed to avoid or minimize adverse effects. As part of the cumulative effects assessment, the changes to cultural, social, health and economic conditions as a result of the Project's residual effects from other past, present and *reasonably foreseeable physical activities* that overlap with the Project study area will be included in the cumulative effects assessment. Mitigation measures to avoid	**Part B: Planning Phase Results; Section 4** **Part D: Location Information and Context; Section 14** **Part F: Potential Effects of the Project; Section 22**

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		or minimize potential adverse cumulative effects of the Project on cultural, social, health and economic conditions will be proposed.	
19	Cumulative effects caused by the Ogoki River diversion project carried out in the 1940s-1950s.	As part of the Project planning and regulatory approval process, an effects assessment, including an assessment of cumulative effects, is being conducted which will include proposing mitigation measures that will be needed to avoid or minimize adverse effects. As part of the cumulative effects assessment, the changes to the environment, health, social and economic conditions as a result of the Project's residual environmental, health, social and economic effects from other past, present and *reasonably foreseeable physical activities* that overlap with the Project study area will be included in the cumulative effects assessment. Therefore, considering a MFFN CAR would require a new crossing of the Ogoki River, cumulative effects of the Project and historical impacts of the Ogoki River diversion project will be considered in a federal impact assessment as required. The cumulative effects assessment would consider lessons learned from the impacts that resulted from previous projects such as the Ogoki River diversion project in the development of mitigation measures relevant to the MFFN CAR Project.	**Part C: Project Information; Section 12** **Part D: Location Information and Context; Section 13c; Section 14** **Part F: Potential Effects of the Project; Section 22**
Drinking Water			
20	Effects on drinking water sources due to alterations to groundwater and surface water flow patterns.	As part of the Project planning and regulatory approval process, an effects assessment is being conducted which will include determining the potential for the Project to affect drinking water sources due to alterations to groundwater and surface water flow patterns. The effects assessment will include proposing mitigation measures that will be needed to avoid or minimize potential adverse effects on surface water and groundwater that may result in effects to drinking water sources.	**Part D: Location Information and Context; Section 14** **Part E: Federal, Provincial, Territorial, Indigenous or Municipal Involvement and Effects; Section 18** **Part F: Potential Effects of the Project; Section 22**
Economic Conditions			
21	Effects on economic conditions resulting from increased population, economic activities and opportunities, changes to cost of living, social and cultural settings, and in- and out-migration.	The proposed Project may potentially result in increased population, economic activities and opportunities, changes to cost of living, social and cultural settings, and in- and out-migration which would affect economic conditions of potentially affected non-Indigenous and Indigenous communities. The Project will provide reliable access to the community of Marten Falls, increased travel safety and reduce the price of food, fuel and supplies, and will provide MFFN with future economic development opportunities. As part of the Project planning and regulatory approval process, an effects assessment, including an assessment of cumulative effects, is being conducted which will include proposing mitigation measures that will be needed to avoid or minimize potential adverse effects on economic conditions resulting from increased population, economic activities and opportunities, changes to cost of living, social and cultural settings, and in- and out-migration. This assessment would be supported through data collection activities with members of the Marten Falls community and other neighbouring communities.	**Part F: Potential Effects of the Project; Section 21; Section 22**
22	Effects on economic and cultural way of life due to changes in economic conditions.	The proposed Project may potentially result in changes in economic conditions that would affect the economic and cultural way of life of potentially affected non-Indigenous and Indigenous communities. The Project will provide reliable access to the community of Marten Falls, increased travel safety and reduce the price of food, fuel and supplies, and will provide MFFN with future economic development opportunities. As part of the Project planning and regulatory approval process, an effects assessment, including an assessment of cumulative effects, is being conducted which will include proposing mitigation measures that will be needed to avoid or minimize potential adverse effects on economic and cultural way of life due to	**Part F: Potential Effects of the Project; Section 21; Section 22**

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		changes in economic conditions. This assessment would be supported through data collection activities with members of the Marten Falls community and other neighbouring communities.	
23	Dialogue and cooperation with current and future industrial stakeholders whose interests and holdings may be impacted by the Project, including KWG Resources and Noront Resources.	MFFN appreciates the contribution of any relevant information and assistance from interested parties that may assist in the development of a feasible and beneficial Project design, and that may assist in the assessment of potential Project effects. MFFN has engaged directly with industrial stakeholders such as Noront and KWG for many years in the planning and development of the CAR, as well as to remain informed regarding future mineral exploration and development in the area, including the Ring of Fire area. MFFN has organized and hosted an annual Ring of Fire Symposium that brings together industrial, commercial and community members to engage in ongoing communication and awareness.	**Part B: Planning Phase Results; Section 3**
24	Spillover effects on regional development in the Far-North due to the Project and the Webequie Supply Road.	As part of the Project planning and regulatory approval process, an effects assessment, including an assessment of cumulative effects, is being conducted which will include proposing mitigation measures that will be needed to avoid or minimize adverse effects. As part of the cumulative effects assessment, the changes to the environment, health, social and economic conditions as a result of the Project's residual environmental, health, social and economic effects from other past, present and *reasonably foreseeable physical activities* that overlap with the Project study area will be included in the cumulative effects assessment. This assessment will include both positive and adverse effects on regional development. While the proposed Webequie Supply Road is well outside the Marten Falls CAR Project study area, the potential for its inclusion in a cumulative effects assessment will be considered, and discussed with IAAC.	**Part B: Planning Phase Results; Section 3** **Part F: Potential Effects of the Project; Section 22**
Fish and Fish Habitat			
25	Effects on fish passage resulting from the construction of water crossings, including effects on water quality, stream morphology, spawning habitat, fish habitat, death of fish and increased fishing activity.	The proposed Project may potentially affect fish and fish habitat due to the construction of water crossings. As part of the Project planning and regulatory approval process, an effects assessment is being conducted on the potential Project effects on fish passage that may result from the construction of water crossings, including potential effects on water quality, stream morphology, spawning habitat, fish habitat, and the potential for the Project to result in the death of fish and increased fishing activity. Mitigation measures that will be needed to avoid or minimize these potential adverse effects will be proposed. Fisheries and Oceans Canada (DFO)'s measures to protect fish and fish habitat and applicable standards and codes of practice will be applied to the extent feasible. A CAR route that would minimize potential adverse effects on fish and fish habitat will be one of the factors considered in the determination of a final proposed CAR route. The intention of MFFN is to propose a balance between maximizing community benefits, while minimizing adverse effects through an informed CAR route selection process, application of effective mitigation measures, and ongoing monitoring and follow-up programs as required. Fish habitat offsetting measures will be implemented as required to mitigate adverse effects on fish and fish habitat.	**Part B: Planning Phase Results; Section 3; Section 4** **Part C: Project Information; Section 11** **Part D: Location Information and Context; Section 14** **Part E: Federal, Provincial, Territorial, Indigenous or Municipal Involvement and Effects; Section 18** **Part F: Potential Effects of the Project; Section 19; Section 22**
26	Effects on fish and fish habitat resulting from construction and operations, such as runoff from roads and parking lots typically containing sediments, oil, grease and heavy metals that may be harmful to aquatic biota.	The proposed Project may potentially affect fish and fish habitat during construction, operation and maintenance due to the introduction of runoff that may contain harmful substances to fish-bearing waterways. As part of the Project planning and regulatory approval process, an effects assessment is being conducted which will include proposing mitigation measures that will be needed to avoid or minimize adverse effects on fish and fish habitat, including effects potentially resulting from construction and operations, such as runoff from roads and parking lots typically containing sediments, oil, grease and heavy metals that may be harmful to aquatic biota. Fisheries and Oceans Canada (DFO)'s measures to protect fish and fish habitat and applicable standards and codes of practice will be applied to the extent feasible. A CAR route that would minimize potential adverse effects on fish and fish habitat will be one of the factors considered in the determination of a final proposed CAR route. The intention of MFFN is to propose a balance between maximizing community benefits, while minimizing adverse effects through an informed CAR route selection process, application of effective mitigation measures,	**Part B: Planning Phase Results; Section 3; Section 4** **Part C: Project Information; Section 11** **Part D: Location Information and Context; Section 14** **Part E: Federal, Provincial, Territorial, Indigenous or Municipal Involvement and Effects; Section 18**

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		and ongoing monitoring and follow-up programs as required. Fish habitat offsetting measures will be implemented as required to mitigate adverse effects on fish and fish habitat. During construction, there is the possibility of accidental leaks or spills from construction equipment. In preparation for construction, a Spill Management Plan will be developed to mitigate and manage accidental releases of hazardous substances. During operation of the CAR, traffic accidents may occur which could involve spills of hazardous substances. To reduce the probability of traffic accidents along the CAR, the Project will be constructed according to established design codes and standards and maintained according to relevant guidelines and regulatory requirements for the proposed purpose and location of the road. During Project construction and maintenance, the handling, storage, transportation and disposal of hazardous substances will be done in accordance with the federal *Transportation of Dangerous Goods Act, 1992* and the provincial *Dangerous Goods Transportation Act* (and respecting the Canada-Ontario *Agreement Respecting Administration of the Transportation of Dangerous Goods Act, 1992*), including spills management and reporting under the provincial *Environmental Protection Act*. Therefore, the potential adverse effects of accidents, including hazardous substance spills associated with the Project, are expected to be mitigated to the extent feasible.	**Part F: Potential Effects of the Project; Section 19; Section 22**
Follow-up and Monitoring Programs			
27	Allocation of financial resources to cover the costs of any cleanup, restoration, reclamation or enhancement work required.	Currently, there is provincial funding confirmed for construction of the Project. The construction phase of the Project includes site clean-up, restoration, and site reclamation or enhancement work (as required), for areas disturbed during construction that are not required for project operation and maintenance. No federal funding has been provided, or is currently anticipated, for the Project.	**Part E: Federal, Provincial, Territorial, Indigenous or Municipal Involvement and Effects; Section 16**
Food Security			
28	Effects on food availability, including country foods, and cost.	The proposed Project may potentially result in changes to food, including country foods, availability and cost. The Project is expected to provide reliable access, increase travel safety and reduce the cost of food, fuel and supplies. It is also expected to provide MFFN, and potentially, neighbouring Indigenous communities, with future economic development opportunities. A reliable means of land transport to MFFN will reduce the community's reliance on air transport and will help reduce the cost of food overall. Regarding country foods, the Project will increase accessibility to areas not previously available for harvesting of country foods (e.g., fish, wildlife and plant populations). This beneficial effect on country food availability will help offset the higher costs for transporting food to the community. To the contrary, there may also be the potential for adverse effects on the availability of country foods due to the increased access for fishers, hunters and gatherers (e.g., berry pickers) to the Project area. As part of the Project planning and regulatory approval process, an effects assessment is being conducted which will include proposing mitigation measures that will be needed to avoid or minimize adverse effects on food availability, including country foods, and cost.	**Part B: Planning Phase Results; Section 3** **Part F: Potential Effects of the Project; Section 21**
General – Assessment Type			
29	Value of federal assessment due to the regional context, the social, health, economic and environmental effects, cumulative effects, and the Project listed in the *Physical Activities Regulations.*	As part of the Project planning and regulatory approval process, an effects assessment, including an assessment of cumulative effects, is being conducted which will include proposing mitigation measures that will be needed to avoid or minimize adverse social, health, economic and environmental effects. Should an impact assessment be required by IAAC for the Project, a cumulative effects assessment will be conducted and included within an Impact Statement document in accordance with the scope and content as recommended within the IAAC's *Tailored Impact Statement Guidelines.*	**Part C: Project Information; Section 8** **Part E: Federal, Provincial, Territorial, Indigenous or Municipal Involvement and Effects; Section 18**

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30	Value of a regional assessment to support land use planning, and understand cumulative effects, including to freshwater, Aboriginal and Treaty rights, and climate change.	Regional assessments are one component of a broader Government of Canada effort to address the issue of cumulative effects nationally. Currently, no regional assessment has been conducted for the area that includes the proposed Project. Should a regional assessment become available during the regulatory review process for this proposed Project, that information would be considered in the effects assessment that is being conducted for the proposed Project.	**Part B: Planning Phase Results; Section 5** **Part E: Federal, Provincial, Territorial, Indigenous or Municipal Involvement and Effects; Section 18** **Part F: Potential Effects of the Project; Section 22**
General – Project Description			
31	Long-term feasibility for this proponent to manage all phases of the Project given proposed industrial use.	As currently proposed, MFFN will be managing all phases of the Project development, which will include Project design to accommodate industrial use, and Project construction and operation. MFFN will make decisions on the CAR under the leadership of MFFN Community Member Advisors, MFFN Chief and Council, and with support of technical advisors. Options for road ownership, maintenance activities and liability are being considered in discussion with the Province.	**Part C: Project Information; Section 11**
32	Transparency regarding funding (from federal and/or provincial government, private sector businesses or extractive industries) for the construction and operation, including maintenance, of an industrial road of this length.	A description of any financial support that federal authorities are, or may be, providing to the Project is included in the Detailed Project Description. Information regarding Project funding was provided in Section 4.1 'Financial Support' of the initial Project Description (August 2019) that was provided in the IAAC Public Registry for public review from August 9, 2019 to August 29, 2019, and from September 11, 2019 to October 1, 2019.	**Part E: Federal, Provincial, Territorial, Indigenous or Municipal Involvement and Effects; Section 16**
33	Clarity on the Project's components, including the exact location of quarry pits and work camps.	The proposed Project engineering is currently at the conceptual level. Final details regarding the exact location of quarry pits and work camps will be determined as studies are completed and the detailed design is prepared. Studies being conducted include areas along each alternative route that take advantage of existing aggregate materials to minimize the need for sourcing materials further from construction areas. Additionally, the detailed design will take into account the results of baseline studies currently being conducted in order to avoid adverse effects of quarry pits and work camps on natural features such as wildlife habitat, wetlands, and peatlands. Information regarding proposed locations of quarry pits and work camps along a proposed CAR alignment will be provided once a proposed CAR alignment is determined through ongoing studies and feedback from the ongoing engagement program. Key steps of the ongoing engagement program that are intended to obtain feedback on the two proposed Project alternatives towards determining the final CAR alignment and locations of major ancillary features, such as quarry pits and work camps are summarized as follows: 1) Send letters introducing the proposed Project to Neighbouring Indigenous Communities and key stakeholders 2) Hold meetings with Neighbouring Indigenous Communities and select members of those communities (e.g., Elders, hunters, trappers) 3) Provide Project update information and opportunities for feedback using a variety of communication tools to Neighbouring Indigenous Communities and key stakeholders (e.g., Project website; social media, notices in local newspapers and on the radio, newsletters, email updates), including letters seeking feedback on locations of Project components including major ancillary facilities	**Part C: Project Information; Section 9**

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		4) Keep records on input received and provide updates using communication methods described above on how feedback has influenced the Project design Additional information regarding the Project engagement and consultation process is provided in **Part B: Planning Phase Results** in the Detailed Project Description. MFFN is committed to engaging communities that may be potentially impacted by the Project, or those communities who have expressed interest on the Project as whole. These efforts and communications with respective groups will be considered in the preferred route selection and final locations of ancillary infrastructure components such as quarry pits and work camps.	
34	Effects due to potential volume of traffic on the road for future mining projects.	Estimated traffic volumes on the proposed CAR, and on the existing Ontario road network that the CAR would provide access to, may potentially change if future mining projects are developed. As part of the Project planning and regulatory approval process, an effects assessment, including an assessment of cumulative effects related to the predicted volume of traffic on the road, is being conducted which will include proposing mitigation measures that will be needed to avoid or minimize adverse effects of traffic. As part of the cumulative effects assessment, the changes to cultural, social, health and economic conditions as a result of the Project's residual effects from other past, present and *reasonably foreseeable physical activities* that overlap with the Project study area will be included in the cumulative effects assessment. Mitigation measures to avoid or minimize potential adverse cumulative effects of traffic will be proposed.	**Part C: Project Information; Section 9; Section 10** **Part D: Location Information and Context; Section 14** **Part F: Potential Effects of the Project; Section 22; Section 23**
35	Use of road (a community access road or an industrial road to enable future access to potential mineral development activities in the Ring of Fire area).	The Project will provide all-season reliable access, reduce the cost of transporting supplies, increase safety of winter road travel and provide the community with economic opportunities associated with potential future mineral developments in MFFN territory or near the Project, including the Ring of Fire area. The Project will provide substantial benefits to MFFN regardless of if a future link to potential northern mine development areas, such as the Ring of Fire area, may become viable. However, the potential future development of these mineral deposits could offer considerable employment opportunities and other benefits to neighbouring non-Indigenous and Indigenous communities, including MFFN. Currently, no all-season ground access exists to the Ring of Fire mining claims or mining claims of interest north of the community.	**Part A: Updated General Information; Section 1** **Part C: Project Information; Section 7**
36	Clarity on locations of all potentially impacted Indigenous groups and their traditional territories for each project alternative.	The Project falls within the traditional territory of MFFN. To date, the only neighbouring Indigenous Community that has clearly indicated that their traditional territory extends into the MFCAR Project study area is Aroland First Nation. Mapping that identifies the traditional territories of other neighbouring First Nation communities is not readily available. Other Indigenous communities may identify that their traditional territories extend into the MFCAR study area as a result of future planned engagement activities with these other communities. This information may be shared with MFFN in the future as a result of planned engagement activities. Potential Project-related effects of the two proposed alterative CAR routes to those traditional lands of neighbouring Indigenous communities, including those identified by both the province and the IAAC, will be confirmed and considered as part of the Project impact assessment process.	**Part D: Location Information and Context; Section 13e**
37	Nature of the proponent's engagement activities and participants, including any responses provided to Indigenous groups.	Through the ongoing Project engagement program, MFFN has and will continue to engage, at varying levels, with interested Indigenous community members and other persons (the public) so that feedback is considered in the Project decision-making, design and proposed mitigation measures. The nature and scope of MFFN's engagement program including type and nature of comments provided were included in Section 6.2.1 'Engagement Activities and Responses to Date' in the initial Project Description. As indicated in that section, most of the comments were requests for consideration of specific issues as part of Project planning and the Project approval process. As such, responses have been that their concerns have been noted and that more specific responses will be provided once an impact assessment is initiated as that will be when more detailed information will become available. This Summary of Issues table as part of the federal review process provides responses to the key issues raised during the MFFN engagement program and government engagement and is posted on the IAAC Public Registry as part of the Detailed Project Description for this Project.	**Part B: Planning Phase Results; Section 3; Section 4**

Issue #	Key Issue Raised	Response	Location in Detailed Project Description for Additional Information
38	Reasons for estimated timeline for the construction of the road.	The estimated timeline for the Project construction phase (2021 - 2031), considers the scope and scale of the Proposed project, engagement process and required regulatory review and approval processes. For the purpose of the Detailed Project Description, the maximum expected construction period of 10 years is proposed. However, the construction phase may take as few as three years to complete depending on financing arrangements and agreements.	**Part C: Project Information; Section 11**
39	Clarity on lead for the Project and information on the extent of involvement of the Marten Falls First Nation Project Team, including a list of the community members involved and examples of meeting minutes.	The proponent (and lead) of the proposed Project is Marten Falls First Nation (MFFN). MFFN will be responsible for design, construction and maintenance of the proposed Project. The planning of the Project is community-led; meaning the community of MFFN will develop solutions and advance decisions on the CAR. The community has formed a Project Team consisting of MFFN members and non-MFFN members to guide the Project through the required regulatory permitting process. The Project Team will act on behalf of the MFFN community based on guidance, direction and input from MFFN Chief and Council, MFFN Community Member Advisers and community members. Therefore, the Project Team envisions two distinct roles for MFFN community members: 1) involvement in the community-led process as a proponent of the Project; and 2) an Indigenous community potentially affected by the Project. The Project engagement program is currently ongoing with regional Indigenous communities, key stakeholders and the general public. Engagement meetings are being documented and feedback is being tracked. The results of engagement for this Project regarding information presented, feedback received, and how feedback influenced Project-related decisions will be made available to the public in accordance with regulatory requirements.	**Part A: Updated General Information; Section 2**
40	Clarity on workforce characteristics for the Project, including by gender, as well as main employment barriers for local under-represented groups.	Final details regarding the Project workforce characteristics will be determined as studies are completed and the detailed design is prepared. As part of the Project planning and regulatory approval process, an effects assessment is being conducted which will include proposing mitigation measures that will be needed to avoid or minimize adverse effects related to gender, as well as main employment barriers for local under-represented groups.	**Part B: Planning Phase Results; Section 3**
Groundwater			
41	Effects to groundwater, including from wetland contamination.	During construction, there is the possibility of accidental leaks or spills from construction equipment. In preparation for construction, a Spill Management Plan will be developed to mitigate and manage accidental releases of hazardous substances. During operation of the community access road (CAR), traffic accidents may occur which could involve spills of hazardous substances. To reduce the probability of traffic accidents along the CAR, the Project will be constructed according to established design codes and standards and maintained according to relevant guidelines and regulatory requirements for the proposed purpose and location of the road. During Project construction and maintenance, the handling, storage, transportation and disposal of hazardous substances will be done in accordance with the federal *Transportation of Dangerous Goods Act, 1992* and the provincial *Dangerous Goods Transportation Act* (and respecting the Canada-Ontario *Agreement Respecting Administration of the Transportation of Dangerous Goods Act, 1992*), including spills management and reporting under the provincial *Environmental Protection Act*. Therefore, the potential adverse effects of accidents, including hazardous substance spills associated with the Project that may contaminate wetlands and groundwater, are expected to be mitigated to the extent feasible. Additional potential effects to groundwater would be primarily related to construction activities such as dewatering, water use, and the creation of impervious surfaces which have the potential to affect groundwater. A temporary lowering of the groundwater table during Project construction by required dewatering activities, as needed, may decrease groundwater	**Part D: Location Information and Context; Section 14** **Part E: Federal, Provincial, Territorial, Indigenous or Municipal Involvement and Effects; Section 18** **Part F: Potential Effects of the Project; Section 19; Section 22; Section 24**

Issue #	Key Issue Raised	Response	Location in Detailed Project Description for Additional Information
		discharge to wetlands. As part of the Project planning and regulatory approval process, an effects assessment is being conducted that will include proposing mitigation measures needed to avoid or minimize adverse effects to groundwater, including from wetland contamination.	
Human Health and Well-Being			
42	Health impacts from noise on human receptors may vary based on construction timing (e.g. nighttime activities) and duration.	The proposed Project may produce sound levels that may be perceived as noise by human receptors, which may have potential adverse effects to human health. As part of the Project planning and regulatory approval process, an effects assessment is being conducted which will include proposing mitigation measures that will be needed to avoid or minimize adverse health effects from noise on human receptors. Should an impact assessment be required by IAAC for the Project, an assessment of effects will be conducted, including effects due to noise, and mitigation measures to avoid or minimize potential adverse effects of the Project will be proposed and included in an Impact Statement document. Mitigation measures proposed to avoid adverse effects on human health related to noise are expected to include restrictions on the timing and duration of construction activities near residences to the extent feasible pending additional engagement with potentially affected residents on this topic once a final CAR route is determined.	**Part D: Location Information and Context; Section 14** **Part E: Federal, Provincial, Territorial, Indigenous or Municipal Involvement and Effects; Section 18** **Part F: Potential Effects of the Project; Section 22**
Indigenous and Stakeholder Engagement and Consultation			
43	Involvement and support of Indigenous peoples for development in the Ring of Fire area.	The primary purpose of the proposed MFFN CAR Project is to provide access for the community of Marten Falls regardless of whether future development in the Ring of Fire occurs. While there are ongoing discussions and studies related to roads leading to the Ring of Fire area, the timing, ownership, funding and feasibility of potential future developments in the Ring of Fire area are currently undetermined and therefore proposed future developments within the Ring of Fire area would be separate projects from the proposed MFFN CAR Project. The focus of the ongoing engagement program is regarding the proposed MFFN CAR Project. Therefore, MFFN cannot comment on involvement and support of Indigenous peoples for development in the Ring of Fire area.	**Part B: Planning Phase Results; Section 4**
44	Sufficient and timely funding for Indigenous groups and other stakeholders to participate in the Planning Phase.	Both the federal and provincial governments have funding programs available which support Indigenous groups, individuals and non-profit organizations interested in participating in the Project Planning Phase review process though an application and eligibility process. MFFN cannot comment on the sufficiency of the government-initiated participant funding program.	**Part C: Project Information; Section 11**
45	Collaboration with Indigenous groups for provincial planning, due to the effects of the investment in the North-South Infrastructure corridor, which is a catalyst for regional development.	The proposed Project is for a community access road to Marten Falls. As part of Project planning and approval processes, the potential for economic changes to the Marten Falls community and other neighbouring communities will be considered. This would also include potential economic benefits that might result from the development of lands in the vicinity of the recommended community access road route.	**Part B: Planning Phase Results; Section 4** **Part D: Location Information and Context; Section 13e** **Part F: Potential Effects of the Project; Section 22**
46	Early collaborative planning process and multi-party meaningful Indigenous consultation throughout the federal impact assessment, including during the definition of the project design, taking into consideration Indigenous Knowledge and traditional land use.	MFFN has been engaging with the neighbouring Indigenous communities on the Project for several years. This multi-party meaningful Indigenous engagement effort has included direct discussions and meetings with several communities, as well as public open houses available to anyone interested in the Project to attend, and the public release of draft documents for review and comment such as the Initial Project Description. To support Project planning and approvals, MFFN is committed to ongoing engagement with neighbouring communities including the consideration of Indigenous Knowledge and land use information should communities wish to share this information. Input from neighbouring communities received to date is included in the Detailed Project Description. This information will inform the Project effects assessment and proposed mitigation measures.	**Part B: Planning Phase Results; Section 4**

Issue #	Key Issue Raised	Response	Location in Detailed Project Description for Additional Information
47	Use of inputs gathered from Indigenous groups during consultation to revise effects assessment and alternative routes presented, in particular due to the effects on wildlife.	The ongoing Project engagement process will continue to gather feedback from potentially affected Indigenous groups on the potential effects of the proposed two western route alternatives for the CAR. Determination of the final CAR route, and assessment of the potential Project effects, both adverse and beneficial, will be undertaken based on feedback from the ongoing engagement process, including Indigenous Knowledge, previous studies, and information that is currently being gathered through ongoing desktop studies, and field studies (including wildlife studies) within the proposed alternative route corridors. The intention of MFFN is to propose a balance between maximizing community benefits, while minimizing adverse effects through an informed CAR route selection process, application of effective mitigation measures, and ongoing monitoring and follow-up programs as required.	**Part B: Planning Phase Results; Section 4**
Indigenous Knowledge			
48	Incorporation of Indigenous Knowledge into planning, management, and operational decisions as well as during environmental data collection, monitoring studies and identification of mitigation measures related to social, economic and environmental assessment of exploration activities or potential developments.	The ongoing engagement program for the Project will provide potentially affected neighbouring, and interested, Indigenous communities and stakeholders the opportunity to record their concerns, questions and opinions on potential effects and mitigation strategies, and their Indigenous Knowledge of the local environment. Updated information on the engagement program process is provided in the Detailed Project Description. As part of the Project planning and regulatory approval process, an effects assessment is being conducted which will include proposing mitigation measures that will be needed to avoid or minimize adverse effects. To support the effects assessment process, desktop studies, baseline field studies and the engagement of Indigenous communities, the public, interested groups and government agencies are in progress. Considering the Project falls mostly within the traditional territory of MFFN, with a portion of MFFN traditional lands being shared with Aroland FN in the southern area of the proposed Project, MFFN and Aroland FN are in the process of establishing a Memorandum of Understanding and Indigenous Knowledge Sharing Agreement. MFFN is also committed to developing an understanding of how Indigenous Knowledge from neighbouring Indigenous communities can be shared and also incorporated into Project planning, management, and operational decisions as well as during environmental data collection, monitoring studies and identification of mitigation measures related to social, economic and environmental assessment of the Project, including assessment of cumulative effects. MFFN understands that some Indigenous Knowledge may not be shared and will clarify the Indigenous Knowledge that can be shared during discussions with neighbouring Indigenous communities that would like to contribute their Indigenous Knowledge for the above-stated Project related purposes.	**Part A: Updated General Information; Section 1** **Part B: Planning Phase Results; Section 4** **Part C: Project Information; Section 12** **Part D: Location Information and Context; Section 13d** **Part F: Potential Effects of the Project; Section 19; Section 21; Section 22**
Indigenous Peoples' Current Use of Lands and Resources for Traditional Purposes			
49	Impacts on Indigenous peoples' ability to continue traditional practices, such as trapping and use of trap lines, hunting, fishing, harvesting, berry picking, medicinal plant harvesting, teaching, and spiritual practices.	The proposed Project may potentially affect the traditional practices of Indigenous peoples such as trapping and use of trap lines, hunting, fishing, harvesting, berry picking, medicinal plant harvesting, teaching, and spiritual practices. As part of the Project planning and regulatory approval process, an effects assessment is being conducted which will include proposing mitigation measures that will be needed to avoid or minimize potential adverse effects on Indigenous peoples' ability to continue traditional practices, such as trapping and use of trap lines, hunting, fishing, harvesting, berry picking, medicinal plant harvesting, teaching, and spiritual practices.	**Part D: Location Information and Context; Section 13e** **Part F: Potential Effects of the Project; Section 21; Section 22**
50	Impacts of easier access by non-Indigenous peoples to Indigenous traditional territories.	The proposed Project may result in effects related to easier access by non-Indigenous peoples to Indigenous traditional territories such as increased hunting in Indigenous traditional territories. As part of the Project planning and regulatory approval process, an effects assessment is being conducted which will assess the potential effects of easier access by non-Indigenous peoples to Indigenous traditional territories. The effects assessment will include mitigation measures that are	**Part F: Potential Effects of the Project; Section 21; Section 22**

Issue #	Key Issue Raised	Response	Location in Detailed Project Description for Additional Information
		feasible and that may be needed to avoid or minimize potential adverse effects related to easier access by non-Indigenous peoples to Indigenous traditional territories.	
Indigenous Peoples' Economic Conditions			
51	Effects on economic conditions (living cost, compensation, poverty, available land) of Indigenous peoples (including women and youth).	The proposed Project may potentially affect economic conditions of Indigenous peoples (including women and youth), such as potential effects on living cost, poverty and available land. As part of the Project planning and regulatory approval process, an effects assessment is being conducted which will assess the potential effects of economic conditions (living cost, poverty, available land) of Indigenous peoples (including women and youth). The effects assessment will include mitigation measures that are feasible and that may be needed to avoid or minimize potential adverse effects related to changes to economic conditions (living cost, poverty, available land) of Indigenous peoples (including women and youth).	**Part F: Potential Effects of the Project; Section 21; Section 22**
52	Proponent's contribution to training, skills development and employment.	Project planning activities will consider ways to enhance Project-related employment opportunities for Indigenous people, including ways to contribute to training and skills development that would be required for Project related activities. At this stage of the Project planning phase, MFFN has yet to determine specifics regarding contribution to training, skills development and employment. These details will be determined as the Project design advances and in consideration of feedback received from the ongoing Project engagement and consultation activities.	**Part C: Project Information; Section7; Section 12** **Part F: Potential Effects of the Project; Section 21; Section 22**
Indigenous Peoples' Health Conditions			
53	Effects on malnutrition, country food contamination, diabetes, cardiovascular issues, mental health and accessibility of health-care services.	The proposed Project may potentially affect malnutrition, country food contamination, diabetes, cardiovascular issues, mental health and accessibility of health-care services for the MFFN community and neighbouring potentially affected Indigenous communities. The Project will provide reliable access, increased travel safety and reduce the price of food, fuel and supplies, and will provide MFFN with future economic development opportunities. Therefore, the Project is expected to provide substantial benefits to MFFN related to increased access to health care and nutritional foods. As part of the Project planning and regulatory approval process, an effects assessment is being conducted which will assess the potential effects of the Project on malnutrition, country food contamination, diabetes, cardiovascular issues, mental health and accessibility of health-care services. The effects assessment will include mitigation measures that are feasible and that may be needed to avoid or minimize potential adverse effects related to malnutrition, country food contamination, diabetes, cardiovascular issues, mental health and accessibility of health-care services.	**Part B: Planning Phase Results; Section 4** **Part F: Potential Effects of the Project; Section 21; Section 22**
54	Effects on air quality, air emissions and dust, which can cause adverse impacts on human sensitive receptors.	The proposed Project may potentially affect air quality (including increased air emissions and dust) which may potentially affect human sensitive receptors. As part of the Project planning and regulatory approval process, an effects assessment is being conducted which will assess the potential effects of the Project on air quality, including air emissions and dust, which can cause adverse impacts on human sensitive receptors. The effects assessment will include mitigation measures that are feasible and that may be needed to avoid or minimize potential adverse effects related to air quality, air emissions, dust, and effects on human sensitive receptors.	**Part D: Location Information and Context; Section 14** **Part F: Potential Effects of the Project; Section 22; Section 23; Section 24**
55	Effects of accessibility on increased number of pregnancies, sexual violence, sexually transmitted infections and gender-based violence on women and youth.	Increased accessibility to MFFN, and Aroland First Nation, resulting from the Project may potentially affect the number of pregnancies, sexual violence, sexually transmitted infections and gender-based violence on women and youth. As part of the Project planning and regulatory approval process, an effects assessment is being conducted which will include proposing mitigation measures that will be needed to avoid or minimize adverse effects of accessibility on increased number of pregnancies, sexual violence, sexually transmitted infections and gender-based violence on women and youth. The	**Part F: Potential Effects of the Project; Section 22**

Issue #	Key Issue Raised	Response	Location in Detailed Project Description for Additional Information
		Project impact assessment will include a Gender Based Analysis in accordance with IAAC guidance on methods to conduct a Gender Based Analysis.	
Indigenous Peoples' Rights			
56	Impacts on rights protected under the Constitution Act, 1982, including rights to land and resources, Cree language, spirituality, family trap lines/Cree Nationhood, values- mores, choice of livelihood and vocation.	MFFN is committed to creating and sustaining constructive dialogue and relationships with neighbouring Indigenous communities to support the environmental, social and economic sustainability of the Project. Through the ongoing engagement program for this Project, MFFN will continue to invite neighbouring Indigenous communities to express their opinions and interest in the proposed Project and will endeavour to work towards cooperative involvement of communities interested in the Project with the intent to protect the rights and cultural values of affected Indigenous communities.	**Part B: Planning Phase Results; Section 4** **Part F: Potential Effects of the Project; Section 21; Section 22**
Indigenous Peoples' Social Conditions			
57	Effects on social conditions from youth delinquent issues, child hunger, poverty, child-rearing responsibilities, single parenting.	The proposed Project may potentially affect social conditions related to youth delinquent issues, child hunger, poverty, child-rearing responsibilities, and single parenting. As part of the Project planning and regulatory approval process, an effects assessment is being conducted which will assess the potential effects of the Project on social conditions from youth delinquent issues, child hunger, poverty, child-rearing responsibilities, and single parenting. The effects assessment will include mitigation measures that are feasible and that may be needed to avoid or minimize potential adverse effects related to social conditions from youth delinquent issues, child hunger, poverty, child-rearing responsibilities, and single parenting.	**Part F: Potential Effects of the Project; Section 21; Section 22**
58	Effects on social conditions due to loss of elders as teachers of culture/heritage, loss of spirituality, loss of language, loss of culture, traditional camps, family structure, and bush survival skills, loss of family homelands and alteration of social values.	The proposed Project may potentially affect social conditions related to loss of elders as teachers of culture/heritage, loss of spirituality, loss of language, loss of culture, traditional camps, family structure, and bush survival skills, loss of family homelands and alteration of social values. As part of the Project planning and regulatory approval process, an effects assessment is being conducted which will assess the potential effects of the Project on social conditions due to loss of elders as teachers of culture/heritage, loss of spirituality, loss of language, loss of culture, traditional camps, family structure, and bush survival skills, loss of family homelands and alteration of social values. The effects assessment will include mitigation measures that are feasible and that may be needed to avoid or minimize potential adverse effects related to social conditions due to loss of elders as teachers of culture/heritage, loss of spirituality, loss of language, loss of culture, traditional camps, family structure, and bush survival skills, loss of family homelands and alteration of social values.	**Part F: Potential Effects of the Project; Section 21; Section 22**
59	Effects on social conditions due to changes in quality of life, urbanization, increased connectivity, rapid social changes, access to technology, increased mobility.	The proposed Project may potentially affect social conditions related to changes in quality of life, urbanization, increased connectivity, rapid social changes, access to technology and increased mobility. As part of the Project planning and regulatory approval process, an effects assessment is being conducted which will assess the potential effects of the Project on social conditions due to changes in quality of life, urbanization, increased connectivity, rapid social changes, access to technology, and increased mobility. The effects assessment will include mitigation measures that are feasible and that may be needed to avoid or minimize potential adverse effects related to social conditions due to changes in quality of life, urbanization, increased connectivity, rapid social changes, access to technology, and increased mobility.	**Part F: Potential Effects of the Project; Section 21; Section 22**
60	Effects on social conditions due to changes in accessibility, personal finance, career guidance, legal aid, essential workplace and life skills.	The proposed Project may potentially affect social conditions due to changes in accessibility, personal finance, career guidance, legal aid, essential workplace and life skills. As part of the Project planning and regulatory approval process, an effects assessment is being conducted which will assess the potential effects of the Project on social conditions due to changes in accessibility, personal finance, career guidance, legal aid, essential workplace and life skills. The effects assessment will include mitigation measures that are feasible and that may be needed to avoid or minimize potential adverse effects related to social conditions due to changes in accessibility, personal finance, career guidance, legal aid, essential workplace and life skills.	**Part F: Potential Effects of the Project; Section 21; Section 22**

Issue #	Key Issue Raised	Response	Location in Detailed Project Description for Additional Information
61	Effects on social conditions stemming from smoking, alcohol and drug use, as well as driving under the influence.	The proposed Project may potentially affect social conditions related to smoking, alcohol and drug use, as well as driving under the influence. As part of the Project planning and regulatory approval process, an effects assessment is being conducted which will assess the potential effects of the Project on social conditions stemming from smoking, alcohol and drug use, as well as driving under the influence. The effects assessment will include mitigation measures that are feasible and that may be needed to avoid or minimize potential adverse effects stemming from smoking, alcohol and drug use, as well as driving under the influence.	**Part F: Potential Effects of the Project; Section 21; Section 22**
Indigenous Peoples' Physical and Cultural Heritage			
62	Effects on cultural heritage and archaeological resources of Indigenous groups.	The proposed Project may potentially affect cultural heritage and archaeological resources of Indigenous groups. As part of the Project planning and regulatory approval process, an effects assessment is being conducted which will assess the potential effects of the Project on cultural heritage and archaeological resources of Indigenous groups. The effects assessment will include mitigation measures that are feasible and that may be needed to avoid or minimize potential adverse effects on cultural heritage and archaeological resources of Indigenous groups. A CAR route that would minimize potential adverse effects on cultural heritage and archaeological resources will be one of the factors considered in the determination of a final proposed CAR route.	**Part E: Federal, Provincial, Territorial, Indigenous or Municipal Involvement and Effects; Section 18** **Part F: Potential Effects of the Project; Section 21; Section 22**
Mitigation Measures			
63	Mitigation measures related to impacts on Indigenous people, their rights, their social, health, economic and environmental conditions.	Through the ongoing Project engagement program, MFFN has and will continue to engage, at varying levels, with interested Indigenous community members and other persons (the public) so that feedback is considered in the Project decision-making, design and development of feasible mitigation measures to avoid Project related impacts on Indigenous people, their rights, their social, health, economic and environmental conditions.	**Part F: Potential Effects of the Project; Section 21; Section 22**
64	Clarity of mitigation measures, including of blasting noise, loss or effects to flora and fauna.	The proposed Project may potentially affect local flora and fauna. Through the ongoing Project engagement program, MFFN has and will continue to engage, at varying levels, with interested Indigenous community members and other persons (the public) so that feedback is considered in the Project decision-making, design and development of feasible mitigation measures to avoid Project related impacts related to blasting noise, and loss or effects to flora and fauna.	**Part D: Location Information and Context; Section 14** **Part E: Federal, Provincial, Territorial, Indigenous or Municipal Involvement and Effects; Section 18** **Part F: Potential Effects of the Project; Section 19**
Navigation			
65	Effects on navigable waters.	As part of the Project planning and regulatory approval process, an effects assessment is being conducted which will assess the potential effects of the Project on navigable waters. The effects assessment will include mitigation measures that are feasible and that may be needed to avoid or minimize potential adverse effects on navigable waters. The public right to navigation on Canada's navigable waters is protected under the *Canadian Navigable Waters Act*. It is expected that the IAAC will seek the timely participation of federal authorities, such as DFO and Transport Canada, in the review of a Project Impact Statement.	**Part E: Federal, Provincial, Territorial, Indigenous or Municipal Involvement and Effects; Section 18**
Operations, Decommissioning and Abandonment			
66	Clarity on all aspects of the operations phase. Effects from the lack of appropriate de-commissioning, revegetation and reclamation activities.	Considering that the Project is an access road, the operation phase will include ongoing maintenance activities of the CAR and associated components such as water crossings and borrow areas required for road maintenance. The proposed Project engineering is currently at the conceptual level. Final details regarding the operations phase such as locations of borrow areas for ongoing maintenance will be determined as studies are completed and the detailed design is prepared.	**Part C: Project Information; Section 9; Section 11**

Issue #	Key Issue Raised	Response	Location in Detailed Project Description for Additional Information
		A Project effects assessment is being developed that will provide clarity on all aspects of the operations phase of a proposed CAR alignment. Mitigation measures to avoid or minimize potential adverse effects of the Project will be proposed, including ongoing follow-up monitoring to check the effectiveness of revegetation and reclamation activities of temporarily disturbed areas, as required. Currently, there are no plans for decommissioning the CAR should it be constructed. Decommissioning of temporary components that are no longer required, once construction of the CAR is complete, will occur as a part of the construction phase of the Project. These temporary components include: access roads, quarries, borrow areas, and construction staging areas not required to maintain the CAR once it is built.	
Project Contribution to Sustainability			
67	The Project's contribution to sustainability, recognizing the interconnectedness and interdependence of human-ecological systems and well-being of present and future generations.	As part of the Project planning and regulatory approval process, an effects assessment is being conducted which will assess the Project's contribution to sustainability, in recognition of the interconnectedness and interdependence of human-ecological systems and well-being of present and future generations. The effects assessment will include mitigation measures that are feasible and that may be needed to avoid or minimize potential adverse effects on sustainability of human-ecological systems and well-being of present and future generations.	**Part E: Federal, Provincial, Territorial, Indigenous or Municipal Involvement and Effects; Section 18** **Part F: Potential Effects of the Project; Section 21**
68	Weight of negative effects versus positive effects of the Project.	To support Project planning decision making, both positive and negative effects of the Project will be considered. The intention of MFFN is to propose a balance between maximizing community benefits, while minimizing adverse effects through an informed CAR route selection process, application of effective mitigation measures and on-going follow-up monitoring.	**Part F: Potential Effects of the Project; Section 21**
Project Expansion			
69	The Project's potential expansion to the Ring of Fire area, noting the baseline studies already being carried out for such a purpose along the corridor north from the Project to the Ring of Fire area.	The Project being proposed is an all-season CAR to MFFN. The CAR is being developed as a multi-purpose use road in order to accommodate commercial/industrial traffic such as mining and forestry trucks. The primary purpose of this project is to provide access for the community of Marten Falls regardless of whether future mineral development occurs. While there are ongoing discussions and studies related to roads leading to the Ring of Fire area, timing, ownership, funding and feasibility of those potential future roads are all unknown and therefore a future road or roads to the Ring of Fire area would be a separate project.	**Part B: Planning Phase Results; Section 3; Section 4** **Part C: Project Information; Section 7**
70	Effects, and cumulative effects, due to increased industrial traffic, resulting from the road potentially being extended to the Ring of Fire area.	As part of the Project planning and regulatory approval process, an effects assessment, including an assessment of cumulative effects, is being conducted which will include proposing mitigation measures that will be needed to avoid or minimize adverse effects related to increased industrial traffic. The changes due to increased industrial traffic from other past, present and *reasonably foreseeable physical activities* that overlap with the Project study area will be included in the cumulative effects assessment.	**Part C: Project Information; Section 7** **Part D: Location Information and Context; Section 14** **Part F: Potential Effects of the Project; Section 22; Section 23; Section 24**
Purpose of and Need for the Project			
71	Linkage between mineral developments, the Project and the Webequie Supply Road Project.	The Project being proposed is an all-season CAR to MFFN. which will provide reliable access, increased travel safety and reduce the price of food, fuel and supplies, and will provide MFFN with future economic development opportunities. The Project will provide substantial benefits to MFFN regardless of if a future link to potential northern mine development areas may become viable. Should a future road project connect the CAR to the Ring of Fire area, the CAR could also be used as an industry supply road because the CAR will be designed to accommodate industrial traffic such as mining and forestry	**Part A: Updated General Information; Section 1** **Part C: Project Information; Section 7**

Issue #	Key Issue Raised	Response	Location in Detailed Project Description for Additional Information
		trucks. The Webequie Supply Road Project is a separate project which would connect Webequie First Nation to the McFaulds Lake area, and it has no connectivity to the proposed MFFN CAR Project.	**Part F: Potential Effects of the Project; Section 22**
72	Project scope and its potential use for industrial purposes and expansion to the Ring of Fire area.	The Project is currently being proposed and scoped for the primary purpose as a community access road to MFFN. Should a future road project connect the CAR to the Ring of Fire area, the CAR could also be used as an industry supply road because the CAR will be designed to accommodate industrial traffic such as mining and forestry trucks.	**Part C: Project Information; Section 7; Section 12**
Riparian and Wetland Environments			
73	Effects to riparian and wetland environments (which have a high ecological and social value in the Far North), buffer zones, spread of invasive species and disturbance.	Potential environmental effects of the Project are identified in the Detailed Project Description and include effects on vegetation, wildlife, and fish and fish habitat from the spread / introduction of invasive species. As part of the Project planning and regulatory approval process, an effects assessment is being conducted which will include proposing mitigation measures that will be needed to avoid or minimize adverse effects to riparian and wetland environments. A CAR route that would minimize potential adverse effects on riparian and wetland environments will be one of the factors considered in the determination of a final proposed CAR route. Through the ongoing Project engagement program, MFFN has and will continue to engage at varying levels with interested Indigenous Community members so that feedback is considered in the Project decision-making, design and impact mitigation measures (such as discussing the feasibility of buffer zones) to avoid or minimize potential adverse effects on environments that have a high ecological and social value such as riparian and wetland environments.	**Part C: Project Information; Section 9; Section 11** **Part D: Location Information and Context; Section 14** **Part F: Potential Effects of the Project; Section 22; Section 23**
74	Effects of changes to water levels, including decreased bank stability and effects to the muskeg that provide carbon sequestration.	As part of the Project planning and regulatory approval process, an effects assessment is being conducted which will assess the potential effects of the Project on changes to water levels, including decreased bank stability and effects to the muskeg that provide carbon sequestration. The effects assessment will include mitigation measures that are feasible and that may be needed to avoid or minimize potential adverse effects on water levels, including decreased bank stability and effects to the muskeg that provide carbon sequestration.	**Part C: Project Information; Section 12** **Part D: Location Information and Context; Section 14** **Part F: Potential Effects on the Project; Section 22**
Social Conditions			
75	Effects of vandalism to infrastructure, such as cabins and trap lines, due to increased access to the territory.	The proposed Project may potentially affect incidences of vandalism to infrastructure, such as cabins and trap lines, due to increased access to the territory. As part of the Project planning and regulatory approval process, an effects assessment is being conducted which will assess the potential effects of the Project on infrastructure, such as cabins and trap lines, due to increased access to the territory and related potential for increased vandalism associated with increased access to the Project area. The effects assessment will include mitigation measures that are feasible and that may be needed to avoid or minimize potential adverse effects on infrastructure, such as cabins and trap lines, due to increased access to the territory and related potential for increased vandalism associated with increased access to the Project area.	**Part F: Potential Effects of the Project; Section 21; Section 22**
Species at Risk, Terrestrial Wildlife and their Habitat			
76	Effects on federally listed species at risk, including wolverine and caribou, as a result of the change and disruption of their habitat, such as changes to home range and movement patterns, sensory disturbance, air quality, increased predation, barriers and migration.	The proposed Project may potentially affect federally listed species at risk, including wolverine and caribou, as a result of the change and disruption of their habitat. As part of the Project planning and regulatory approval process, an effects assessment is being conducted which will assess the potential effects of the Project on federally listed species at risk, including wolverine and caribou, as a result of the change and disruption of their habitat, such as changes to home range and movement patterns, sensory disturbance, air quality, increased predation, barriers and migration. The effects assessment will include mitigation measures that are feasible and that may be needed to avoid or minimize potential	**Part E: Federal, Provincial, Territorial, Indigenous or Municipal Involvement and Effects; Section 18** **Part D: Location Information and Context; Section 14**

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		adverse effects on federally listed species at risk. A CAR route that would minimize potential adverse effects on species at risk will be one of the factors considered in the determination of a final proposed CAR route.	**Part F: Potential Effects of the Project; Section 22**
77	Effects on federally listed species at risk, including wolverine and caribou, as a result of increased human disturbance, increased recreational activities, stress and data collection activities, such as attaching radio collars for monitoring Woodland Caribou.	Methods used to gather information on species at risk, including information from the provincial government's ongoing caribou monitoring program, are methods developed, recommended and used by government department specialists. Wildlife field studies being conducted by consultants to gather baseline information on wildlife such as caribou are not currently using invasive methods such as attaching radio collars to wildlife. However, results of available wildlife monitoring efforts by government Ministries will be used for determining potential effects of the Project on species at risk. The proposed Project may potentially affect federally listed species at risk, including wolverine and caribou, as a result of increased human disturbance and increased recreational activities. As part of the Project planning and regulatory approval process, an effects assessment is being conducted which will assess the potential effects of the Project on federally listed species at risk, including wolverine and caribou, as a result of increased human disturbance, increased recreational activities, stress and data collection activities, such as attaching radio collars for monitoring Woodland Caribou. The effects assessment will include mitigation measures that are feasible and that may be needed to avoid or minimize potential adverse effects on federally listed species at risk. A CAR route that would minimize potential adverse effects on species at risk will be one of the factors considered in the determination of a final proposed CAR route.	**Part E: Federal, Provincial, Territorial, Indigenous or Municipal Involvement and Effects; Section 18** **Part D: Location Information and Context; Section 14** **Part F: Potential Effects of the Project; Section 22**
Structure, Site, Things of Historical, Archaeological, Paleontological or Architectural Significance			
78	Consultation and presentation of impacts on Indigenous peoples' physical and cultural heritage, current use of land for traditional purpose, or any structure, site or thing that is of historical, archaeological, paleontological or architectural significance.	Determination of the final CAR route, and assessment of the potential Project effects, both adverse and beneficial, will be undertaken based on feedback from the ongoing engagement and engagement process, including Indigenous Knowledge, previous studies, and information that is currently being gathered through ongoing desktop studies, and field studies within the proposed two alternative route corridors. Through the ongoing Project engagement program MFFN has and will continue to engage at varying levels with interested Indigenous Community members so that feedback is considered in the Project decision-making, design and impact mitigation measures to avoid or minimize potential adverse effects on Indigenous peoples' physical and cultural heritage, current use of land for traditional purpose, or any structure, site or thing that is of historical, archaeological, paleontological or architectural significance.	**Part B: Planning Phase Results; Section 4** **Part F: Potential Effects of the Project; Section 21**
Surface Water Quality and Quantity			
79	Effects from contamination, sedimentation, dust deposition, erosion, petroleum/chemical spills, water quality and quantity, water flows, beavers damming activities, permanent disruption of wetlands hydrology and other adverse effects to surface water quality and waterbeds.	During construction, there is the possibility of accidental leaks or spills from construction equipment. In preparation for construction, a Spill Management Plan will be developed to mitigate and manage accidental releases of hazardous substances. During operation of the community access road (CAR), traffic accidents may occur which could involve spills of hazardous substances. To reduce the probability of traffic accidents along the CAR, the Project will be constructed according to established design codes and standards and maintained according to relevant guidelines and regulatory requirements for the proposed purpose and location of the road. During Project construction and maintenance, the handling, storage, transportation and disposal of hazardous substances will be done in accordance with the federal *Transportation of Dangerous Goods Act, 1992* and the provincial *Dangerous Goods Transportation Act* (and respecting the Canada-Ontario *Agreement Respecting Administration of the Transportation of Dangerous Goods Act, 1992*), including spills management and reporting under the provincial *Environmental Protection Act*. Therefore, the potential adverse effects of accidents, including hazardous substance spills associated with the Project, are expected to be mitigated to the extent feasible. As part of the Project planning and regulatory approval process, an effects assessment is being conducted which will assess the potential effects of the Project from contamination, sedimentation, dust deposition, erosion, petroleum/chemical spills,	**Part F: Potential Effects of the Project; Section 22; Section 24**

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		water quality and quantity, water flows, beavers damming activities, permanent disruption of wetlands hydrology and other potential adverse effects to surface water quality and waterbeds. The effects assessment will include mitigation measures that are feasible and that may be needed to avoid or minimize potential adverse effects on surface water quality and waterbeds.	
80	Effects on the Albany River and downstream of the Project.	A CAR route that considers the crossing location of the Albany River and that would minimize potential adverse effects on the Albany River will be one of the factors considered in the determination of a final proposed CAR route. In addition, the potential effects of a CAR route crossing the Ogoki River, Dusey River, Corey Creek and Wabassi River will also be considered in the determination of the final proposed CAR route. As part of the Project planning and regulatory approval process, an effects assessment is being conducted which will assess the potential effects of the Project on the Albany River and downstream of the Project. The effects assessment will include mitigation measures that are feasible and that may be needed to avoid or minimize potential adverse effects on the Albany River and downstream of the Project. Bridges required across streams and rivers will be constructed in accordance with applicable provincial and federal standards and guidelines, and regulatory design codes.	**Part C: Project Information; Section 12** **Part D: Location Information and Context; Section 13c**
Topography, Soil and Sediment			
81	Effects of the Project on permafrost.	The proposed Project may potentially affect permafrost. As part of the Project planning and regulatory approval process, an effects assessment is being conducted which will assess the potential effects of the Project on permafrost. The effects assessment will include mitigation measures that are feasible and that may be needed to avoid or minimize potential adverse effects on permafrost. The Project will be designed in consideration of the most recent relevant standards and guidelines for roads in northern regions where permafrost occurs, such as the Transportation Association of Canada's Primer on Developing and Managing Transportation Infrastructure in Permafrost Regions (2010) and the federal government's Northern Land Use Guidelines – Access: Roads and Trails.	**Part E: Federal, Provincial, Territorial, Indigenous or Municipal Involvement and Effects; Section 18** **Part F: Potential Effects of the Project; Section 22**
Vegetation			
82	Effects on native and rare vegetation due to construction activities, use of roadside herbicides, soil disturbances and the introduction of invasive plant species.	The proposed Project may potentially affect native and rare vegetation. As part of the Project planning and regulatory approval process, an effects assessment is being conducted which will assess the potential effects of the Project on native and rare vegetation due to construction activities, use of roadside herbicides, soil disturbances and the introduction of invasive plant species. The effects assessment will include mitigation measures that are feasible and that may be needed to avoid or minimize potential adverse effects on native and rare vegetation.	**Part F: Potential Effects of the Project; Section 22**
Vulnerable Population Groups (GBA+)			
83	Impacts on vulnerable population groups (GBA+) such as women, disabled persons, elders and youth as a result of gender-based violence, human trafficking, resulting from the influx of male workers to the communities.	The proposed Project may potentially affect vulnerable population groups (GBA+) such as women, disabled persons, elders and youth as a result of gender-based violence, human trafficking, resulting from the influx of male workers to the communities. As part of the Project planning and regulatory approval process, an effects assessment is being conducted which will assess the potential effects of the Project on vulnerable population groups (GBA+) such as women, disabled persons, elders and youth as a result of gender-based violence, human trafficking, resulting from the influx of male workers to the communities. To assess potential Project effects on vulnerable groups, federal government recommendations and guidance regarding conducting a GBA+ will be considered. The effects assessment will include mitigation measures that are feasible and that may be needed to avoid or minimize potential adverse effects on vulnerable population groups (GBA+) such as women, disabled persons, elders and youth as a result of gender-based violence, human trafficking, resulting from the influx of male workers to the communities.	**Part F: Potential Effects of the Project; Section 22**

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84	Indigenous groups' access to economic benefits and opportunities and for mitigation measures for long-term youth unemployment.	To support Project planning and regulatory approvals, an assessment of effects, including effects of the Project such as potential economic benefits and opportunities for Indigenous peoples, will be conducted and will include specific consideration of opportunities for long-term youth employment.	**Part F: Potential Effects of the Project; Section 22**
85	Identification of the segments of the population that will either benefit or be negatively impacted (directly or indirectly) by the Project, such as information on indigeneity (quality of being Indigenous), religion, education levels, disability or accessibility, etc.	To support Project planning and regulatory approvals, an assessment of effects, including effects of the Project on human health and well-being will be conducted and mitigation measures to avoid or minimize potential adverse effects of the Project will be proposed. The Project effects assessment will consider information, as available, regarding the potentially affected population segments that will either benefit or be negatively impacted (directly or indirectly) by the Project, such as information on indigeneity (quality of being Indigenous), religion, education levels, disability or accessibility.	**Part F: Potential Effects of the Project; Section 22**
Waste and Wastewater			
86	Effects from pollution, waste, including hazardous waste, and wastewater disposal.	The proposed Project may potentially affect the environment and people due to effects on air and water quality resulting from improper handling, transportation and disposal of hazardous wastes. As part of the Project planning and regulatory approval process, an effects assessment is being conducted which will assess the potential effects of the Project related to pollution, waste, including hazardous wastes, and wastewater disposal. The effects assessment will include mitigation measures that are feasible and that may be needed to avoid or minimize potential adverse effects related to pollution, waste, including hazardous wastes, and wastewater disposal. During Project construction and maintenance, the handling, storage, transportation and disposal of hazardous substances will be done in accordance with the federal *Transportation of Dangerous Goods Act, 1992* and the provincial *Dangerous Goods Transportation Act* (and respecting the Canada-Ontario *Agreement Respecting Administration of the Transportation of Dangerous Goods Act, 1992*), including spills management and reporting under the provincial *Environmental Protection Act*.	**Part C: Project Information; Section 9** **Part F: Potential Effects of the Project; Section 24**

Notes:

*** Country foods**, also known as 'traditional foods' are defined as all foods sourced outside of commercial food systems. These include any food that is trapped, fished, hunted, harvested or grown for subsistence or medicinal purposes, outside of the commercial food chain. This definition is from Health Canada (2018) encompasses the following food items:

- Aquatic and terrestrial fauna fished, trapped, hunted, and/or harvested (e.g., game animals and birds, fish, and seafood) for domestic consumption
- Produce harvested from naturally occurring sources (e.g., berries, seeds, leaves, roots, and lichen)
- Plant tissues (e.g., roots, bark, leaves, and seeds) ingested for medicinal or other uses (e.g., teas)
- Produce (e.g., fruits, vegetables, and fungi) grown in gardens, and/or home orchards
- Aquatic and terrestrial fauna (and their by-products) produced for domestic consumption but not for market (e.g., ducks, chickens or other fowls, eggs, and dairy products)

References:

Health Canada. 2018. Guidance for Evaluating Human Health Impacts in Environmental Assessment: Country Foods. Healthy Environments and Consumer Safety Branch, Health Canada, Ottawa, Ontario.

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