

Executive Summary

Introduction

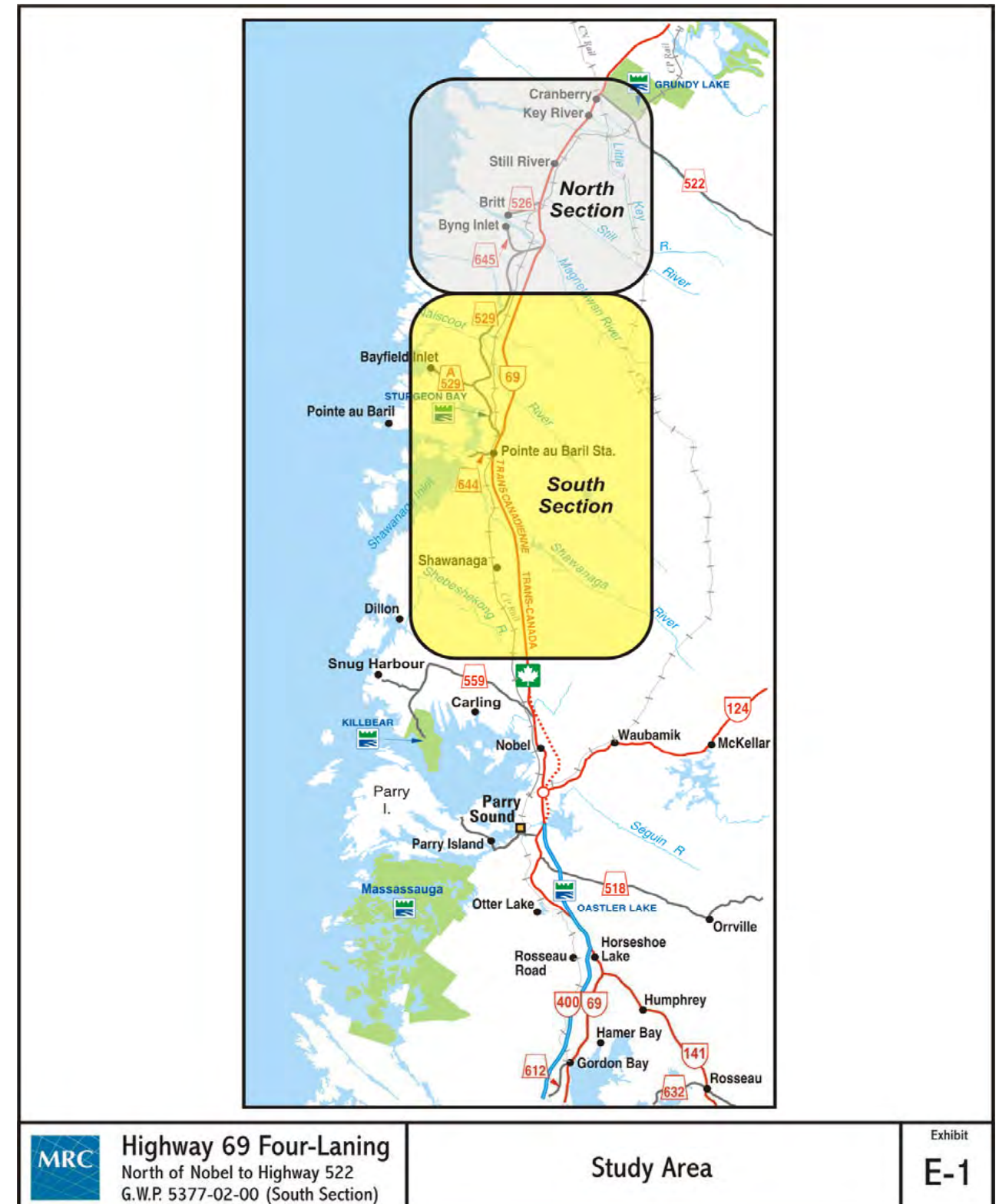
The Ontario Ministry of Transportation (MTO) has initiated a process to complete a Route Planning Study for Highway 69. This study consists of the planning for a new four-lane Highway 69 from approximately Highway 559 (Nobel) to Highway 522. The study has been divided into a South Section (north of Nobel to north of Harris Lake Road) and a North Section (north of Harris Lake Road to north of Highway 522) to allow for the additional evaluation of information for the North Section, and the timely completion of the southern portion. This report addresses the South Section, and a separate report will address the North Section. Exhibit E-1 identifies the South and North Study Sections.

The study meets the requirements of a Group "A" project under the *Class Environmental Assessment for Provincial Transportation Facilities (2000)*. The Ontario Ministry of the Environment (MOE) has established the Class Environmental Assessment (Class EA) process for groups of projects in order to ensure compliance with the *Environmental Assessment Act R.S.O. 1990*. Provided that the process is followed, projects and activities included under the Class EA do not require formal ministerial approval under the *Environmental Assessment Act*.

In addition to the environmental assessment component, the study includes an engineering component satisfying the requirements of MTO's traditional Preliminary Design Report process.

Environmental Assessment Process

The work on a planning study of this type must be carried out in accordance with the applicable environmental legislation and the current government policies and procedures. These are described on the following pages.



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Ontario *Environmental Assessment Act*

The Ontario *Environmental Assessment Act* (EAA) governs the conduct of planning studies in the province of Ontario. The purpose of the EAA is to ensure that:

- A reasonable and traceable planning process is followed;
- The need for the project is demonstrated;
- The public has input into the process and investigations;
- The study includes a review of a full range of alternatives; and
- The selected alternative minimizes any environmental impacts or provides mitigation strategies resulting from the improvements.

In accordance with the Class EA process this *Route Planning and Environmental Assessment Report* is available for a 30-day public review.

At the end of the 30-day review period, the project is considered to have met the requirements of the EAA, and MTO may proceed to tender for construction. Any commitments documented in this report will be addressed during the Detail Design phase and any other outstanding environmental approvals should be resolved and addressed prior to construction.

Canadian *Environmental Assessment Act*

The *Canadian Environmental Assessment Act* (CEAA) may be “triggered” by:

- Need for Federal funding
- Need for Federal lands (including First Nation lands)
- Issuance of a Federal approval identified on the Law List (as listed in CEAA)

This project is not currently eligible for Federal funding, therefore, the first “trigger” does not apply.

Lands required for this project include First Nation lands within the Shawanaga First Nation, therefore the second “trigger” applies.

For the third “trigger”, there are two potential federal approvals that are anticipated to be required. In accordance with the Ministry of Natural Resources / Ministry of Transportation Fisheries Protocol, Department of Fisheries and Oceans (DFO) Authorization under the Section 35(2) of the Federal *Fisheries Act* is anticipated for new watercourse crossings at several locations.

In addition, Transport Canada has confirmed navigable waters will be crossed at several locations within the study area, thereby requiring approvals under the *Navigable Waters Protection Act*.

Based on the triggers outlined above, approvals under CEAA are currently anticipated for this project. A copy of the CEAA Scoping Document for this project is provided in Appendix W.

Other Approval Requirements

Undertaking an Environmental Assessment also requires consideration of other approvals and review agencies. These include:

- Federal Review Requirements and Approvals;
- Canadian Environmental Assessment Agency (CEA Agency);
- Department of Fisheries and Oceans (DFO) for fisheries habitat;
- Transport Canada for navigable water crossings;
- Provincial Review/Policy Requirements;
- The Environmental Protection Act;
- Ontario Wetlands Policy/Ontario Fisheries Protocol/Noise Protocol/Archaeological Protocol;
- Ontario Municipal Board Road Closing Orders; and
- Controlled Access Designation.

Although MTO is not subject to municipal approval requirements, consideration is given to municipal governments’ responsibilities in the development of the route planning process as follows:

- Municipal Policy;
- Development Control, Official and Secondary Plans;
- Zoning Bylaws; and
- Transportation planning policy.

Study Approach

The study approach for the Highway 69 Route Planning Study and Environmental Assessment was to:

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- Examine the study area in progressively refined stages from corridors, to routes, to the preferred alternative;
- Work with the travelling public, stakeholders and the residents of the study area to gain input regarding the future needs of the area;
- Define the need for transportation improvements in the corridor;
- Identify and evaluate a full range of alternative transportation improvements to meet future needs;
- Select a preferred alternative that addresses the future needs in an efficient, cost effective and environmentally sensitive manner;
- Identify the benefits of the proposed improvements and avoid or mitigate adverse environmental effects;
- Identify alignment alternatives and property needs; and
- Document the study process and recommendations.

The study approach vetted to the public, agencies and the Highway 69 Project Team was documented in a *Study Design* (August 2003). The report, as contained in Appendix B, describes the study approach and process.

Consultation Process

Public input was sought throughout the study process. Details of the consultation program, including input received and responses provided during each stage of the process, are described in the section of the report that describes that stage of the study.

The public consultation process provided an opportunity for the Project Team to discuss the study process or any other issues relating to the project with property owners, First Nation communities, external agencies, municipalities, interested members of the public, and other stakeholders.

The process was used to notify all interested parties of the project and to provide an opportunity for input to the study and decision-making processes. The opportunity for this input is through a communication process. The findings of each stage of work were communicated to the public, and through ongoing discussions with the various government agencies and ministries, non-government interest groups and property owners.

Formal Points of Notification

The public was contacted several times formally throughout the study process and provided with opportunities for input to the Route Planning Study. Input was sought at four rounds of Public Information Centres (PICs) held during the study. For each round of consultation, Public Information Centres were held in Nobel, Pointe au Baril Station, Britt, and Toronto. The Britt venue has only had three rounds of consultation (all but the fourth). To ensure that all interested members of the public were contacted, an extensive notification process was used. It consisted of:

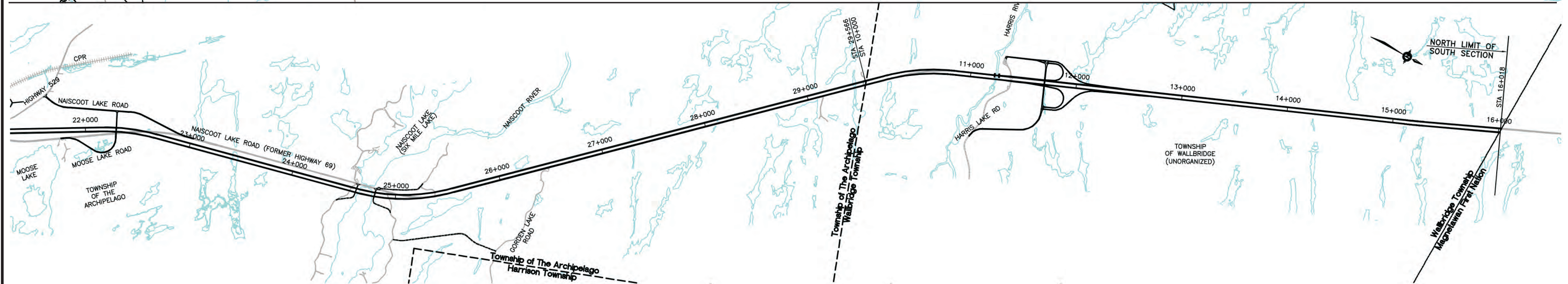
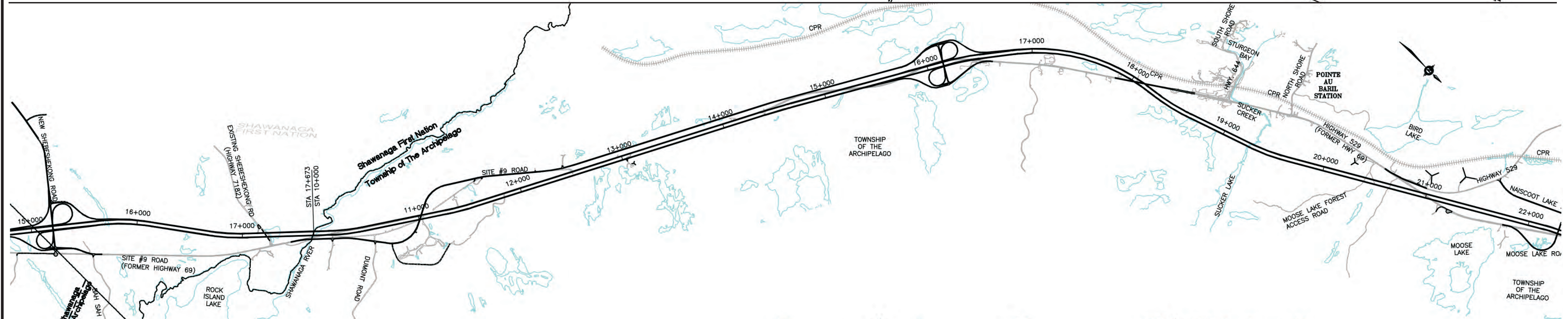
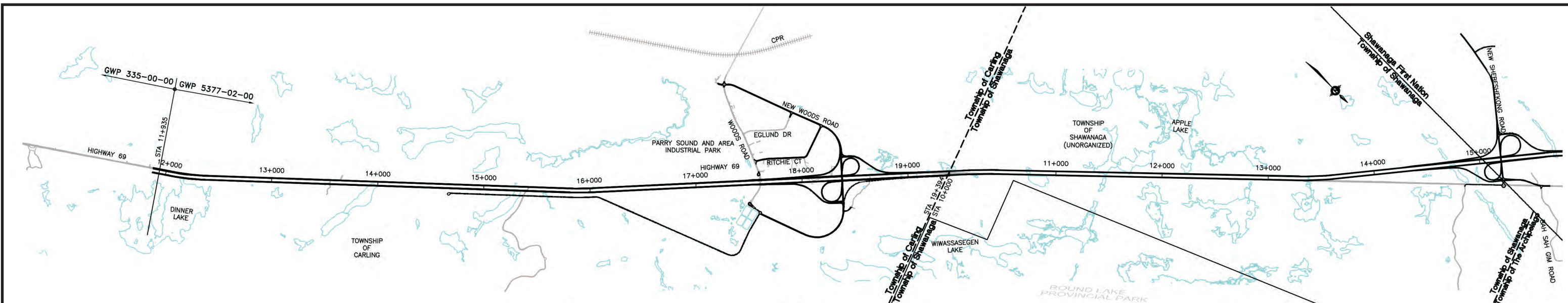
- Announcements in newspapers at the commencement of the Route Planning Study;
- Mailings to property owners in the study area as well as members of the public that had indicated an interest in the study in previous study phases (i.e. requested to be added to project mailing list);
- Establishment of a Highway 69 project Website (www.highway69.ca) that provided continuous updated information on the study;
- Notification of Public Information Centres by contacting the people on the project mailing list (through direct correspondence), through advertisements in the local newspapers (and the Toronto Star) and on the project website; and
- Newspaper advertisements, direct mailings and use of the project Website to announce the study completion and the start of the public review period for final study documentation.

The consultation program was carried out in accordance with the *French Language Services Act*.

Newspaper notices and notification materials, Project Newsletters, Project Web Site information and Public Information Centre Summary Reports are contained in Appendix C, Appendix D, Appendix E and Appendix F, respectively. Summaries of input received and responses provided during each stage of the study are provided in the sections of the report that describe those stages of the planning process. Input received through correspondence is provided in Appendix G.

Recommended Plan Description

The Recommended Plan for a 40.7 km long section of four-lane, fully controlled access Highway 69 is illustrated in Exhibit E-2. It passes through the geographic Townships of Carling, Shawanaga (unorganized), The Archipelago, Harrison (unorganized) and Wallbridge (unorganized). At-grade intersections will be eliminated and access will be provided at interchanges at Woods Road, Shebeshekong Road, Highway 529 (south of Pointe au Baril Station) and Harris Lake Road. The alignment also passes through the Shawanaga First Nation.



Highway 69 Four-Laning
 North of Nobel to Highway 522
 G.W.P. 5377-02-00 (South Section)

Recommended Plan

Exhibit
E-2

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At the south limit of the project the alignment matches the adjacent Highway 69 Four-Laning project presently in Detail Design (WP 335-00-00) with east side twinning. The east side twinning continues northerly 9.5 km changing to west twinning at the southern border of Shawanaga Township. The alignment continues west side twinning through Shawanaga Township for 3.5 km before curving onto a new alignment west of the existing highway. The new alignment section continues through the Shawanaga First Nation with a maximum centreline offset of 300 m, rejoining the existing highway corridor with east side twinning just north of the Shawanaga River at the southern limit of the Township of The Archipelago. The east side twinning continues for 4 km.

The next 2 km follows the existing highway, but requires complete reconstruction to upgrade the horizontal alignment. Following this section, the four-laning transitions to a new alignment west of the existing highway to avoid businesses and residences south of Pointe au Baril Station. The maximum centreline offset through this section is 120 m. This new alignment section continues for 1.5 km, at which point it crosses to a new alignment on the east side of the existing highway, with the highway increasing in elevation due to a high rock ridge immediately east of the community of Pointe au Baril Station. This 3 km new alignment section avoids the Pointe au Baril Station community, however, requires a new crossing of Sucker Creek approximately 400m east of existing Highway 69.

The new alignment curves west again to cross the existing highway just north of the Highway 69/Highway 529 intersection. The new highway then remains adjacent to the existing highway on the west side for 1.4 km. The new alignment then crosses the existing highway again to stay just east of the existing highway right-of-way for approximately 2 km to Naiscoot Lake, crossing the lake immediately adjacent to the existing bridge. North of the lake, the new alignment transitions to west side twinning and maintains this to the northern boundary of the Township of The Archipelago (4.4 km).

At the boundary between The Archipelago and Wallbridge Townships, the new highway is west side twinning. Just south of the Harris River at a horizontal curve, the alignment transitions from west side twinning to east side twinning, and remains in this configuration to the northern study limit.

The Recommended Plan also includes various grade separations, service roads and side road realignments that are required to maintain access to adjacent lands within the study area.

The Recommended Plan was developed through a process that included development of corridor alternatives, a Preferred Corridor, route and interchange alternatives within the Preferred Corridor and the development of the Preferred Route.

Highway 69 will be a four-lane Rural Freeway Divided highway. Each direction will consist of two 3.75 m wide lanes. The shoulder requirements are 3.0m wide on the right, 1.5m for the left shoulder, and a 1.0m rounding. The northbound and southbound lanes will be separated by a 30m open median. The basic right-of-way for the four-laning is 110 m.

Recommended Plan Interchanges

An interchange is proposed at Highway 69 and Woods Road. The configuration is a Parclo A-4 on the west side of the highway and a Parclo A-2 on the east side, with protection for an ultimate Parclo A-4 configuration with the completion of the E-N direct ramp. Given current absence of development on the east side of Highway 69 a direct E-N ramp is not needed at this time to accommodate traffic.

An interchange is proposed at Highway 69 and the realigned Shebeshekong Road to provide access to the Shawanaga First Nation community and the businesses and residences just north of Shawanaga River. This interchange is located partially on Crown land and partially on Shawanaga First Nation land. The interchange consists of a Parclo A-4 configuration on the west side with a Parclo A-2 configuration on the east, which maintains the existing Highway 69 as a service road aligned with the northbound exit ramp, with minimal reconstruction and reduces the amount of construction through swamp. An E-N ramp is not required given the absence of development and low traffic volumes, and low potential for significant future development in the medium or longer terms.

A Parclo A-2 interchange is proposed south of Pointe au Baril Station, with Highway 529 and Site #9 Road aligned with the northbound and southbound ramp terminals respectively. This interchange will provide access to Pointe au Baril Station, Sturgeon Bay Provincial Park, other permanent and seasonal residences on Highway 529, Naiscoot Lake cottages to the north, the Township waste disposal site and a residential cluster on Site #9 Road to the south. Site #9 Road crosses Highway 69 on a new flyover just north of the Shawanaga River, thereby providing a continuous connection to the Shebeshekong Road interchange and an alternate route for residents to the south who wish to travel to Pointe au Baril Station.

A Parclo A-B interchange is proposed at Harris Lake Road. This interchange will provide access to the seasonal community on Harris Lake east of Highway 69 and a picnic/rest area on the north side of the Harris River. Given the very low volumes of this interchange and the lack of opportunities for significant future development, the weaving issues on the crossing road which are typically associated with a Parclo A-B configuration are not considered a significant operational or safety issue.

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Recommended Plan Structures

There are 17 new major structures within the study area. These include four interchange structures, eight watercourse crossings and five crossing road structures. In accordance with MTO preference, the proposed bridges are typically straight and square (i.e. zero skew) for ease of construction. The exceptions to this include the twin, single-span rigid frame bridges at the Highway 529 Overpass, which have a 20° skew to reduce the structure length, and the Sucker Creek, Moose Lake Road and Naiscoot Lake structures which are located on curved sections of the highway alignment.

Two snowmobile and pedestrian crossings were identified and recommended though discussions with local snowmobile clubs, representatives of the Park-to-Park Trail association, and the Shawanaga First Nation. Both pedestrian and snowmobile crossings are concrete rigid frame open footing culverts.

There was not a strong ecological rationale to construct dedicated large mammal crossing structures removed from existing valley corridors. Specifically, there are no discrete, focused crossing points used by concentrations of large animals that warrant installation of dedicated large mammal crossing structures, the overall mortality is not excessive, and the large animal populations are 'secure'.

There are four larger watercourses/waterbodies and/or associated valleys that will be crossed by the new highway on structures that are large enough to accommodate large wildlife. These waterbody crossings are generally spaced along the length of the highway. These locations include the Shawanaga River, Sucker Creek, Naiscoot Lake and northbound lanes at Harris River. Design provisions have been integrated into these bridge crossing locations to ensure large mammal movement can be accommodated. Where the existing shoreline was deemed inadequate, a separate wildlife crossing platform has been incorporated.

Recommended Plan Sideroads

The Recommended Plan includes various service roads, side road realignments and extensions, and local access roads to maintain access to existing land uses within the study area.

A new side road will be provided to intersect Highway 69 at the Woods Road Interchange. This road will be north of the existing Woods Road and incorporate existing roads within the Parry Sound and Area Industrial Park. It will intersect with existing Woods Road east of the current CPR at-grade crossing, thereby avoiding any construction in the vicinity of the rail corridor. The realigned Woods Road will extend easterly from the interchange to connect with the existing lagoon access. New Woods Road will be under the jurisdiction of the Township of Carling.

Existing Woods Road, west of Highway 69 will remain in place to provide access to industrial lands in the area but will not cross Highway 69. The roadway will be terminated at a new cul-de-sac at the Highway 69 right-of-way.

A new alignment for Shebeshekong Road will be constructed for 1.5 km to connect to the Shebeshekong Road interchange. This road will tie into the existing Shebeshekong Road (Highway 7182) approximately 300 m west of the interchange. The new roadway will serve as the main access to the Shawanaga First Nation community, and also provides an alternate route southerly to Highway 559, and ultimately to Parry Sound. On the east side of the interchange, new Shebeshekong Road will intersect with proposed Site #9 Road (service road).

An 8.8 km long service road (Site #9 Road) will be provided from Shebeshekong Road interchange northerly to the Highway 529 interchange (south of Pointe au Baril Station). This service road will provide an alternate route between these interchanges.

The Highway 529 Extension will extend from the Highway 529 interchange to Pointe au Baril Station. For the majority of its length, the existing Highway 69 will be used, re-designated as Highway 529. A short section of new connecting roadway will be required to connect to the interchange, which will align with the eastern ramp terminal. The new four-lane highway will cross over the Highway 529 Extension approximately 1.6 km north of the interchange. The horizontal alignment of the existing roadway will remain essentially unchanged from just north of the interchange through Pointe au Baril Station, providing access to residences and businesses within the community. North of the community area, at the current intersection between the existing Highway 69 and Highway 529, a short realignment of approximately 420m will eliminate this intersection and provide a continuous movement onto existing Highway 529.

A service road will be provided to access the cottage communities surrounding Naiscoot Lake. This service road will intersect Highway 529 north of Pointe au Baril Station. From this intersection, a 1.5 km section of new roadway will be required to connect Highway 529 to the existing highway. Naiscoot Lake Road heads north on the existing highway alignment for 1.8 km to Naiscoot Lake. The existing highway bridge crossing Naiscoot Lake will be used to provide access to the cottage communities on both sides of Naiscoot Lake. Immediately north of Naiscoot Lake, this roadway will terminate at a cul-de-sac.

A 1.4 km length of new road will intersect Naiscoot Lake Road on the west side of Highway 69, cross Highway 69 on a new bridge, and curve south, utilizing a section of the existing highway to provide access to Moose Lake Lodge and forest access roads to the south and east.

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Existing Harris Lake Road will be realigned to connect with the proposed interchange, providing access to the cottage community on Harris Lake east of Highway 69. West of the interchange, this new connecting roadway will provide access to a rest stop/picnic area on the north shore of the Harris River.

There are a number of local access roads also proposed to provide local property access and Crown Land access.

Recommended Plan Miscellaneous

The traffic management plan has been developed to provide access to local roads at all times during construction. Construction activities will be kept as far as possible from the travelling public.

The Recommended Plan will be separated into six contracts. The contract limits have been established based on the proposed staging and anticipated construction cost of each segment.

Road transfers are proposed in several areas of the study. The Township of Carling has agreed in principle to the transfer of approximately 3km of new road. A process has been initiated with the Township of The Archipelago to transfer 11km of new and existing roads to the Township.

In the Shawanaga First Nation there are 7.8km of road that could be transferred from MTO. This comprises of existing highway and new roads.

There is a minor length of new road in unorganized townships that should be transferred however no changes to current maintenance or operation of roads is anticipated in these areas.

Recommended Plan Cost

The estimated cost of the Highway 69 four-laning within the study area is approximately \$250 Million.

The preliminary cost estimate is based on major item quantities, which were determined from preliminary design plans, profiles and cross-sections. Other minor items including culverts and illumination were calculated as 30% of the major item costs. 3% was also added for utility relocations. A further 15% contingency was added to the structure costs and 12% for non structure item costs. Unit costs used in this calculation were up to date at the time of printing.

Staging costs were calculated as 10% of all items, including contingency. Engineering and Contract Administration was based on 15% of item costs including contingency.

Summary of Identified Concerns, Mitigating Measures and Future Commitments

The next phases of the study process are Detail Design and construction.

During Detail Design and prior to construction, a number of commitments for future consultation and environmental mitigation, as described in this Route Planning and Environmental Assessment Report, will be fulfilled. This section of the report describes those commitments.

A Design and Construction Report will be prepared near the end of Detail Design, to document how the commitments identified at the end of the Route Planning Study were given consideration.

A summary of identified concerns and future commitments are provided in Exhibit E-3.

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Exhibit E-3: Summary of Environmental Concerns and Commitments		
Issue/Concerns Potential Effects	Concerned Stakeholder(s)	Future Work or Mitigation (to be confirmed during Detail Design)
CEAA Review Process	CEA Agency and Federal Agencies MTO	<ul style="list-style-type: none"> Input to CEAA documentation for Federal Triggers as required Obtain all federal approvals
Navigability <ul style="list-style-type: none"> Potential impacts to navigability during or after construction Obtain approval under the <i>Navigable Waters Protection Act</i> 	Transport Canada MTO General Public	<ul style="list-style-type: none"> Maintain or improve existing clearances for navigability Obtain approval under the <i>Navigable Waters Protection Act</i> during Detail Design
Groundwater <ul style="list-style-type: none"> Increased soil erosion Groundwater contaminants from disturbance of contaminated soils, leaks and accident spills Changes in groundwater levels in aquifers and yields of wells due to dewatering, changed flow patterns that may disrupt the community or private groundwater supplies for drinking water, irrigation or commercial uses Damage to groundwater wells from blasting and vibration 	MOE MTO Property Owners	<ul style="list-style-type: none"> Prepare a Spill Prevention, Control and Countermeasures Plan for all construction contracts If adverse effects are anticipated, develop and initiate a Groundwater Monitoring Program (well quality and quantity monitoring prior to contact initiation) Obtain a permit to take water (PTTW)
Fisheries and Aquatic Habitat <ul style="list-style-type: none"> Impacts to specialized aquatic habitats Indirect or secondary impacts to watercourses and waterbodies Fish passage 	Ministry of Natural Resources DFO MTO General Public	<ul style="list-style-type: none"> Undertake more detailed fish and fish habitat impact assessments in relation to more specific project design (including more detailed field assessment and sensitivity analysis as required) and refine mitigation measures, in order to fulfill requirements of DFO/MTO/MNR Fisheries Protocol and required approvals Refine siting and/or design of bridge structures to avoid specialized aquatic habitat Design culverts and structures to minimize the length (e.g. culverts design using wing walls or head walls) Median openings should be considered where feasible and use techniques to reduce fill footprints Incorporate design measures to minimize the degree of encroachment of fills for abutments at new crossings Minimize the length of stream disrupted for new culverts Minimize the length of stream disruption and duration of disruption Avoid or minimize realignment requirements by aligning new culverts along the existing channel wherever possible Design culverts to avoid and minimize impacts to stream flow or velocity Minimize the length of channel sections requiring realignment by incorporation of all reasonable measures to reduce the fill footprint Design to avoid encroachment into a channel where a section of watercourse channel meanders within the ROW Reconstruct realigned channel sections using a naturalized channel design to ensure existing habitat conditions are maintained and enhanced Avoid 'hard engineering' approaches for watercourse realignment Design realigned channels to be of similar length to the existing channel Maintain channel dimensions and channel type along the new sections Integrate design input by a hydrologist and/or fluvial specialist as required Minimize encroachment into aquatic and wetland habitat, particularly those habitats identified as relatively more sensitive Timing restrictions for instream work will be included in the contract package Include special provision for blasting near watercourses in the contract package, as well as other typical constraints used at watercourses with fisheries resources (i.e. prevention of debris from entering the waterway, no refuelling near water, etc.) <p>Where watercourses support potential direct fish use up and downstream of the highway and fish passage is a potential concern:</p> <ul style="list-style-type: none"> Culverts should be embedded and substrate placed throughout the culvert – embedment should be sufficient such that substrate can be sized to stay in place under storm flows and not affect the required conveyance capacity A low flow channel should be formed within the substrate to avoid creation of a barrier to fish movement under low flow conditions In no case should a barrier to fish movement be created

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Exhibit E-3: Summary of Environmental Concerns and Commitments		
Issue/Concerns Potential Effects	Concerned Stakeholder(s)	Future Work or Mitigation (to be confirmed during Detail Design)
		<ul style="list-style-type: none"> Design transitions from culvert inlets and particularly the culvert outfall to avoid creation of erosive conditions Where relevant, created outlet and inlet pools to provide potential refuge habitat as well as for energy dissipation
<p>Vegetation and Wetlands</p> <ul style="list-style-type: none"> Direct impacts (e.g. loss of vegetation) Indirect impacts (e.g. spills) 	<p>Ministry of Natural Resources MTO General Public</p>	<ul style="list-style-type: none"> Develop vegetation protection measures in the contract package, including protection for the main portions of natural areas Maintain the existing drainage regime over the short and long term; drainage should not be diverted or impounded All trees should be felled and removed from the adjacent natural habitat Any temporary dewatering that may be required during construction through the wetland areas should be properly managed, and discharge filtered prior to release to the natural area to prevent erosion, siltation and/or temporary drawdown or flooding All construction-related debris should be appropriately disposed of following construction An environmental inspector should be retained to ensure all relevant mitigation measures are properly applied throughout construction <p>Site-specific mitigation measures:</p> <ul style="list-style-type: none"> Where appropriate, along the edges of the more sensitive natural features (e.g. deciduous swamps, coniferous swamps and shrub fens), temporary protection fencing will be installed prior to grading. This fencing will be maintained throughout construction. In many cases, it may be appropriate to integrate additional sediment and erosion control fencing with construction barrier fencing. Specific edge management techniques be applied in order to protect newly created edges of the more sensitive forested swamp communities. Techniques to be considered include native soil and seedbank retention (i.e. no root grubbing in a narrow transition zone to encourage rapid re-growth), and edge plantings. Salvage of seedbanks for the small areas of sensitive wetland communities and communities supporting rare species (e.g. shrub fens, forested swamps, and Unit L14). Seedbank material can be re-instated in adjacent areas or temporarily disturbed areas that will be re-instated.
<p>Wildlife</p> <ul style="list-style-type: none"> Potential for increased mortality Migratory birds Eco-passages Species at Risk 	<p>Ministry of Natural Resources MTO First Nation Community(ies)</p>	<ul style="list-style-type: none"> Create replacement habitat for species at risk reptiles Explore various types of warning signage (e.g. mobile/seasonal signage, indicate target wildlife group) to increase driver awareness and minimize driver habituation. Provide wildlife crossing opportunities (Eco-passages) under new bridge structures at Shawanaga River, Sucker Creek, Naiscoot Lake and northbound Harris River. Evaluate fence options to direct wildlife at these locations. Provide dedicated wildlife culverts for southbound Harris River crossing Eco-passages to be naturalized to promote wildlife use Install smaller, more numerous crossing structures/culverts across the length of the highway Provide wildlife fencing north of the Shebeshekong Road and Pointe au Baril Station interchanges. In these areas, employ barriers specifically designed to prevent Eastern Massasauga Rattlesnake and other species at risk herpetofauna from accessing the new roadway. Employ a training program to address the identification and management (e.g. relocation from the construction zone) of species of conservation concern for the contract administrator, environmental inspector, and contractor staff Include timing restrictions for clearing activities to minimize impacts to breeding birds (no clearing May 1 to July 28 yearly, <i>Migratory Birds Convention Act</i>)
<p>Surface Water</p> <ul style="list-style-type: none"> Increased upstream/downstream flood levels and erosion Increase of pollutants to receiving watercourses Increase in surface erosion to receiving watercourses 	<p>Ministry of Natural Resources MTO General Public</p>	<ul style="list-style-type: none"> Design watercourse crossings to minimize flood risk and erosion Complete a Stormwater Management Study to identify water quantity and facilities to control peak flow and runoff and best management practices Use erosion and sediment control measures at all sensitive areas where the disturbance of construction must be contained.

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Exhibit E-3: Summary of Environmental Concerns and Commitments		
Issue/Concerns Potential Effects	Concerned Stakeholder(s)	Future Work or Mitigation (to be confirmed during Detail Design)
Erosion and Sediment Control <ul style="list-style-type: none"> Impact to water quality and habitat quality 	Ministry of Natural Resources MTO General Public	<ul style="list-style-type: none"> Develop an erosion protection and sediment control plan Employ appropriate sedimentation and erosion control measures throughout the construction phase, including erection of silt fencing and maintenance of these until all disturbed surfaces that drain to natural areas are re-stabilized and vegetated Schedule construction activities to occur primarily during low runoff periods where feasible Minimize equipment operation when ground conditions are such that extensive compaction and pooling occurs, and ruts from vehicles are evident Prior to construction, install control measures such as straw bale flow checks, rock flow checks, silt fence barrier and erosion control blankets on slopes and in the vicinity of watercourses to reduce the potential for erosion Install control measures prior to stripping of soils, and adjust as grading proceeds Inspect control measures daily during construction and repair as necessary Stabilize and re-vegetate exposed soils after grading Seeding of temporarily disturbed areas will incorporate appropriate mixes of locally adapted native plant species to accelerate re-vegetation Any temporary roads will be removed and restored to pre-existing conditions Minimize erosion by modifying the slope to flatten it or bench it, using retaining walls, using the least erodible fill materials in highly sensitive locations, implementing a landscape plan and controlling run-off
Aggregates <ul style="list-style-type: none"> Potential for sterilization of aggregate resources 	Ministry of Natural Resources MTO Ministry of Northern Development and Mines	<ul style="list-style-type: none"> Consult with MNR and MNDM regarding aggregate resources
Management of Excess Materials <ul style="list-style-type: none"> Potential impacts (e.g. site contamination) to sensitive areas and habitats a result of access material storage or disposal 	MTO Ministry of Natural Resources MOE	<ul style="list-style-type: none"> Excess materials will be managed in accordance with OPSS 180 Stockpiles of excavated materials, equipment storage and parking will be managed in designated areas to avoid further degradation of adjacent habitat In consultation with MNR, identify appropriate locations for disposal of excess materials on Crown Lands
Potential Contamination <ul style="list-style-type: none"> Potential contaminated sites 	MTO MOE	<ul style="list-style-type: none"> Complete a Preliminary Site Screening for all properties prior to acquisition Complete an Environmental Site Assessment for all properties identified as having potential contamination issues.
Community Structure – Residential <ul style="list-style-type: none"> Impacts and disruptions to the social fabric of the affected communities 	MTO Property Owners Residents Seasonal Residents	<ul style="list-style-type: none"> Provide owners compensation for the lands and buildings to be acquired. Provide advance notice of land acquisitions.
Businesses <ul style="list-style-type: none"> Impacts and disruptions to business 	MTO Affected Owners	<ul style="list-style-type: none"> Conduct property negotiations with business/property owners in accordance with standard MTO property purchasing processes
Forest Management <ul style="list-style-type: none"> Access to lands Impacts to Sustainable Forest Licence (SFL) 	MTO Ministry of Natural Resources Westwind Forest Stewardship	<ul style="list-style-type: none"> Provide suitable access to lands currently enjoying access. (Extension of access through each area will be the responsibility of others.) Design and construct forest access roads to sufficient structural standards as to accommodate heavy logging trucks (MNR Forest Access Road standards)
Recreational <ul style="list-style-type: none"> Impacts to marina operations Impacts to snowmobile trails and access 	MTO Affected Owners Parry Sound Snowmobile District Park-to-Park Trail	<ul style="list-style-type: none"> Provide access to the marina at Naiscoot Lake via Service Road off Highway 529 Provide access to Moose Lake area via an overpass from Highway 529 Provide a grade separated snowmobile trail crossing to connect the TOPS Trail on the east side of the four-laned highway to the snowmobile trail on the west side (south of Woods Road) at Dinner Lake Provide TOPS Trail corridor from Dinner Lake northerly to Woods Road on the east side of the new Highway 69 Provide a Park-to-Park trail crossing at Dinner Lake Maintain access to recreational lodges, cottages and areas utilized for hunting and fishing via interchanges and the Service Road system

Executive Summary

Exhibit E-3: Summary of Environmental Concerns and Commitments		
Issue/Concerns Potential Effects	Concerned Stakeholder(s)	Future Work or Mitigation (to be confirmed during Detail Design)
Industry <ul style="list-style-type: none"> Access and servicing 	MTO Affected Owners	<ul style="list-style-type: none"> Provide access to the Parry Sound and Area Industrial Park via the Woods Road interchange Maintain existing access to The Ironworker Maintain access to the industrial operations located south of Pointe au Baril Station via Highway 529
Noise <ul style="list-style-type: none"> Changes in noise levels 	MTO MOE General Public	<ul style="list-style-type: none"> During construction, the contractor will abide by the Operational Constraints and municipal noise control by-laws Employ SP199 F33
Air Quality <ul style="list-style-type: none"> Impacts to health, plan and crop damage or the deterioration of property cleanliness 	MTO MOE General Public	<ul style="list-style-type: none"> Employ standard dust control measures during construction
Vistas and Aesthetics <ul style="list-style-type: none"> Impact on the general visual environment of the roadway due to changes in the form of the roadway 	MTO General Public	<ul style="list-style-type: none"> Minimize vegetation removal, signage and entry features Retain vegetation at the edge of the ROW (beyond clear zone) Retain rock outcrops for visual interest (within the median and adjacent to the outside edge of the travelled highway) Minimize the removal of vegetation as a result of the construction of access ramps and structures Design proposed bridge structures to be aesthetically compatible with the landscape During Detail Design a landscape architect will develop additional landscape elements to minimize impacts to the visual and aesthetic elements of the new highway
Landscape <ul style="list-style-type: none"> General Appearance Scenic vistas 		<ul style="list-style-type: none"> Use native species to enhance the final design with the intent of reducing impacts to fisheries, vegetation, wetlands and wildlife resources Promote scenic vistas and blending of the Highway into the landscape
Traffic Interruptions and Delay During Construction		<ul style="list-style-type: none"> Finalize a Traffic Management and Staging Plan Monitor traffic conditions during construction to ensure that unreasonable delays and backups are not occurring Maintain traffic flow during construction using standard MTO construction signage, flag persons to regulate traffic and reduced speed limits through construction zones Notify emergency response agencies of the construction schedule
Construction Dust and Noise		<ul style="list-style-type: none"> Employ Contract Operational Constraints and municipal noise control by-laws Complaints regarding construction noise will be investigated according to the provisions of the existing MTO/MOE Noise Protocol The contractor will be required to conform to SP199F33 Blasting and pile driving will normally be restricted to the period of 0700 to 1900 hours daily The contractor will be required to conform to OPSS 120 (General Specification for the Use of Explosives) Standard MTO special provisions will be included in the contract to mitigate dust
Archaeology	MTO Ministry of Culture	<ul style="list-style-type: none"> Include provisions in contract package, in the event that either human remains or archaeological resources are discovered during construction Notify Registrar of Cemeteries Regulation of the Ministry of Government Services (416-326-8404) should other cultural heritage values be identified during construction
Built and Cultural Heritage <ul style="list-style-type: none"> Displacement, disruption or indirect impacts to cultural landscape units and build heritage features 	MTO Ministry of Culture General Public	<ul style="list-style-type: none"> Complete documentation and site mapping of affected built and cultural heritage features
Median Crossovers	EMS MTO	<ul style="list-style-type: none"> Median crossovers will be evaluated for emergency and maintenance purposes
Consultation	MNR / First Nations / Municipalities / Snowmobile Clubs / Park-to-Park Trail / Forest Industry / CEAA	<ul style="list-style-type: none"> Maintain communications to promote active participation and provide innovative solutions to comment interest elements (Crown Land access, wildlife mitigation, snowmobile trails) Advertise commencement of Detail Design assignments, PIC's and Design and Construction Report (DCR) completion
<i>EA Act</i>	MTO	<ul style="list-style-type: none"> Complete DCR's for all Contracts

Executive Summary

Exhibit E-3: Summary of Environmental Concerns and Commitments		
Issue/Concerns Potential Effects	Concerned Stakeholder(s)	Future Work or Mitigation (to be confirmed during Detail Design)
Cycling <ul style="list-style-type: none"> Cycling is not permitted on Four-lane Highway 69 		<ul style="list-style-type: none"> Cyclists are encouraged to use alternate parallel routes where available Proposed four-laning provides an alternate parallel route Those sections where parallel routes are not available, options will be evaluated
Value Engineering	MNR MCL MTO	<ul style="list-style-type: none"> Review VE changes with MNR and develop detailed mitigation measures for their review, including more extensive channel realignment plan (which is anticipated to be HADD) for the Harris River tributary Complete Stage 2 archaeological investigation to address northerly shift of Harris Lake Road Interchange Undertake additional field investigations and sensitivity analyses, complete more detailed impact assessments and develop appropriate mitigation measures as required to address the design changes recommended during the VE process. The suite of general mitigation measures outlined above for fish and aquatic habitat and wildlife and terrestrial habitat is generally applicable to address the implications of the recommended VE design changes on the respective features. However, these measures require site specific refinement. <ul style="list-style-type: none"> Specifically, more field assessment may be required to assess the implications of the proposed shift of the Harris Lake Road interchange on both aquatic and terrestrial features. In particular, more detailed assessment of tributary C120 will be required to assess the implications of the much more significant encroachment of the new interchange on the tributary, and to develop an appropriate channel realignment design. The design changes at Sucker Creek and for the Harris River structure and associated wildlife passage design can generally be addressed with refinement to the mitigation measures already identified for the associated aquatic and terrestrial features.