

Chapter 2: Project Justification and Alternatives Considered

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2.0 PROJECT JUSTIFICATION AND ALTERNATIVES CONSIDERED

2.1 Purpose of the Project

The purpose of the proposed Project 6, which is a 141 kilometre (km) all-season road (the Project), is to link the communities of Manto Sipi Cree Nation, Bunibonabee Cree Nation, God's Lake First Nation and God's Lake Narrows Northern Affairs Community to enable the transfer of people and goods among the communities.

The proposed Project is one in a series of all-season roads being planned to establish a regional transportation network on the east side of Lake Winnipeg. With the construction of future all season road sections, these communities will gain year round access to Provincial Road (PR) 373. This regional transportation network will allow all-season road access for First Nation communities that currently must depend on restricted seasonal winter road access or other modes of travel (ex: airplane) to access their communities and southern goods and services. It is unknown when additional all-season road segments, PR 373 to Wasagamack (Project P2) and Anderson Junction to Bunibonabee (Project P5), will be proposed however; Project 2 and Project 5 are not within MI's current 10-year plan at this point in time.

2.1.1 Background

Since 1999, the Government of Manitoba has investigated the feasibility, justification and scope of the development of an all-season road network on the east side of Lake Winnipeg. Key steps have included the following.

- A 1999 study led by Manitoba Transportation and Government Services (now Manitoba Infrastructure [MI]) assessing the feasibility of an east side all-season road network (Dillon Consulting Limited 1999).
- A follow-up study assessing the justification and scope of two potential all-season road route scenarios (Dillon Consulting Limited and H.N. Westdal & Associates 2000).
- A 2001 initiative culminating in the development of a planning approach and overall work plan to design and service east side of Lake Winnipeg communities with an all-season road network (Dillon Consulting Limited and N.D. Lea 2001).
- The development of a Broad Area Plan entitled "*Promises to Keep... – Towards a Broad Area Plan for the East Side of Lake Winnipeg*" (East Side Planning Initiative 2004) presenting a number of transportation-related recommendations including engagement of directly affected First Nations and other communities, assessment of environmental effects of transportation alternatives and completion of a Regional Transportation Network Study to consider other means of access (ex: rail and ferries) to communities on the east side of Lake Winnipeg.
- Multi-disciplinary planning and engineering work for the 2008 Large Area Transportation Network Study to identify a preferred all-season transportation network connecting east side communities with Manitoba's existing all-season road network, as well as to assess the feasibility of alternative surface and air transportation modes. The final report of this Study, completed in 2010,

recommended a 1,028 km all-season road network for the region at a cost of approximately \$3 billion (2011\$) (SNC-Lavalin *et al.* 2010a;b;c;d).

The outcome of more than a decade of comprehensive consideration was that the most feasible, reliable, safe and equitable transportation improvement on the east side of Lake Winnipeg would be the construction of an all-season road network, supplemented during its development with improved winter roads and permanent bridges, where appropriate. To support this outcome, the Government of Manitoba introduced the East Side Transportation Initiative to connect the remote communities on the east side of Lake Winnipeg with the rest of Manitoba and established the Manitoba East Side Road Authority (ESRA) as the provincial Crown agency to manage the initiative through the planning, design and construction of all-season roads and bridges. ESRA however, has since been absorbed into MI, Remote Road Operations, which will continue to manage the regional project.

The first segment of all-season road to initiate construction in this regional transportation network connects PR 304 (near Hollow Water First Nation) to Berens River (Project P1). On August 16, 2010, following an environmental assessment under *The Environment Act* of Manitoba, Manitoba Sustainable Development (MSD; formerly Manitoba Conservation and Water Stewardship) issued Licence No. 2929 for this road. On July 26, 2011, following a Comprehensive Study conducted under the *Canadian Environmental Assessment Act* (CEAA), the federal Minister of the Environment concluded that there would likely be no significant adverse environmental effects from Project P1 and that the identified mitigation measures and follow-up program were appropriate for the project (Canadian Environmental Assessment Agency 2011). This segment of road officially opened in December 2017.

Construction of another segment of this regional transportation network, an all-season road between St. Theresa Point First Nation to Wasagamack First Nation (Project P3a), began in 2016. A Comprehensive Study Report was prepared by Public Works Government Services Canada under the CEAA for a new airport and road between Wasagamack First Nation and St. Theresa Point First Nation in 2001 and Environment Act Licence 2543 was issued for the project on December 20, 2001. The road segment of the project was later included in MI's transportation network plan as Project P3a. The project was originally located on Federal Reserve lands, which were transferred to the Province of Manitoba on December 18, 2015.

Two additional sections of all-season road connecting Berens River First Nation to Poplar River First Nation (Project P4) and Pauingassi First Nation and Little Grand Rapids First Nation (Project P7a) are currently in process for approval. Project P4 is being reviewed under the *Canadian Environmental Assessment Act* 2012 (CEAA, 2012) and *The Environment Act* of Manitoba, while Project P7a is being reviewed under *The Environment Act* of Manitoba. No other segments of the transportation network are being advanced at this time.

2.1.2 Project Need

The proposed Project will provide all-season road access among the communities of Manto Sipi Cree Nation, Bunibonibee Cree Nation, God's Lake First Nation and God's Lake Narrows Northern Affairs Community. Currently, there is no all-season road access among these communities. The nearest all-season road is approximately 160 km west of Bunibonibee Cree Nation, which is PR 374 connecting Cross Lake First Nation to the Provincial highway network at PR 373 north of the Norway House Cree Nation. The existing transportation infrastructure in the vicinity of the Project consists of the following.

- The seasonal winter road network linking these communities to each other and to PR 373, which is operational for approximately 2 months per year.
- An approximate 1,170-metre (m) gravel runway and airport building serving Bunibonibee Cree Nation (Oxford House).
- An approximate 1,075 m gravel runway and airport building serving Manto Sip Cree Nation (God's River).
- An approximate 1,160 m gravel runway and airport building serving the God's Lake First Nation and God's Lake Narrows Northern Affairs Community (God's Lake).

Existing transportation infrastructure constrains movement of goods, services and people. While the existing seasonal winter roads are utilized to transport equipment, fuel and other bulk supplies, perishables and other consumable items are shipped to the area primarily by air. As a result of the nature of transportation options, goods and services in these communities are expensive. For example, the price of fuel is approximately 1.5 to 2 times higher and the price of perishable items such as milk and fresh produce up to 7 times higher than in centres serviced by all-season roads.

Travel by individuals is similarly constrained, with private vehicles and snowmobiles or All-Terrain Vehicles being used while the winter road is operational to visit family and friends in neighbouring communities, access services and purchase household items in larger centres. Travel by air is available for the remainder of the year. The high cost of air travel among the communities ~\$370 round trip and to major centers ~\$710 round trip to Winnipeg and ~\$360 to \$570 round trip to Thompson (Perimeter Aviation 2017) limits personal transportation. The bulk of transportation occurs during the winter road season because of the lower transportation costs for individuals and goods. In addition to the transportation limitations and costs, there are safety concerns and potential loss of life related to community members travelling by snowmobile or All-Terrain Vehicle beyond the seasonal winter road period.

2.1.3 Project Objectives

The key objectives of the East Side Transportation Initiative and this project are to:

- provide alternative transportation to the increasingly unreliable winter road network
- improve linkages among communities
- reduce transportation costs for goods and services
- enhance access to emergency, health and social services

- provide construction employment and economic opportunities
- enhance opportunities for local sustainable development initiatives

With the completion of the proposed Project, Manto Sipi Cree Nation, Bunibonibee Cree Nation and God’s Lake First Nation will benefit from the improved linkage among their communities. In addition, the communities will have an opportunity to benefit from construction employment and economic opportunities for their members.

MI’s long-term objective is to complete the regional transportation network and provide communities with year-round vehicular access to the provincial road network in Manitoba that will supply additional benefits of reduced transportation costs for people, goods and services and enhanced access to other services.

2.2 Alternative Means of Carrying Out the Project

2.2.1 Alternative Transportation Options

At the outset of the Large Area Transportation Study a number of alternative transportation modes, in addition to an all-season road system, were considered in detail to service the remote communities on the east side of Lake Winnipeg (SNC-Lavalin *et al.* 2010a;b;c;d). These alternative transportation modes represent “alternative means to carry out the Project”. The alternative transportation modes considered were:

- railway
- hovercraft
- ferries
- airships/dirigibles
- improved winter roads

Transportation modes other than an All-Season Road Transportation Network were not deemed appropriate due to cost, unreliability, environmental damage, safety impairment, or lack of freedom to move.

Generally, the alternative modes considered were not deemed appropriate as a permanent solution when assessed against criteria including cost, reliability, environmental effects, safety and movement flexibility (SNC-Lavalin *et al.* 2011a). The alternative modes considered along with some of their key evaluation considerations are summarized in **Table 2.1**.

With regard to the alternative modes of transportation and evaluation considerations listed in **Table 2.1**, the Large Area Transportation Network Study concluded that the most reliable, safe and equitable improvement to the existing east side of Lake Winnipeg transportation system would be the construction of an all-season road system supplemented during its development with improved winter roads and permanent bridges where appropriate (ex: the preferred means for the Project).

Table 2.1: Alternative Surface and Air Transportation Modes

Transportation Mode	Evaluation Considerations
Railway	<ul style="list-style-type: none"> ▪ Construction cost on a per km basis comparable to that of an all-season road. ▪ Lengthy connections needed to connect to existing railhead/rail line at Wabowden (now decommissioned) and Lac du Bonnet, respectively, duplicates approximately 130 km of existing PR 373 and 110 km of existing Highway 11/PR 304 as well as the P1 all-season road currently being constructed. ▪ Flatter gradients required for rail versus road increases cost and may be more difficult to maintain rideable profile over fen and bog complexes. ▪ During construction phase, difficult to offload/reload goods and people at continually advancing rail/winter road interface. ▪ Less freedom to move than with a road system.
Hovercraft	<ul style="list-style-type: none"> ▪ Only suitable over large bodies of open water. ▪ Would likely suffer skirt degradation over fens and bogs. ▪ Damage to the environment over potential multiple routes. ▪ May damage ice surface during freeze up, potentially breaking ice and creating hazards for snowmobilers.
Airships/Dirigibles	<ul style="list-style-type: none"> ▪ Would need to be very large to haul Transportation Association of Canada maximum highway loadings (Boeing SkyHook Heavy Lift Vehicle under development has a maximum payload of 36 tonnes over a distance of 370 km without refuelling). ▪ More sensitive than fixed wing aircraft to inclement weather, potentially a significant factor east of Lake Winnipeg (Boeing SkyHook Heavy Lift Vehicle can only operate in winds up to approximately 45 km/h).
Ferries	<ul style="list-style-type: none"> ▪ May be appropriate for summer transportation across lakes or rivers as an interim lower cost link in an all-season road system. ▪ An ice bridge parallel to the ferry route could be used for winter transportation but has potential to break through ice, with safety and environmental degradation risks and implications.
Improved Winter Roads	<ul style="list-style-type: none"> ▪ Shift existing winter road onto firmer ground along a future all-season road route. ▪ Provide permanent bridges at major water crossings along future all-season road route. ▪ Could be initial phases in development of an all-season road route.

Source: SNC-Lavalin *et al.* 2011a; Manitoba Transportation and Government Services 2005

In comparison with either the existing system or alternative means such as airships, the rationale for the conclusion of an all-season road network as the best transportation mode and preferred means to carry out the project includes the following.

- Greater long-term reliability for safely moving people and goods during all seasons and most weather conditions.
- Greater freedom of movement for people and goods from all east side communities, individuals and businesses.
- More equitable system for travel and trade, on par with the existing all-season road system serving most communities in the province.

In addition to considering other modes of transportation to improve year-round access to communities on the east side of Lake Winnipeg, the Large Area Transportation Network Study identified and assessed all-season road route options to connect east side communities to the existing Manitoba road network (SNC-Lavalin *et al.* 2011a). The following sections describe the Project route selection process and summarize the changes that have been made to the original Project alignment as a result of community input, including the benefits of these changes to the environment, Indigenous peoples and the public.

2.2.2 Road Route Alignment

2.2.2.1 Background

Within the 2010 East Side Large Area Transportation Network Study, an all-season road corridor among the communities of Manto Sipi Cree Nation, Bunibonibee Cree Nation, God’s Lake First Nation and God’s Lake Narrows Northern Affairs Community was proposed at a preliminary level using aerial photo analysis and in consideration of terrain conditions, water crossings, available wildlife information (including Woodland Caribou Habitat Suitability Index Model results), Traditional Knowledge (TK) studies, feedback from community and public engagement and designated land constraints (ex: First Nation Reserves, protected areas). Consistent with the evaluation framework used for other east side all-season road route options (SNC-Lavalin *et al.* 2011b), the evaluation criteria for the all-season road corridor among the communities considered the following.

- Technical aspects such as travel distance, terrain conditions, borrow/road construction materials availability and construction constraints/limitations.
- Natural environment such as potential effects on Species at Risk and environmentally sensitive features, habitat fragmentation and potential effects on aquatic habitat.
- Social/cultural environment such as potential effects (positive and negative) on traditional uses of land, culturally sensitive resources, community infrastructure benefits, community well-being and community knowledge and interest.
- Capital and maintenance costs such as estimated capital cost of bridges, culverts and road as well as estimated annual maintenance costs.

Road route selection criteria included consideration of technical aspects, natural environment, social/cultural environment and capital and

Early rounds of public engagement focused on several options to connect the communities to each other and the Provincial Road Network in the Northern Sector of the Study Area. A single route was identified for the proposed Project all-season road alignment (SNC-Lavalin *et al.* 2011a). The route originally identified in 2010 was generally in the vicinity of the current winter road and transmission line alignments (**Figure 2-1**).

In 2012, as a result of engineering studies and community feedback from the Project engagement program (**Chapter 5, Section 5.2**), slight revisions were made. The new alignments out from God’s Lake First Nation and Manto Sipi Cree Nation reduces the potential for fragmentation and disturbance of the



Figure 2-1: History of the proposed Project all-season road alignment alternatives

land as it parallels the winter road and transmission line for a longer portion. The alignment entering Manto Sipi Cree Nation immediately west of the community was discarded because it was too close to the airport, crossed God's River at its widest part and infringed on a Treaty Land Entitlement (TLE) parcel. Likewise, the alignment was adjusted further north around Hawkin's Lake to provide greater separation from the God's Lake First Nation Reserve Lands.

Since 2012, the proposed all-season road corridor among Manto Sipi Cree Nation, Bunibonibee Cree Nation, God's Lake First Nation and God's Lake Narrows Northern Affairs Community has been refined further through an iterative process using the above-stated evaluation criteria and additional community feedback. An approximately 8 km section of the alignment near Manto Sipi Cree Nation has not been finalized, with four alignment options being considered for this section (**Figure 2-2**). A flyover was conducted on June 5, 2017 with MI, a Manto Sipi Councillor and Manto Sipi's consultant to investigate the four alignment options for this section. As a result of the flyover the two northern most options (Options 1 and 2) were eliminated because of poor terrain and lack of road building materials along or adjacent to the alignment option. The southernmost option (Option 4) has a length of 7.8 km and is located on rugged terrain that would require significant cut and fill volumes to construct. Option 3 has the shortest length (7.3 km), rock for road construction is available along the alignment and there is a relatively smooth horizontal and vertical alignment for easier construction. For these reasons, MI has recommended Option 3 to Manto Sipi Cree Nation to be the selected option for the alignment. This recommendation is being considered by the community.

The history and rationale of the road alignment alternatives, culminating with the proposed Project alignment, is summarized in **Table 2.2** and illustrated in **Figure 2-1**.

2.2.2.2 Preferred Alignment

With the exception of the 8 km section near Manto Sipi Cree Nation that is still being considered, the October 2016 all-season road alignment illustrated in Figure 2-1 is currently the preferred alignment and is the alignment proposed and assessed in the effects assessment (**Chapter 6**) component of this Environmental Impact Statement. The alignment proposed reflects considerable involvement by local communities as described in **Chapter 5**. The proposed alignment avoids locations indicated as important traditional and heritage resource use areas. The proposed route is in close proximity to suitable road construction resources (potential quarry sites) which minimizes the length of access roads and resulting disturbance to the environment. The proposed alignment is also located on suitable terrain/ground conditions that will facilitate road construction logistics, minimize the quantity of materials needed to construct the road and minimize the duration of road construction, further minimizing environmental disturbance.

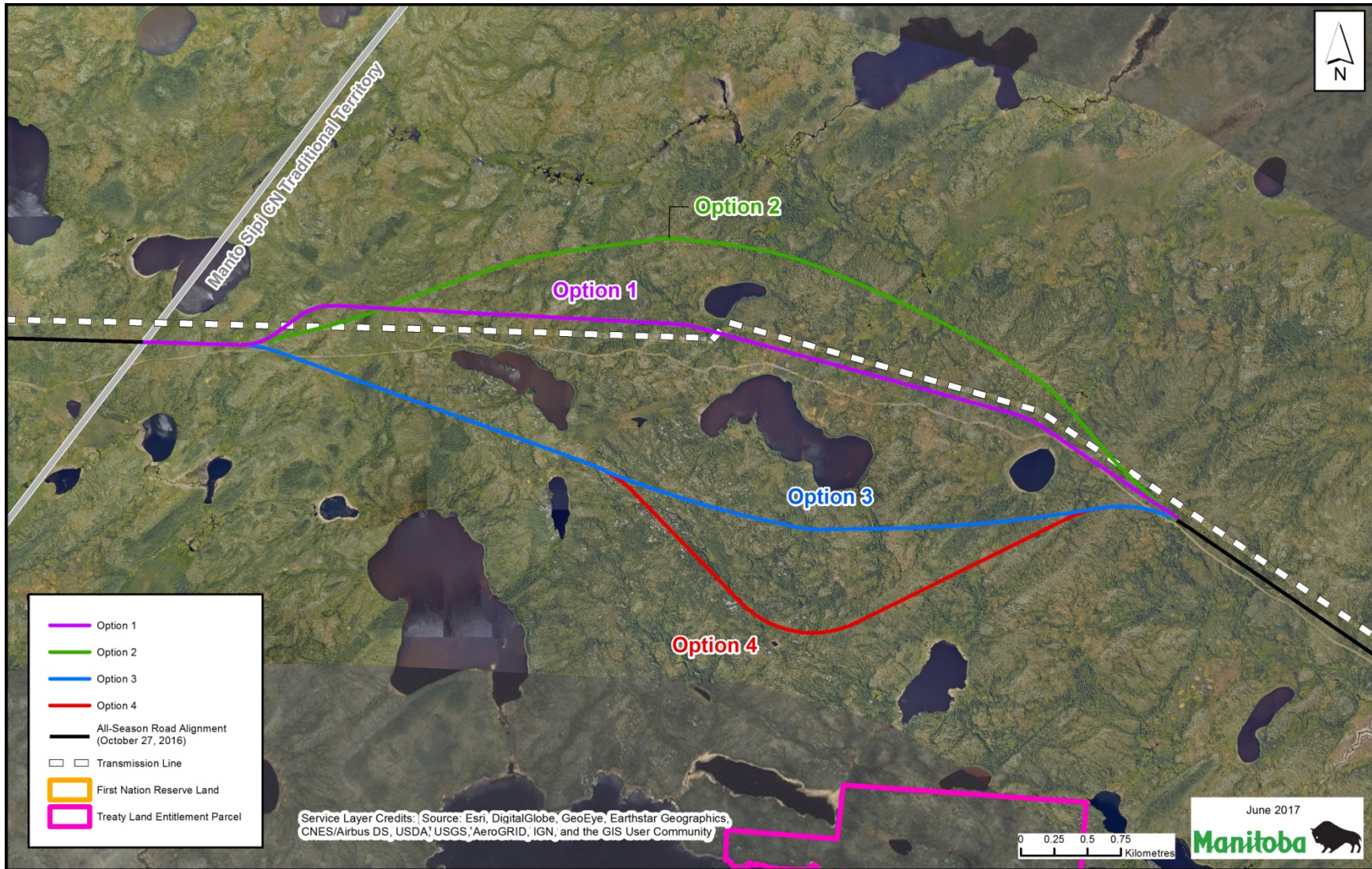


Figure 2-2: Alignment options for proposed all-season road segment near Manto Sipi Cree Nation

Table 2.2: Chronology of Alignment Revisions to the Proposed Project All-Season Road Route Options (Refer to Figure 2-1)

	Comments Provided by Communities	Revisions based on Community Input	Revisions based on Engineering and Environmental Considerations
November 2012			
	<ul style="list-style-type: none"> Preference expressed to more closely parallel existing winter roads, to move the route further away from Hawkins Lake due to Reserve land and to move away from the west side of Manto Sipi Cree Nation near the TLE parcel. 	<ul style="list-style-type: none"> Alignment from God’s Lake First Nation shifted south and from Manto Sipi Cree Nation shifted north to follow portions of winter road. Alignment adjustment from Manto Sipi Cree Nation to avoid the TLE parcel. Location chosen by Manto Sipi Cree Nation through Section 35 Consultation process with Manitoba. 	<ul style="list-style-type: none"> Alignment west out of Manto Sipi Cree Nation discarded as it is too close to the airport and it crosses God’s River at widest point. Alignment near Magill Lake shifted east for easier stream crossing and to avoid flood plain.
Resulting Benefits	<ul style="list-style-type: none"> Locating the road to more closely follow the winter road reduces potential for fragmentation and disturbance of the land. Crossing God’s River at a narrower point will reduce construction costs. 		
August 2014			
	<ul style="list-style-type: none"> None indicated. 	<ul style="list-style-type: none"> None indicated. 	<ul style="list-style-type: none"> Alignment near God’s Lake First Nation adjusted to terminate at north edge of Reserve land rather than further east into the Northern Affairs Community.
Resulting Benefits	<ul style="list-style-type: none"> This alignment revision eliminates the need for two large span bridges across portions of God’s Lake reducing potential effects on aquatic environment and reducing engineering and construction costs. 		
November 2015			
	<ul style="list-style-type: none"> Preference was expressed to move the route further away from the God’s Lake First Nation Reserve land near the intersection. 	<ul style="list-style-type: none"> Alignment near intersection shifted northeast away from the noted Reserve land. 	<ul style="list-style-type: none"> Alignment between Bunibonibee Cree Nation and God’s Lake First Nation adjusted as Manitoba Hydro did not want the all-season road route so close to their transmission line. Minor adjustment north of Hawkins Lake to avoid a low area.
Resulting Benefits	<ul style="list-style-type: none"> Adjusting alignment, as requested, reduces potential to affect Reserve land and a Manitoba Hydro transmission line right-of-way (ROW) and moving away from a low area reduces potential effects on aquatic environment. 		
February 2016			
	<ul style="list-style-type: none"> None indicated. 	<ul style="list-style-type: none"> None indicated. 	<ul style="list-style-type: none"> The alignment at the intersection was adjusted to create a 90-degree intersection. Other minor adjustments along the alignment to smooth curves (north of Hawkins Lake) and to ensure 100-m setback from waterbodies throughout.
Resulting Benefits	<ul style="list-style-type: none"> Smoothing curves and creating a 90-degree intersection at the junction to Manto Sipi Cree Nation improves public safety by, while ensuring the 100-m setback reduces potential effects to aquatic environment. 		
October 2016			
	<ul style="list-style-type: none"> In response to viewing Option 4, Manto Sipi Cree Nation indicated they wanted more information to select the preferred option for an 8 km section of alignment near their TLE parcel. 	<ul style="list-style-type: none"> MI proposed two other alignments (Options 2 and 3) located further away from the TLE parcel than Option 4 for consideration by Manto Sipi Cree Nation. 	<ul style="list-style-type: none"> A fly-over in May 2016 with ESRA engineer identified several areas of poor terrain and constructability including Option 1 resulting in alignment changes including the Option 4 as shown
Resulting Benefits	<ul style="list-style-type: none"> Reduces potential effects to wetland environment and provides better terrain for road construction. 		

	Comments Provided by Communities	Revisions based on Community Input	Revisions based on Engineering and Environmental Considerations
June 2017			
	<ul style="list-style-type: none"> Manto Sipi Cree Nation indicated they wanted to have a community meeting to discuss options after the flyover. MI supplied a summary of the flyover and evaluation of Options. 	<ul style="list-style-type: none"> Final Option to be selected based on outcomes of community meeting. 	<ul style="list-style-type: none"> A 2nd fly-over in June 2017 with MI engineer, project manager, Manto Sipi Councillor and consultant evaluated the four alignment options, confirming two most northerly options had poor terrain and constructability resulting in their abandonment and MI recommending Option 3

2.2.3 Watercourse Crossings

2.2.3.1 Bridges

Up to two (2) permanent steel girder or concrete bridges may required to provide safe access across the major water crossings at God’s River and Magill Creek (see **Figure 1-6** in **Chapter 1**). The proposed all-season alignment currently crosses God’s River at the existing single lane Acrow bridge. MI may opt to replace or upgrade the existing crossing depending on community needs and funding allocations at the time of construction. The bridge locations were selected based on a series of factors including:

- shore to shore distance
- approach conditions
- riparian characteristics
- watercourse substrates
- hydrology and channel hydraulics
- footprint area
- preservation of navigability
- bridge design standards and specifications
- TK
- Heritage Resource Impact Assessments

Proposed bridge locations were also subject to review by professional aquatic biologists retained to conduct baseline studies and to assess potential effects on the aquatic environment and mitigation measures required. In addition, input from First Nations community members regarding proposed bridge locations obtained at workshops and community meetings was also taken into consideration in the selection of bridge crossing locations. Refinements to the location of both major water crossings were made as a result of this iterative process.

2.2.3.2 Culverts

Culvert locations were identified based upon the proximity of the proposed road alignment to area streams, characteristics of each particular stream, navigability considerations and riparian conditions. Culverts are anticipated to be required at approximately 51 locations to provide safe access across fish-bearing and non-fish bearing streams, provide fish passage in fish bearing streams and to equalize surface

and shallow subsurface hydraulic conditions adjacent to the proposed road. Culvert design alternatives will be considered and appropriate designs will be selected using guidance from the Manitoba stream crossing guidelines (Fisheries and Oceans Canada and Manitoba Natural Resources 1996), Ducks Unlimited Canada Operational Guides and Best Management Practices for wetland road crossings in boreal forests (Louisiana Pacific *et al.* 2014), applicable Department of Fisheries and Oceans Canada guidelines and input from community members of Manto Sipi Cree Nation, Bunibonibee Cree Nation, God's Lake First Nation and God's Lake Narrows Northern Affairs Community. Proposed stream crossing locations were also subject to review by aquatic biologists retained to conduct baseline studies and to assess potential effects on the aquatic environment and mitigation measures required.

Culverts were selected for these 51 locations based on wetted width for the preliminary design. During detailed design additional factors will be weighed to determine the details of the culvert size and design such as the potential impact on fish habitat, and hydraulic and geotechnical investigations. Crossing type and design may change based on this analysis.

2.2.4 Access Roads

The total length and need for temporary access routes are contingent on the locations of required construction camps, construction staging areas and borrow and quarry areas. The alignment options of temporary access routes will consider the minimization of potential adverse effects to environmental and heritage resources components, soil and terrain conditions and input from community members of Manto Sipi Cree Nation, Bunibonibee Cree Nation, God's Lake First Nation and God's Lake Narrows Northern Affairs Community.

2.2.5 Borrow Areas, Quarries and Pits

Potential quarry and borrow areas will be selected using a variety of factors including availability and suitability of rock and aggregate materials, degree of road bed preparation required, proximity to the proposed road, proximity to bridge and other construction sites, travel distances for equipment and workers and proximity to known environmentally important or sensitive locations. Quarry and borrow areas will be located within the 100 m of the proposed road ROW where possible and will be subject to provincial permitting requirements. Potential quarry and borrow locations will be discussed with the community members at design workshops and/or community meetings. Evaluation of potential quarry and borrow sites will be carried out including, proximity to water bodies, the potential loss of habitat for furbearers and migratory birds, the potential for acid rock drainage, and the presence of heritage resources. The selection of final quarry and borrow area locations will consider community input and the goal of minimizing potential adverse effects to environmental, traditional and heritage resources components.

Sourcing rock and borrow from immediately adjacent to the right of way was determined to be the most cost effective and have the least environmental impact as established quarries and borrow areas on crown

land are a considerable distance from the majority of the project and will result in significant hauling with associated emissions and expense.

2.2.6 Construction Camps and Staging Areas

Temporary construction camps and staging areas will be selected for construction of the proposed road and crossings based on consideration of several factors such as travel distances for equipment and workers, availability of suitable level sites, extent of site preparation work required, proximity to the road and crossings construction sites and proximity to known environmentally important or sensitive locations. Construction camps and staging locations will also be subject to Heritage Resource Impact Assessment and on-going input from local community members through workshops and/or community meetings. Construction camps and staging locations will be sited within the existing 100-m ROW.