

Scoping Document Section	Scoping Document Requirements	Location in EIS	
		Chapter	Section
	resources, and cultural and traditional practices in the Local Assessment Area.		
3.1	○ Identify potential environmental effects and effective mitigation measures, and opportunities to enhance Project benefits.	6	6.2 to 6.4
	○ Identify the need for follow-up plans and monitoring programs.	9	9.1
	■ Adopt an adaptive approach to adjust the IPEP in response to stakeholder interests.	5	5.1.1 and 5.1.2
	■ Communicate to stakeholders how input and information provided was used.	2 5	2.2.2 5.6
3.2	Approach		
	Traditional Knowledge (TK) will be incorporated into the environmental assessment process by providing local information pertaining to traditional land uses, economic activities, ceremonial pursuits, as well as local ecological knowledge. TK also facilitates the direct inclusion of local Indigenous communities in project planning and design. TK information will be obtained through use of existing information (with permission), TK studies with the consent of the affected communities and TK workshops, interviews, community meetings and Open Houses.	2 4	2.2.2 4.4
	The IPEP will extend beyond the local Indigenous communities, with additional Public Open Houses in Winnipeg and presentations to interested stakeholders. Information from previous engagement and Crown consultation initiatives and/or programs such as the Large Area Network Study will also be incorporated. The IPEP will include descriptions of the Project and solicit input on comments and questions relating to the Project and the environmental assessment, prior to submission of the EIS.	5	5.2 to 5.6
4	ENVIRONMENTAL SETTING		
4.1	Biophysical Environment		
4.1.1	Atmospheric Environment		
	The EIS will consider the following attributes in the relevant spatial boundary:	6	6.1.1
	■ Prevailing climate and meteorological conditions including historical and seasonal averages and extremes in monthly temperatures and dates of freeze and thaw; and monthly precipitation and snow cover.	6	6.1.1.1
	■ Local air quality.	6	6.1.1.2
	■ Parameters related to climate change.	6	6.1.1.3
	■ Existing greenhouse gas and other emissions sources and production.	6	6.1.1.3
4.1.2	Physiography and Landscape		
	The EIS will consider the following attributes in the relevant spatial boundary:		
	■ Geology and surficial materials, including geological deposits or resources that may be used for the Project.	6	6.1.2.1

Scoping Document Section	Scoping Document Requirements	Location in EIS	
		Chapter	Section
	<ul style="list-style-type: none"> Soils/terrain. 	6	6.1.3
	<ul style="list-style-type: none"> Watersheds (including lakes and streams). 	6	6.1.5.1
4.1.2	<ul style="list-style-type: none"> Regional surface water/quality. 	6	6.1.5.1.4
	<ul style="list-style-type: none"> Groundwater conditions. 	6	6.1.5.2
4.1.3	<i>Aquatic Environment and Habitat</i> The EIS will consider the following attributes in the relevant spatial boundary:		
	<ul style="list-style-type: none"> The diversity of aquatic habitats in the area to be affected by the Project. 	6	6.1.6
	<ul style="list-style-type: none"> Fish and mollusk species inhabiting the area to be affected by the Project, including those that are important for commercial, recreational, or Aboriginal fisheries, and Species at Risk. Species occurrences will be based on existing information and augmented through sampling. 	6	6.1.6 and 6.1.8.2
	<ul style="list-style-type: none"> Potential utilization by fish of habitats both upstream and downstream of proposed watercourse crossing locations. 	6	6.1.6
	<ul style="list-style-type: none"> Potential fish habitat value and sensitivity to disturbance or alteration in each watercourse at or near the proposed crossing locations. Habitat value and sensitivity will consider habitat for key fish life stages, their relative abundance and importance to fish species. 	6	6.1.6
	<ul style="list-style-type: none"> Site specific surface water quality, including concentrations of water quality parameters that affect the suitability of the environment for aquatic life. 	6	6.1.5.1.4 and 6.1.6
4.14	<i>Vegetation and Terrestrial Habitat</i> The EIS will consider the following attributes in the relevant spatial boundary:		
	<ul style="list-style-type: none"> Ecological land classification using ecological stratification. 	6	6.1.4.1
	<ul style="list-style-type: none"> Vegetation composition, abundance and distribution using Land Cover Classification. 	6	6.1.4.1
	<ul style="list-style-type: none"> Fire history in the boreal forest using Provincial forest data. 	6	6.1.4.1
	<ul style="list-style-type: none"> Terrestrial and wetland community type descriptions developed from field studies. 	6	6.1.4
	<ul style="list-style-type: none"> Native and introduced species developed from desktop and field studies. 	6	6.1.4.1; Appendix 6-1
	<ul style="list-style-type: none"> Plant species of interest using TK studies. 	6	6.1.4.1
	<ul style="list-style-type: none"> Species at Risk (with a focus on <i>The Endangered Species and Ecosystems Act</i> (Manitoba), <i>Species at Risk Act</i>, Committee on the Status of Endangered Wildlife in Canada, and S1 to S2 Provincial ranked species from desktop and field studies). 	6	6.1.4.1 and 6.1.8.1
4.1.5	<i>Amphibians and Reptiles</i> The EIS will consider the following attributes in the relevant spatial boundary using information generated through desktop investigations, discussions with local people, habitat modeling of		

Scoping Document Section	Scoping Document Requirements	Location in EIS	
		Chapter	Section
	Valued Component (VC) species and augmented with field investigations:		
4.1.5	▪ Relative abundance, diversity and habitats of amphibians and reptiles in the area.	6	6.1.4.6
	▪ Species at Risk.	6	6.1.4.6 and 6.1.8.1
4.1.6	Avian Species		
	The EIS will consider the following attributes in the relevant spatial boundary using information generated through desktop investigations, discussions with local people, habitat modeling of VC species and augmented with field investigations:		
	▪ General information on bird species known or expected to inhabit the area.	6	6.1.7; Appendix 6-2
	▪ Relative abundance of bird VC (ex: waterfowl, raptors, game birds, song birds) and the distribution of their habitat.	6	6.1.7
	▪ Nesting sites of colonial waterbirds and raptors.	6	6.1.7
	▪ Species at Risk.	6	6.1.7 and 6.1.8.1
4.1.7	Mammals		
	The EIS will consider the following attributes in the relevant spatial boundary using information generated through desktop investigations, discussions with local people, habitat modeling of VC species and augmented with field investigations using methodologies reviewed by MSD:		
	▪ General information on mammal species known or expected to inhabit the area.	6	6.1.4.5
	▪ Relative abundance and distribution of mammal VCs including furbearers, moose and caribou.	6	6.1.4.5
	▪ Species at Risk.	6	6.1.4.5 and 6.1.8.1
4.2	Socio-Economic Environment		
	The EIS will consider the following attributes in the relevant spatial boundary:		
	▪ Land and resource use.	6	6.1.9.1, 6.1.9.2 and 6.1.11.3
	▪ Parks and Designated Protected Areas.	6	6.1.11.2
	▪ Tourism and recreation.	6	6.1.11.3
	▪ Human health and safety.	6	6.1.9.3
	▪ Infrastructure and services.	6	6.1.9.1
4.3	Indigenous Environment		
	Through TK, the IPEP, prior studies and existing information, the EIS will provide information on the following with respect to Indigenous communities:		
	▪ Community information such as population and services.	6	6.1.9.1
	▪ Resource use including hunting, fishing, trapping and gathering.	6	6.1.9.1 and 6.1.11.3
	▪ Traditional and cultural activities.	6	6.1.9.1
	▪ Heritage and cultural resources.	6	6.1.9.4

Scoping Document Section	Scoping Document Requirements	Location in EIS	
		Chapter	Section
5	PROPOSED ASSESSMENT APPROACH		
5.1	Effects Assessment Principles and Objectives The effects assessment will consider the existing environment without the Project, as the baseline condition against which changes caused by the Project will be identified, measured and assessed. The EIS will include consideration of the:		
	<ul style="list-style-type: none"> Existing biophysical, socio-economic and Indigenous environments in the relevant spatial boundary. 	4	4.2, 4.3.3, 4.4 and 4.5
	<ul style="list-style-type: none"> Project scope and the potential interactions among the Project activities and components of the environment. 	4	4.2, 4.3, and 4.5
	<ul style="list-style-type: none"> Scientific study and analysis, TK, local/community knowledge, and other stakeholder perspectives, comments and questions. 	4 5 6	4.4 5 6.1
	<ul style="list-style-type: none"> Past and potential future human activities that have and continue to affect the environment and how these activities may interact with the Project. 	4 6	4.2 6.6.3
	<ul style="list-style-type: none"> Sustainability of the proposed Project and effects on Indigenous peoples and communities. 	8	8.7
	<ul style="list-style-type: none"> Mitigation of adverse effects by avoidance, minimization and other means and maximizing beneficial effects to the extent practicable. 	4 6	4.5.4 6.6.3
	<ul style="list-style-type: none"> Implementation of follow-up actions where beneficial. 	9	9.1
5.2	Effects Assessment Process The effects assessment will include the following steps:		
	<ul style="list-style-type: none"> Describe the Project and the existing environment. 	3 6	3.1 to 3.6 6.1
	<ul style="list-style-type: none"> Describe temporal and spatial boundaries. 	4	4.3.3
	<ul style="list-style-type: none"> Identify and assess interactions among the Project activities and environmental components. 	6	6.2 and 6.3
	<ul style="list-style-type: none"> Identify and describe a selected list of appropriate VCs. These VCs will be used to provide a focus to the assessment and an evaluation of the significance of the potential environmental effects of the Project. 	4	4.5.1; Appendix 4-1
	<ul style="list-style-type: none"> Identify technically and economically feasible measures to mitigate adverse effects as well as measures to enhance positive effects. 	6	6.4
	<ul style="list-style-type: none"> Determine the significance of residual effects. 	6	6.5 and 6.6.3
5.2.1	Effects Identification The EIS will describe and assess the potential effects of the Project for the construction, operation and maintenance phases of the Project including those on:		
	<ul style="list-style-type: none"> The biophysical environment, including physiography and landscape, vegetation, wildlife, fisheries, surface water, groundwater, and forestry resources, including those caused by the potential release of hazardous materials (diesel fuel, used oil, etc.) 	6	6.2 and 6.3.1 to 6.3.3

Scoping Document Section	Scoping Document Requirements	Location in EIS	
		Chapter	Section
	or pollutants (emissions, effluents, solid wastes and hazardous wastes) that may be produced.		
5.2.1	<ul style="list-style-type: none"> Human health and safety, including, but not necessarily limited to potential effects on human health and safety resulting from the release of pollutants. 	6	6.3.4.5
	<ul style="list-style-type: none"> Heritage and cultural resources. 	6	6.3.4.4
	<ul style="list-style-type: none"> The exercise of Aboriginal and treaty rights, including, but not necessarily limited to: <ul style="list-style-type: none"> direct effects on communities resource use (ex: including hunting, fishing, trapping, gathering) cultural and traditional activities 	6	6.3.4.1 to 6.3.4.3
	Potential socio-economic effects stemming from environmental effects will also be identified and potential climate change implications will be discussed.	6	6.3.4 and 6.6.2.6
5.2.2	Mitigation and Residual Effects		
	The EIS will identify and describe mitigation or effect management measures proposed to be implemented during the phases of the Project, including need for off-setting disruption or loss of fish habitat, fish passage, and navigation rights and safety.	6 8	6.4; 8.1 to 8.5
	The EIS will identify and describe residual environmental effects that are anticipated to remain after mitigation measures have been implemented.	6	6.5
5.2.3	Determination of Significance		
	The EIS will outline the framework to be used in the evaluation of the significance of residual adverse effects by using the following criteria:	4	4.5.5; Tables 4.4 and 4.5
	<ul style="list-style-type: none"> direction or nature of effect (type of effect) 	6	6.5; Appendix 6-5
	<ul style="list-style-type: none"> duration of time that the effect occurs 	6	6.5; Appendix 6-5
	<ul style="list-style-type: none"> magnitude (severity) of the effect 	6	6.5; Appendix 6-5
	<ul style="list-style-type: none"> timing 	6	6.5; Appendix 6-5
	<ul style="list-style-type: none"> geographic extent of the effect 	6	6.5; Appendix 6-5
	<ul style="list-style-type: none"> frequency of the effect (how often the effect occurs) 	6	6.5; Appendix 6-5
	<ul style="list-style-type: none"> reversibility of the effect (if the effect can be reversed) 	6	6.5; Appendix 6-5
	<ul style="list-style-type: none"> ecological and social context (resilience of a VC to adapt to changes as a result of the project) 	6	6.5; Appendix 6-5
	Characterization of the significance of the residual adverse effects will consider scientific study and analysis, TK, and local knowledge, and will relate to all phases of the Project. The EIS will contain a	6	6.5

Scoping Document Section	Scoping Document Requirements	Location in EIS	
		Chapter	Section
	conclusion on significance of residual environmental effects supported by scientific rationale and assessment results including IPEP findings.		
5.3	Cumulative Effects Assessment		
	In addition to assessing the direct effects of the Project, the EIS will also include consideration of potential cumulative effects (the potential for Project effects to act in combination with the effects of other past, present and/or reasonably foreseeable future projects in the Assessment Area). The EIS will outline the approach and methods and will include a description and rationale for the spatial and temporal boundaries used in the cumulative effects assessment.	6	6.6.3
6	MONITORING AND FOLLOW-UP		
	The EIS will summarize proposed mitigation measures and follow-up actions where appropriate, including monitoring, inspection and reporting to be implemented during construction, operation and maintenance of the proposed Project. Monitoring and follow-up will focus on areas of key potential effects on VCs and will consider various methods such as the implementation of contract specifications, environmental management plans, and emergency response plans, as well as specific biophysical surveys and analysis.	6 9	Appendices 6-4 and 6-5 9.1 and 9.3
	Monitoring measures will be considered to facilitate compliance with mitigation measures, confirm effect predictions related to anticipated effects, to determine whether unexpected effects are occurring, and to allow for adaptive management and appropriate mitigation measures if unexpected effects do occur. Required monitoring will be finalized once regulatory requirements are known, and following the issuance of authorizations and regulatory approvals. Monitoring of the environmental effects on local Indigenous people and others who may be directly affected by the Project will be conducted, as required.	9	9.1 and 9.3
7	REPORT FORMAT AND ORGANIZATION		
	The EIS will contain the following:		
	<ul style="list-style-type: none"> Executive summary 	Will be submitted as a separate stand-alone document with the EIS	
	<ul style="list-style-type: none"> Introduction and Overview <ul style="list-style-type: none"> Proponent, location, regulatory framework 	1	1.1 to 1.6
	<ul style="list-style-type: none"> Project Justification and Alternatives Considered 	2	2.1 and 2.2
	<ul style="list-style-type: none"> Project Description <ul style="list-style-type: none"> Scope, phases, components, activities, schedule and funding 	3	3.1 to 3.6
	<ul style="list-style-type: none"> Environmental Assessment Approach <ul style="list-style-type: none"> Scope, sources of information, approach 	4	4.1 to 4.5
	<ul style="list-style-type: none"> Indigenous and Public Engagement <ul style="list-style-type: none"> Objectives and approaches, history, activities, and analysis and discussion of engagement results summarized by community 	5	5.1 to 5.7
	<ul style="list-style-type: none"> Effects Assessment 	6	6.1 to 6.6

Scoping Document Section	Scoping Document Requirements	Location in EIS	
		Chapter	Section
	<ul style="list-style-type: none"> ○ Project setting and baseline conditions, predicted changes to physical environment, effects on VCs, mitigation, conclusion on significance of residual effects 		
	<ul style="list-style-type: none"> ▪ Summary of Environmental Effects Assessment 	7	7.1 and 7.2
	<ul style="list-style-type: none"> ▪ Environmental Protection and Sustainable Development 	8	8.1 to 8.7
	<ul style="list-style-type: none"> ▪ Follow-up and Monitoring Programs 	9	9.1 to 9.4
	<ul style="list-style-type: none"> ▪ References <ul style="list-style-type: none"> ○ Supporting scientific, TK and local knowledge 	10	-

Chapter 1: Introduction and Overview

TABLE OF CONTENTS

	Page
1.0 INTRODUCTION AND OVERVIEW	1-1
1.1 The Proponent – Manitoba Infrastructure	1-1
1.1.1 Contact Information	1-1
1.1.2 Legal Entity.....	1-1
1.1.3 Corporate and Management Structures.....	1-1
1.1.4 Corporate Policy Implementation	1-2
1.1.5 Document Preparation	1-2
1.2 Project Overview.....	1-3
1.2.1 Project Components	1-11
1.2.2 Project Phases and Scheduling	1-11
1.2.3 The East Side Transportation Initiative.....	1-14
1.3 Project Location	1-16
1.3.1 Coordinates.....	1-16
1.3.2 Current Land Use	1-17
1.3.3 Proximity to Federal Lands	1-20
1.3.4 Environmental Significance of the Area	1-20
1.3.5 Proximity to Environmentally Sensitive Areas.....	1-21
1.3.6 Description of Local Communities	1-22
1.3.7 Proximity to Indigenous Territories, Treaty Lands and Reserves	1-22
1.4 Regulatory Framework and the Role of Government	1-23
1.4.1 Federal Regulatory Requirements	1-23
1.4.2 Provincial Regulatory Requirements	1-24
1.4.3 Indigenous Governance	1-26
1.4.4 Land Use and Community Plans and Zoning.....	1-27
1.5 Environmental Assessment Overview	1-28
1.6 Report Organization.....	1-29

LIST OF FIGURES

Figure 1-1:	Proposed Project all-season road alignment.....	1-4
Figure 1-2:	East terminus of the proposed Project alignment near Manto Sipi Cree Nation.....	1-5
Figure 1-3:	Northwest terminus of the proposed Project alignment near Bunibonibee Cree Nation	1-6
Figure 1-4:	South terminus of the proposed Project alignment near God’s Lake First Nation	1-7
Figure 1-5:	Intersection of the proposed Project alignment between Manto Sipi Cree Nation, Bunibonibee Cree Nation and God’s Lake First Nation	1-8
Figure 1-6:	Alignment options for proposed all-season road segment near Manto Sipi Cree Nation	1-9
Figure 1-7:	Proposed major water crossings (bridges) along the Project alignment.....	1-10
Figure 1-8:	Local Assessment Areas for the proposed Project showing Registered Traplines	1-12
Figure 1-9:	Regional Assessment Areas for the proposed Project.....	1-13
Figure 1-10:	Regional transportation network of planned all-season roads on the east side of Lake Winnipeg in the Large Area Transportation Network Study.	1-15
Figure 1-11:	Ecodistricts and Areas of Special Interest in the vicinity of the proposed Project.....	1-18
Figure 1-12:	Land cover in the vicinity of the proposed Project.....	1-19
Figure 1-13:	Summary of Environmental Assessment Approach	1-29

1.0 INTRODUCTION AND OVERVIEW

This document is the Environmental Assessment (EA) for Project 6 – All-Season Road Linking Manto Sipi Cree Nation, Bunibonibee Cree Nation and God’s Lake First Nation (the Project) to be located on the east side of Lake Winnipeg, Manitoba. The EA is being submitted to the Canadian Environmental Assessment Agency (Agency) as an Environmental Impact Statement (EIS) pursuant to the *Canadian Environmental Assessment Act*, 2012 and to Manitoba Sustainable Development (MSD; formerly Manitoba Conservation and Water Stewardship) as an Environment Act Proposal pursuant to requirements of *The Environment Act* of Manitoba.

1.1 The Proponent – Manitoba Infrastructure

The East Side Road Authority (ESRA) was established as a provincial Crown Agency to manage the East Side Transportation Initiative (ESTI) to increase transportation opportunities for communities on the east side of Lake Winnipeg. ESRA, however, has been absorbed into Manitoba Infrastructure (MI), which is a provincial government department. MI is the proponent and will continue to manage the proposed Project.

The proponent of the Project is Manitoba Infrastructure which will develop, construct and maintain the proposed Project.

1.1.1 Contact Information

For matters pertaining to the information contained within this EIS, the principal MI contact is as follows:

Name/Title/Address	Contact information
Mr. Kimber Osiowy Manager, Environmental Services Manitoba Infrastructure 1420-215 Garry Street Winnipeg, Manitoba, R3C 3P3	Direct Phone: (204) 771-4941 Fax: (204) 945-0593 Email: kimber.osiowy@gov.mb.ca

1.1.2 Legal Entity

As noted above, MI is the proponent for the proposed Project and subject to the receipt of the required regulatory approvals, will develop, manage and operate the Project. The Province of Manitoba will fund the proposed Project. There is no proposed or anticipated federal financial support for the Project at this time.

1.1.3 Corporate and Management Structures

MI’s vision, mission, values and priorities are as follows.

Vision

- Connect and protect Manitoba.

Mission

- To ensure safe, reliable and sustainable infrastructure and services for Manitoba and its communities.

Values

- Trustworthy, accountable, innovative, committed and caring.

Priorities

- Strategic Infrastructure Investment – Sustain cost effective and efficient program delivery. Ensure MI's infrastructure investment plan is strategic and meets long-term goals.
- Safety and Protection – Ensure the safety and protection of MI employees while at work. Increase the resilience of Manitoba by focusing on the ability of Manitobans to prepare for and respond to the hazards and risks they face. Ensure the safety of the travelling public while moving throughout Manitoba.
- Fostering Relationships – Build sustainable relationships through trust, communication and common understanding.
- Building Capacity – Develop a knowledgeable workforce that is flexible, dynamic and capable of meeting the challenges we face today and tomorrow. Be efficient in the delivery of our services, products and programs.

1.1.4 Corporate Policy Implementation

Chapter 8 outlines environmental protection measures derived from MI's corporate, environmental and safety policies, as well as how they will be implemented throughout the design, construction planning, construction and operations and maintenance phases of the proposed Project. MI's policies are implemented through inclusion of policies into contract clauses and inspections to ensure adherence.

1.1.5 Document Preparation

This EIS was prepared by KGS Group on behalf of MI. Supporting technical studies were completed by the following MI contractors.

- | | |
|------------------------------------|---------------------------------------|
| ▪ Indigenous and Public Engagement | KGS Group |
| ▪ Aquatic Environment | North/South Consultants Inc. |
| ▪ Heritage Resources | AMEC Foster Wheeler |
| ▪ Traditional Knowledge | HTFC Planning & Design |
| ▪ Vegetation | Szwaluk Environmental Consulting Ltd. |
| ▪ Wildlife | Joro Consultants Inc. |

Technical information used in the preparation of this EIS was reviewed by the MI contractors responsible for the technical studies. Technical information was also provided by MI staff directly involved in the planning, design and construction of other segments of the all-season road network on the east side of Lake Winnipeg. MI staff also provided review of technical study reports and this EIS.

Inquiries regarding this EIS should be directed to Mr. Kimber Osiowy, Manager of Environmental Services, MI at the contact information provided in **Section 1.1.1**.

1.2 Project Overview

An overview of the proposed Project is provided in the following paragraphs with additional information provided in **Chapter 3, Project Description**. MI is proposing to construct an all-season road linking Manto Sipi Cree Nation, Bunibonibee Cree Nation and God's Lake First Nation. Linking the communities will provide economic and social benefits. The proposed alignment for the Project consists of a total 141 kilometres (km) of all-season road on a new right-of-way (ROW) on provincial Crown land (**Figure 1-1**). There are three road sections that will begin at the Reserve boundaries and generally head west and southwest 71.9 km from Manto Sipi Cree Nation, southeast 39.5 km from Bunibonibee Cree Nation and northwest 29.6 km from God's Lake First Nation where the three sections intersect. The east terminus of the all-season road alignment near Manto Sipi Cree Nation is shown in **Figure 1-2**, while the northwest terminus near Bunibonibee Cree Nation and the south terminus near God's Lake First Nation are shown in **Figures 1-3 and 1-4**, respectively. The intersection of the all-season road alignment sections from Manto Sipi Cree Nation, Bunibonibee Cree Nation and God's Lake First Nation is shown in **Figure 1-5**. MI is in discussions with Manto Sipi Cree Nation regarding an approximately 8 km section of the alignment near the community. The community has chosen the alignment in this area to parallel the winter road through a large bog/fen (Option 1 in **Figure 1-6**). Sourcing the necessary rock to construct the segment along the winter road would require additional access roads and quarries. MI has proposed three more alternative options (**Figure 1-6**) to reduce project footprint, cost and construction timelines.

An existing on-Reserve access road will connect to the proposed all-season road at the Bunibonibee Cree Nation Reserve boundary, whereas on-Reserve access roads will need to be constructed separately at Manto Sipi Cree Nation and God's Lake First Nation to connect to the all-season road that will terminate at the Reserve boundaries. The approval for these on-Reserve access roads will be subject to separate approvals by Indigenous Services Canada (ISC).

The all-season road linking the communities will be a gravel-surface public highway, with a design width of 10 metres (m), a design speed of 90 kilometres/hour (km/h) and a posted speed of 70 km/h. The proposed road will generally follow the current winter road alignment and may require replacement of the existing bridge at God's River. The road may also require construction of a new bridge crossing Magill Creek (**Figure 1-7**). In addition, culverts will be required at smaller watercourse crossings and to manage local drainage.

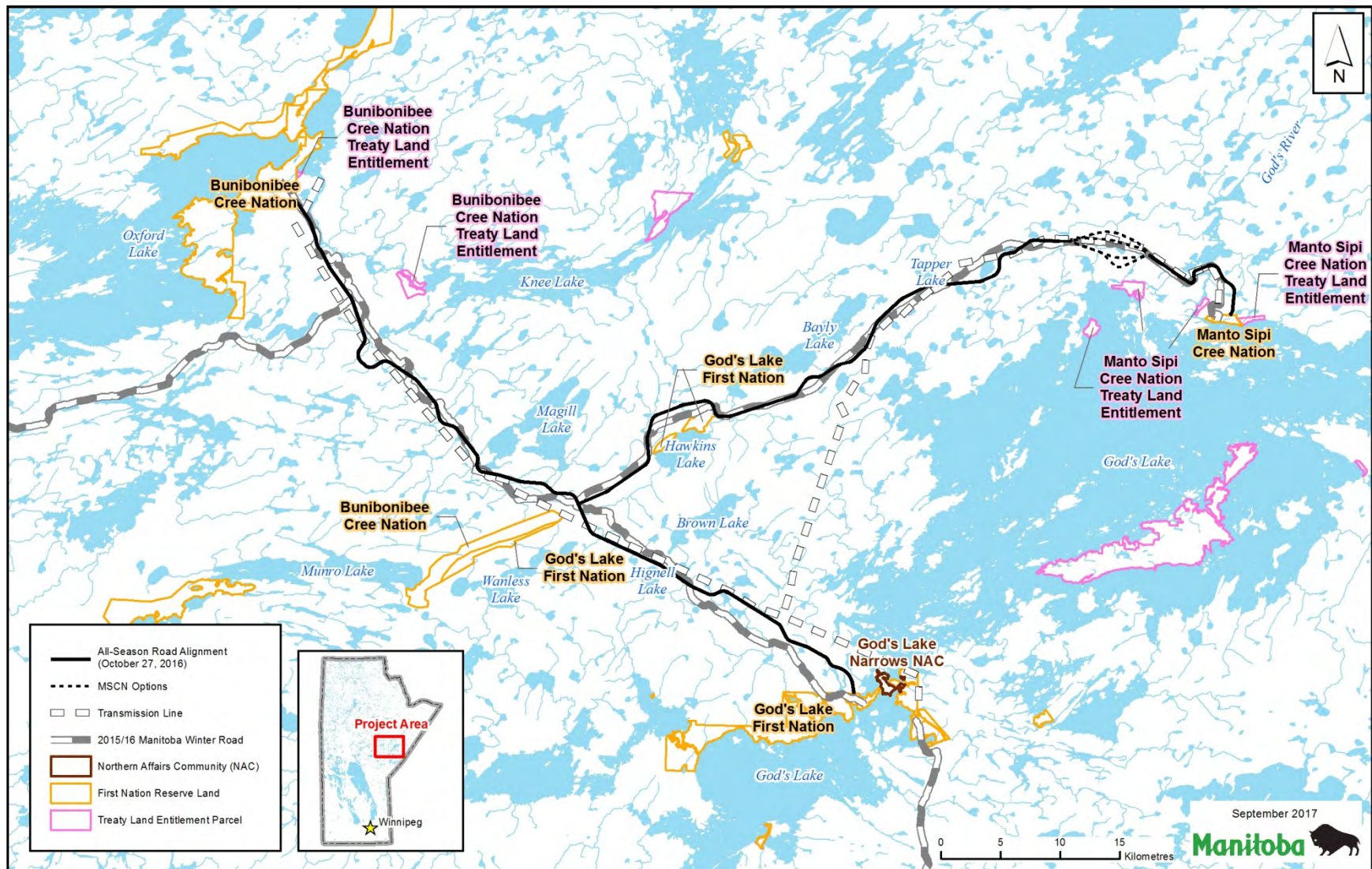


Figure 1-1: Proposed Project all-season road alignment

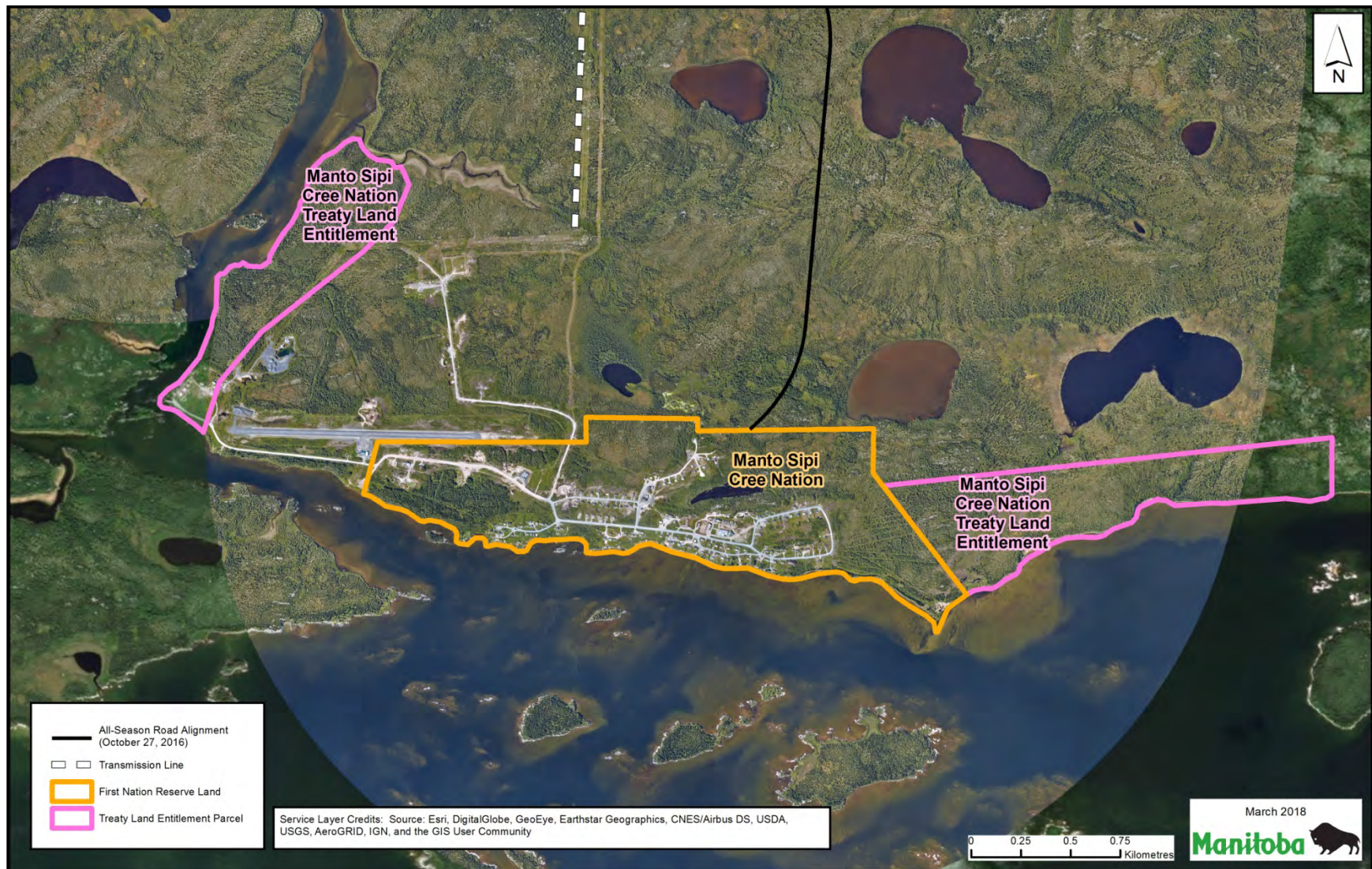


Figure 1-2: East terminus of the proposed Project alignment near Manto Sipi Cree Nation



Figure 1-3: Northwest terminus of the proposed Project alignment near Bunibonibee Cree Nation

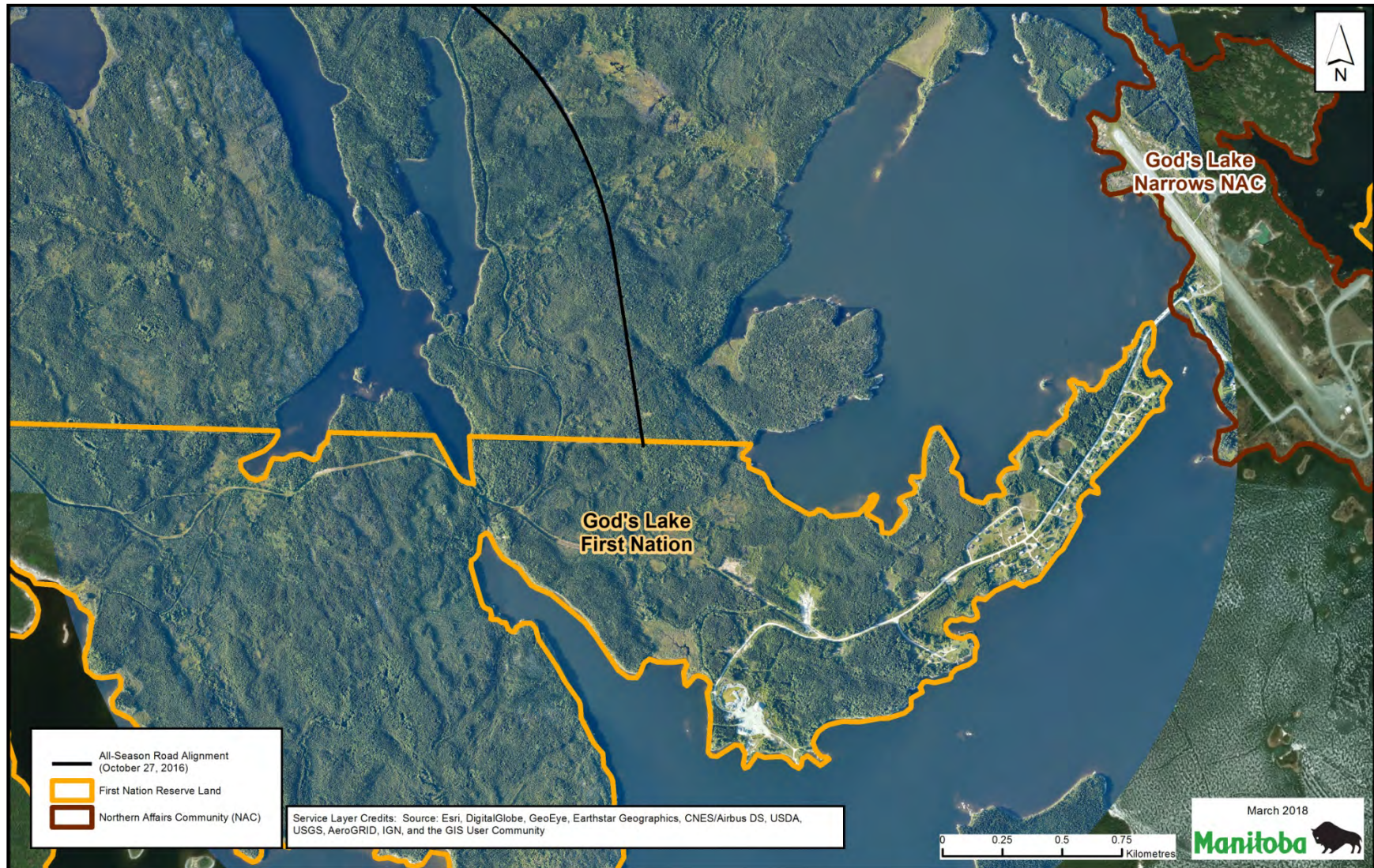


Figure 1-4: South terminus of the proposed Project alignment near God's Lake First Nation

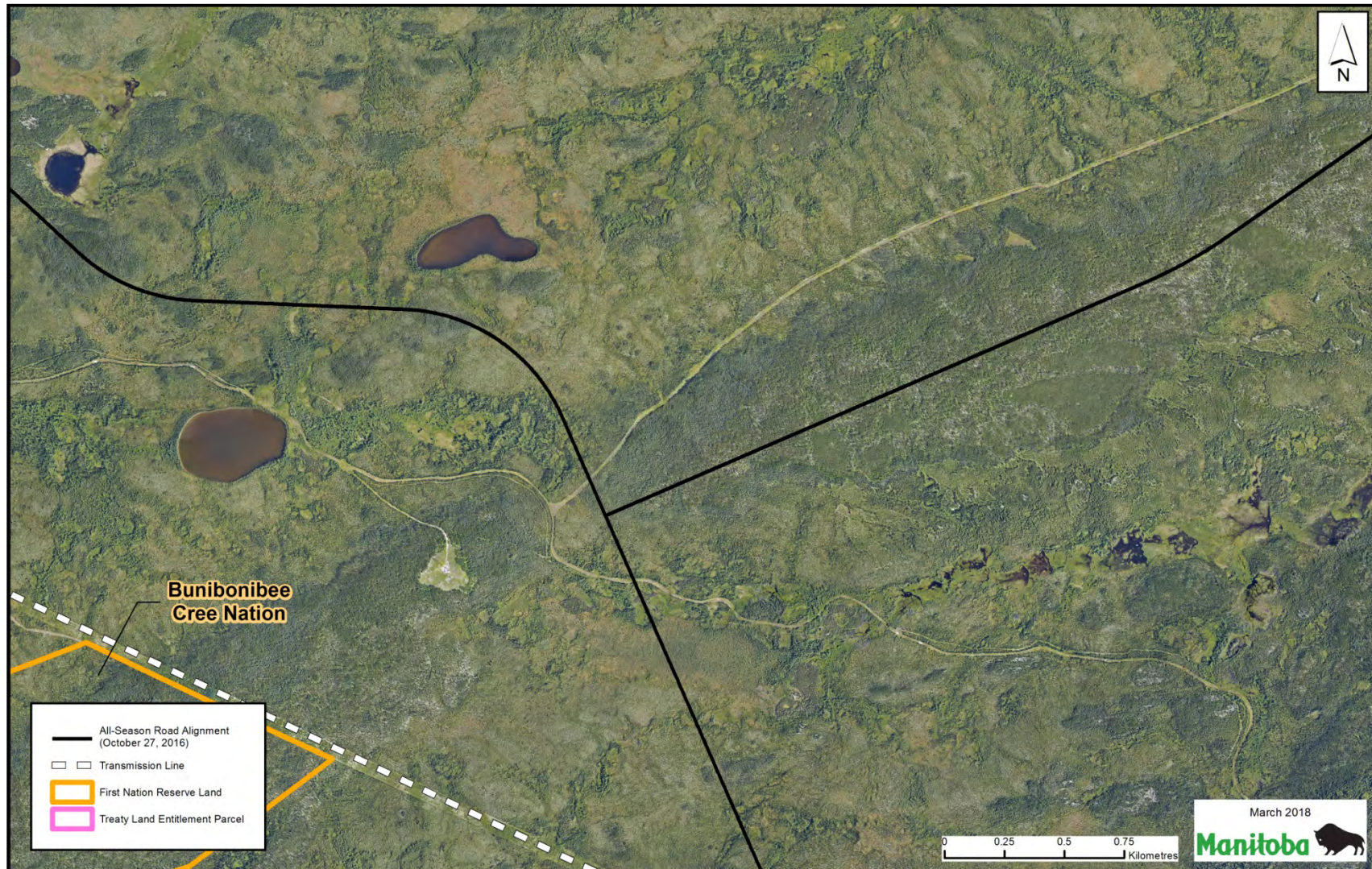


Figure 1-5: Intersection of the proposed Project alignment between Manto Sipi Cree Nation, Bunibonibee Cree Nation and God's Lake First Nation

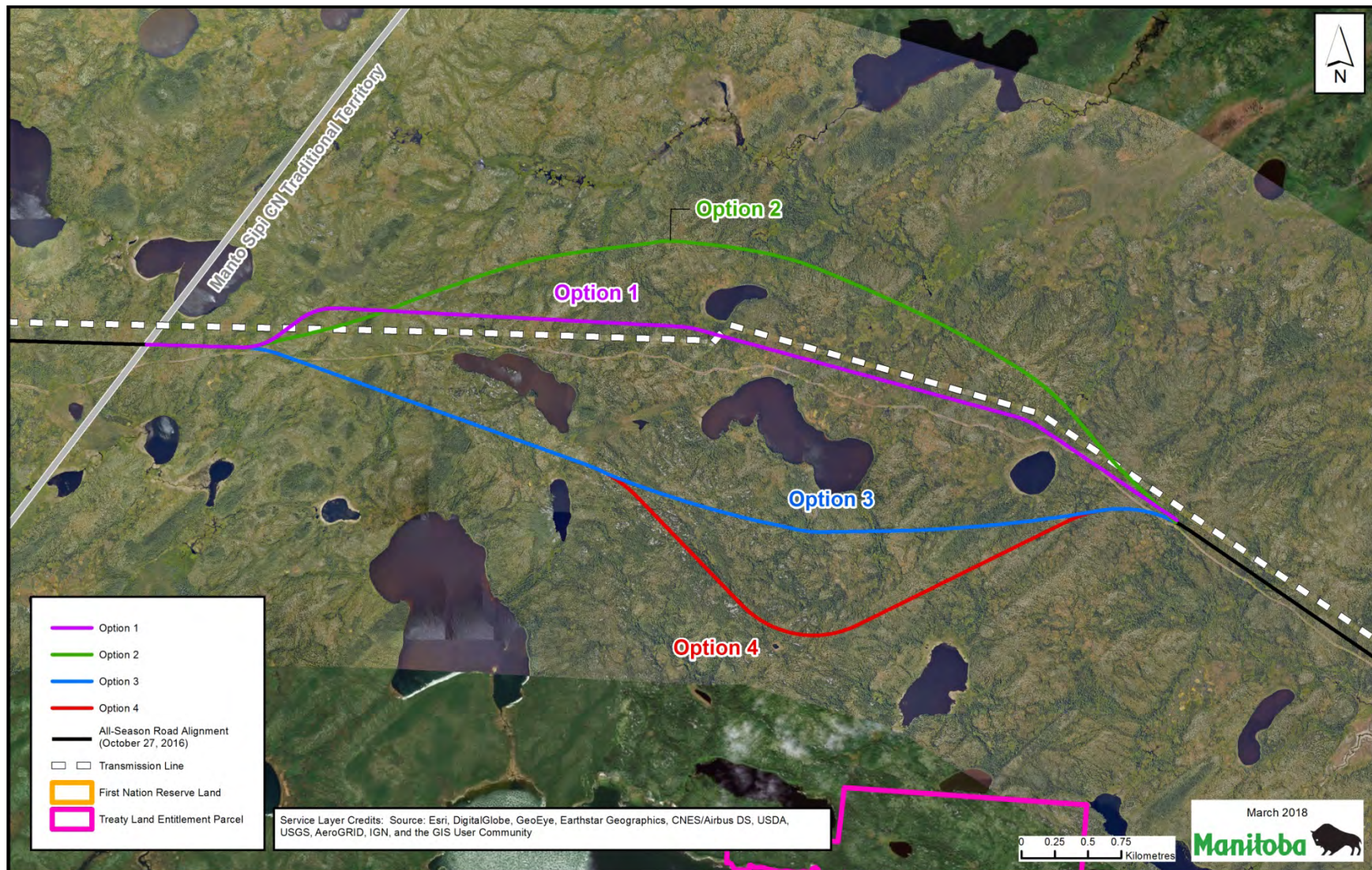


Figure 1-6: Alignment options for proposed all-season road segment near Manto Sipi Cree Nation

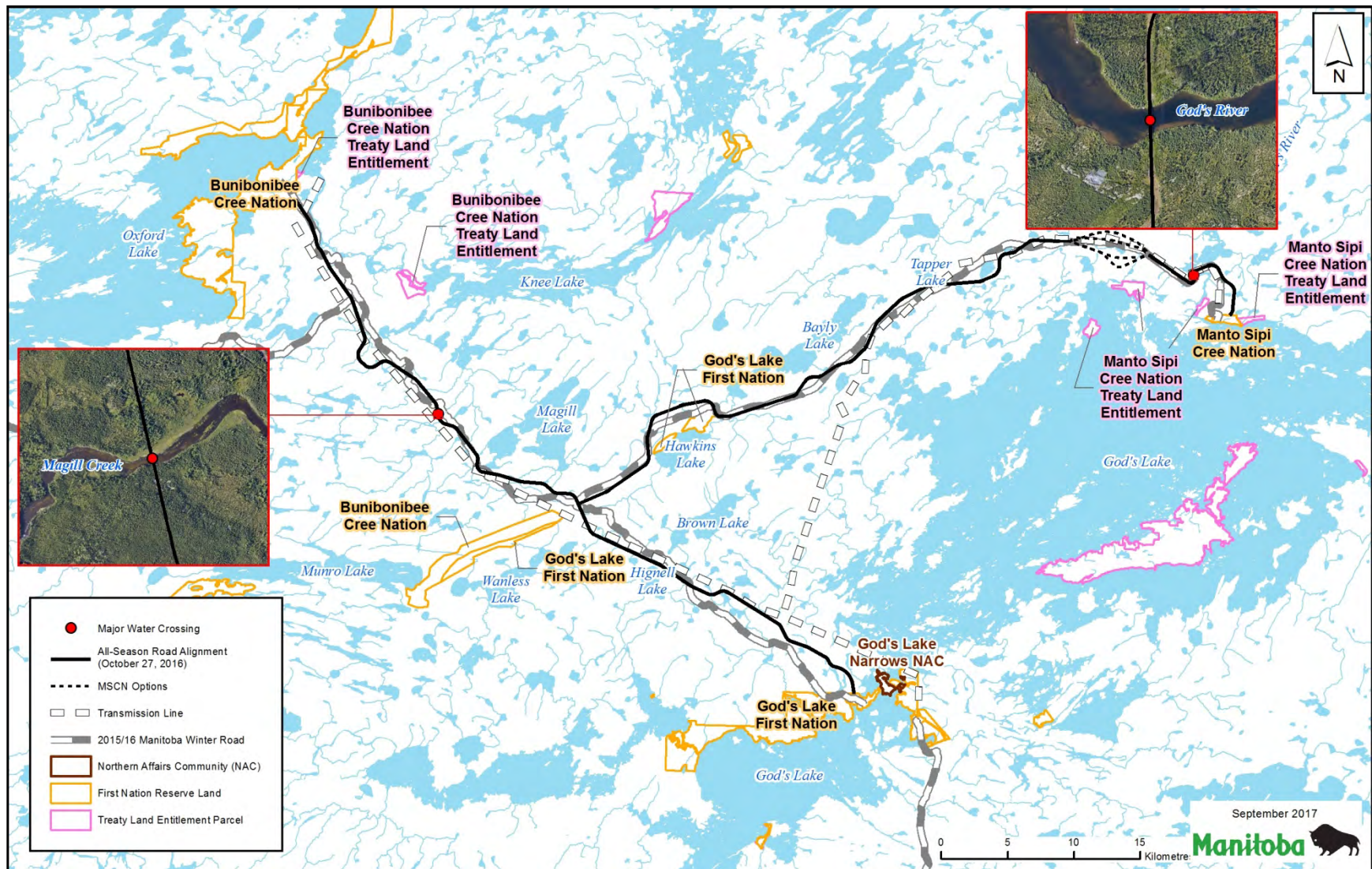


Figure 1-7: Proposed major water crossings (bridges) along the Project alignment

For the purpose of assessing the geographic extent of potential Project-related effects that are expected to occur, the following spatial boundaries have been defined.

- **Project Footprint** – The physical space or directly affected area within which Project components and activities are located and the immediately adjacent area, which is the defined limits of the all-season road ROW (ex: 100 m). Permanent and temporary facilities (ex: temporary access routes, as well as construction camps, borrow pits and quarries, where possible) within which effects are likely to be measurable are also included.
- **Local Assessment Area (LAA)** – Area within which Project effects are measurable and extending beyond the Project Footprint (either a 2 km or 10 km corridor centred on the all-season road alignment depending on the Valued Component (VC) (**Figure 1-8**).
- **Regional Assessment Area (RAA)** – Area beyond the LAA within which most potential indirect and cumulative environmental effects are expected to occur (**Figure 1-9**).

1.2.1 Project Components

The proposed Project will be built on provincial Crown land and has eight main components including:

- all-season road (141 km) on new ROW
- up to two steel girder or concrete bridges at two major water crossings
- culverts for stream crossings or drainage equalization
- temporary construction bridges
- temporary construction access trails
- rock quarries and granular borrow areas
- temporary construction laydown areas
- temporary construction camps

The existing winter road network will support the proposed Project by providing access for some of the construction equipment and materials that will be required for construction.

1.2.2 Project Phases and Scheduling

The proposed Project will be carried out in four main stages including:

- planning and design
- pre-construction
- construction
- operation and maintenance

The alignment will be divided into segments and undertaken sequentially so that completion of the construction phase at one segment will initiate the pre-construction of the adjacent segment. Pre-construction (detailed design) is anticipated to begin in 2020 and construction will follow commencing from Bunibonibee Cree Nation and extending eastward. The Project will provide all-season access among the communities approximately eight years after construction begins.