

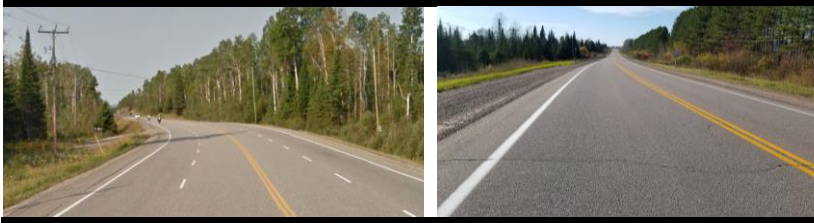
# **HIGHWAY 11/17 FOUR-LANING** **from 1.3 km west of Highway 582 to Coughlin** **Road**

## **Detail Design and Class Environmental** **Assessment Study**



**Online Public Information Centre #2**

**May 10, 2021**



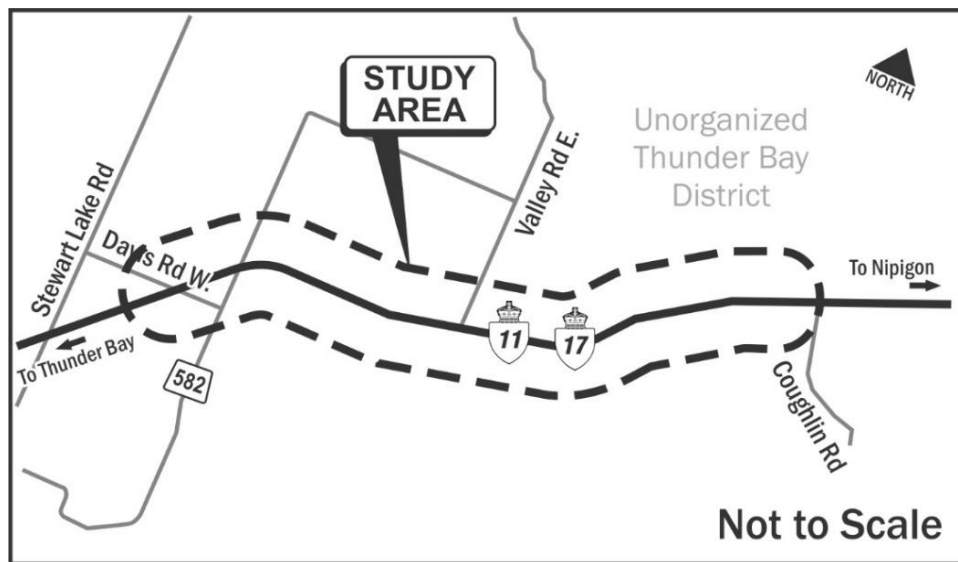
## Highway 11/17 Four-Laning from west of Highway 582 to Coughlin Rd Detail Design & Class EA Study

Public Information Centre #2

# WELCOME

Welcome to the second Public Information Centre (PIC) for the Detail Design and Class Environmental Assessment Study for the four-laning of 8 km of Highway 11/17 from 1.3 km west of Highway 582 to Coughlin Road.

The Ontario Ministry of Transportation acknowledges that it is on lands traditionally occupied by Indigenous Peoples. Indigenous People continue to care for this land and they continue to shape Ontario today - the Ministry wishes to show its respect. Hundreds of years after the first treaties were signed, they are still relevant today.



You are encouraged to ask questions or provide comments to the Project Team via email (preferred) or by telephone. Please use the comment form on the project website (under "Contact Us") or by using the contact information provided at the end of the presentation.



Ask Questions

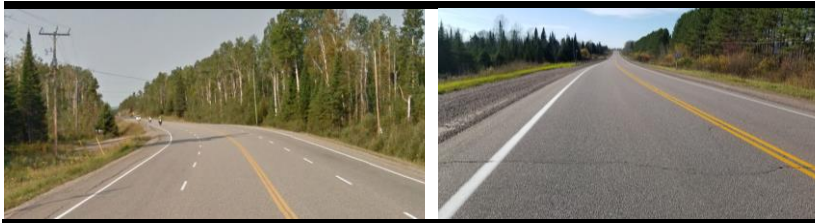


Share Opinions



Submit Comments

**Your participation is important and appreciated!**



Highway 11/17 Four-Laning  
from west of Highway 582 to Coughlin Rd  
Detail Design & Class EA Study

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## VIRTUAL ENGAGEMENT

Due to the on-going global pandemic, the second Public Information Centre (PIC) for this study is being held virtually instead of the in-person drop-in open house format that was held for PIC #1.

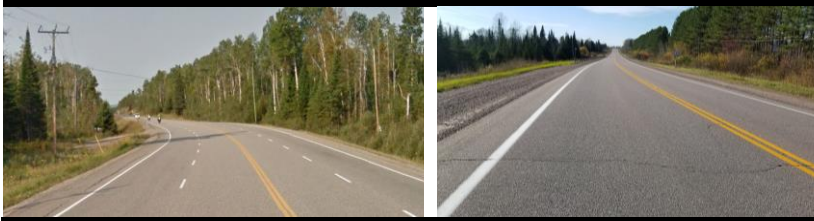
This virtual engagement is to adhere to Ontario Public Health guidelines and provides the following benefits to our stakeholders:

- Avoids group gatherings during the current COVID-19 pandemic.
- Stakeholders may review the information presented at their own time and leisure.
- Comments may be easily submitted using the online comment form on the project website.

Project Managers are also available to discuss the project and any questions that you may have at anytime. Contact information is provided at the end of this presentation and the Project Team will respond to all comments received.







Highway 11/17 Four-Laning  
from west of Highway 582 to Coughlin Rd  
Detail Design & Class EA Study

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## PURPOSE OF STUDY

The purpose of this study is to review the Planning and Preliminary Design (completed in 1997) and prepare the Detail Design plan for the four-laning of Highway 11/17 from 1.3 km west of Highway 582 to Coughlin Road.

**This PIC has been prepared to provide an update on the project, including:**

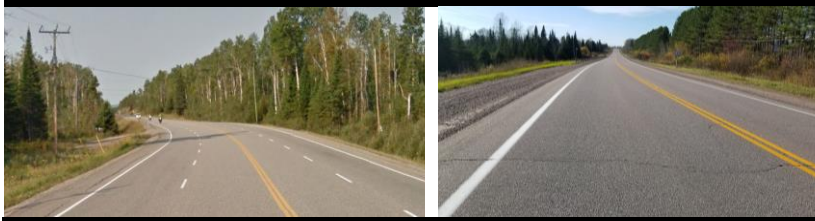
- **Study Progress**
- **Detail Design Plan**
- **Anticipated environmental effects and proposed mitigation measures**
- **Next steps in the study**



Existing Highway 11/17 within the study limits.



Example of two-lane Highway 11/17 within the study limits.

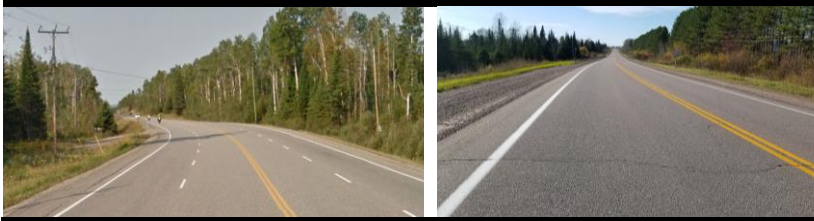


Highway 11/17 Four-Laning  
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## BACKGROUND

- In 1989, the Province made an announcement to four-lane Highway 11/17 between Thunder Bay and Nipigon.
- In 1997, the Planning and Preliminary Design Study for the four-laning of Highway 11/17 from 8 km west of Ouimet easterly 36 km to the west boundary of Red Rock Township was completed. An Environmental Study Report (ESR) was filed in September 1997 and received environmental clearance.
- In June 2017, the Ministry of Transportation (MTO) initiated the Detail Design and Class Environmental Assessment (EA) Study to four-lane Highway 11/17 from west of Highway 582 to Coughlin Road.
- In November 2017, Public Information Centre (PIC) #1 for the study was held at the Hurkett Community Centre in Hurkett, Ontario.
- Following PIC #1, an ESR Addendum was submitted to document a few updates to the EA Approved Plan and was made available for a 30-day review period which ended on May 3, 2018 and received environmental clearance later in May 2018.
- Since PIC #1, the Project Team has developed the Detail Design plan and organized this virtual PIC #2 to present and seek input on the Detail Design plan, which is included later in the presentation.



Highway 11/17 Four-Laning  
from west of Highway 582 to Coughlin Rd  
Detail Design & Class EA Study

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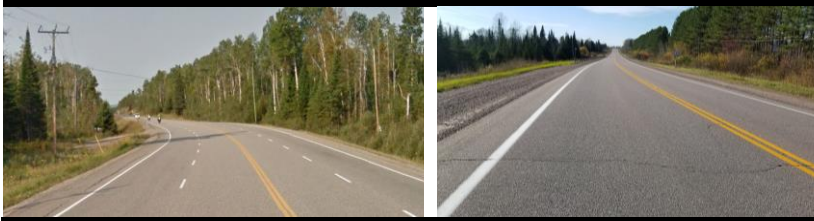
## BENEFITS OF FOUR-LANING HIGHWAY 11/17



Example of a Four-Laned Section of Highway 11/17

- Improve traffic flow by reducing delays caused by slower moving vehicles.
- Improve movement of goods and services, which will have a positive economic impact on the area.
- Reduce risk of collisions and decrease severity of some types of collisions.
- Address future travel demand along the highway.
- Provide allowance for a parallel, continuous, alternative route system in the event of roadway collisions, natural disasters or structural loss, which could lead to the closure of the existing highway.

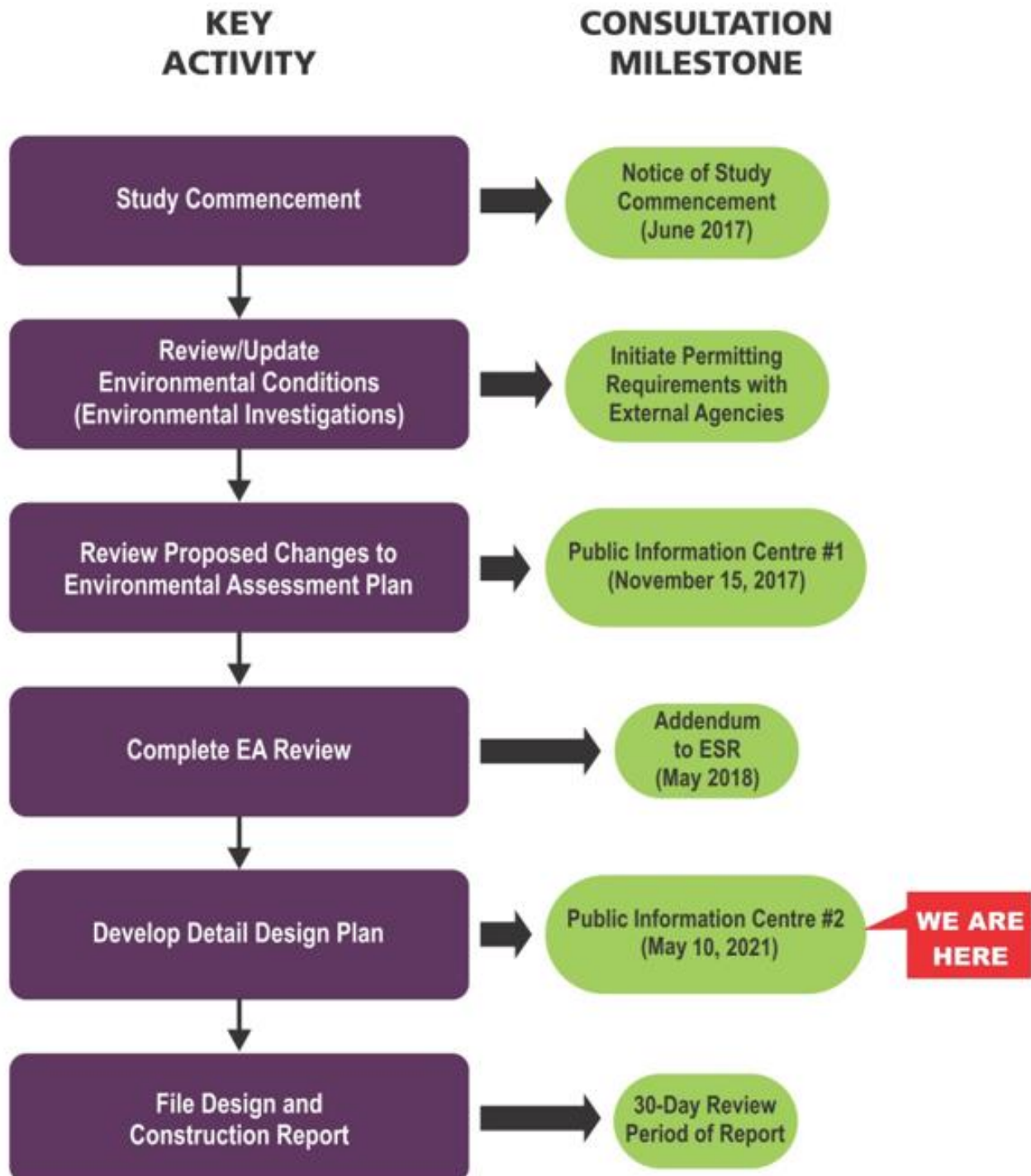


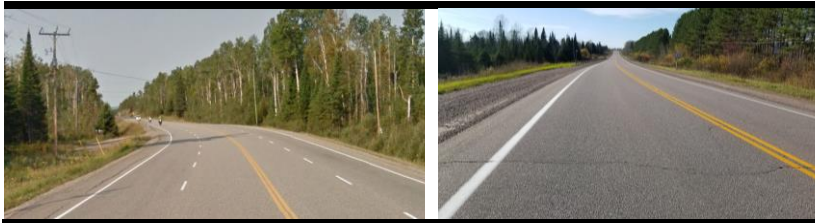


Highway 11/17 Four-Laning  
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## STUDY PROCESS





**Highway 11/17 Four-Laning  
from west of Highway 582 to Coughlin Rd  
Detail Design & Class EA Study**

**Public Information Centre #2**

## SUMMARY OF PUBLIC INFORMATION CENTRE #1

The first Public Information Centre (PIC) #1 was held on November 15, 2017 at the Hurkett Community Centre in Hurkett, Ontario. Approximately 31 people were in attendance, including external agencies, local members of the public, and residents along Highway 11/17 within and adjacent to the study area. The following summarizes the key verbal and written comments and/or concerns raised at that time.

Summary of Key Comments Received from PIC #1	MTO's Response / Action Taken
General support for the four-laning of Highway 11/17 for the section (e.g. safety).	Comments were noted by the Ministry.
Safety concern with sight lines (west) turning left at Stewart Lake Road due to the hill.	Stewart Lake Road is just west of this study area; this concern will be addressed in the future, as part of the adjacent study.
Concerns about property impacts associated with the realignment of Highway 11/17 (EA Approved Plan).	Property impacts were minimized to the extent possible. The Highway 11/17 alignment in the EA Approved Plan has not been altered.
Ensure that the road is safe for cyclists.	Comments were noted by the Ministry. Outside shoulders will be 3.00 m wide and fully paved.
Ensure that there is enough room for vehicles to pull over for emergency vehicles.	Comments were noted by the Ministry. Standard lane widths of 3.75 m will be constructed with outside shoulder (fully paved) widths of 3.00 m.
Ensure that there is highway access to Valley Road West and Valley Road East.	<p>Highway access to and from Valley Road West will be maintained via the Stewart Lake Road connection; access here will be provided to and from both the eastbound and westbound lanes, as shown on the Detail Design plan presented later in the presentation.</p> <p>Highway access to and from Valley Road East will be maintained (to and from the both eastbound and westbound lanes) with a minor realignment of approximately 12.5 m to the east to meet Highway 11/17 at a 90° angle to provide improved line of sight and safety for vehicles approaching the highway from Valley Road East.</p>
Concerns about maintaining vehicle access to Davis Road from the Hurkett Loop (Highway 582) as locals use a natural spring / creek to fill their pools.	The Ministry has considered the opportunity to provide vehicular access to the natural spring / creek and will accommodate this with a connection between the realigned Highway 582 and Davis Road.
Questions about timing of start of construction.	Due to delays in the project, construction start is anticipated to being in Winter 2021/Spring 2022, subject to the completion of this Detailed Design Study, environmental approvals, and availability of funding.

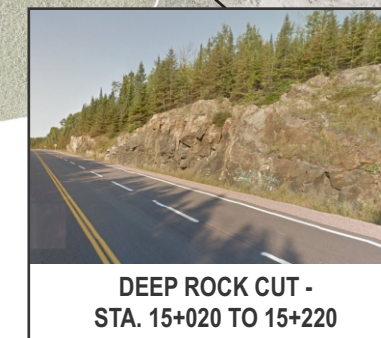
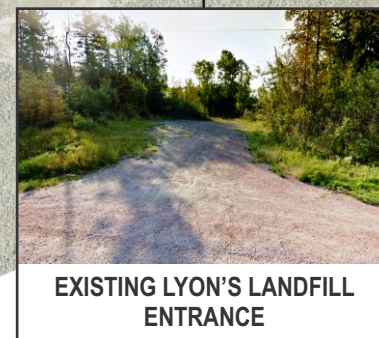
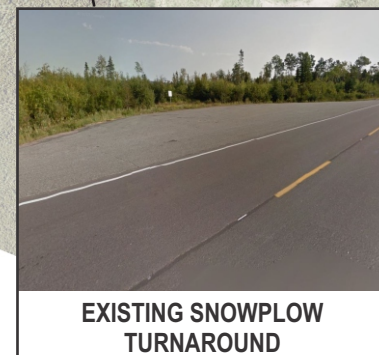
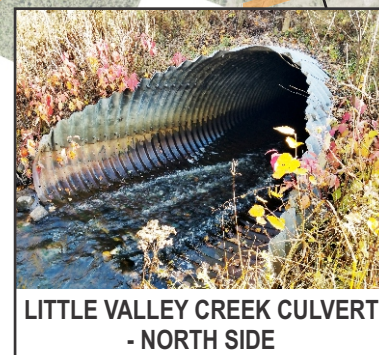
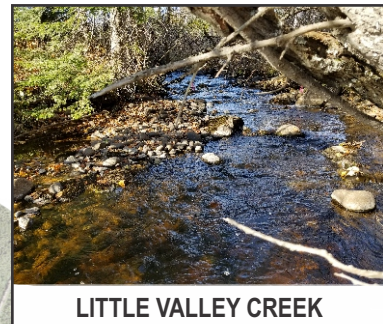




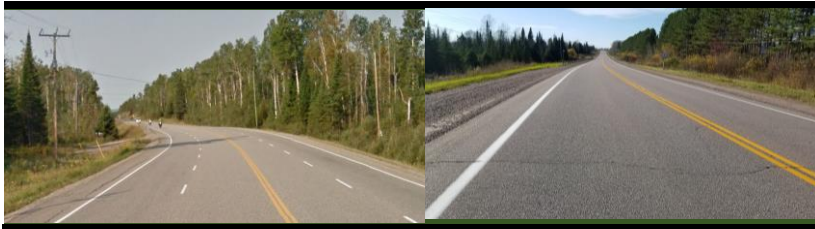
## EXISTING ENVIRONMENTAL CONDITIONS

**LEGEND**

- Creek / Watercourse
- Direction of Flow
- Coldwater Thermal Classification
- Warmwater Thermal Classification
- Direct Fish Use
- Utility Corridor







## Highway 11/17 Four-Laning from west of Highway 582 to Coughlin Rd Detail Design & Class EA Study

Public Information Centre #2

### SUMMARY OF THE DETAIL DESIGN PLAN

The next two slides depict the proposed works of the recommended plan. A summary of the key design features of the Detail Design for the four-laning of Highway 11/17 from 1.3 km west of Highway 582 to Coughlin Road include:

- Expansion of Highway 11/17 to four lanes by twinning (to the north) on the existing alignment;
- Improvements and modifications to select intersecting side-roads, including: Stewart Lake Road Connection, and Valley Road East;
- New structural culverts under the new Highway 11/17 eastbound and westbound lanes at Valley Creek;
- Existing Highway 582, Valley Road, and Davis Road will be cul-de-sac'd, and connection will be provided via the new Stewart Lake Road Connection;
- Highway 582 will be realigned and connected to new Stewart Lake Road Connection;
- Partial illumination at the Highway 582 and Valley Road East intersections; and
- Temporary illumination at the east and west end transitions from 4 lanes to 2 lanes.

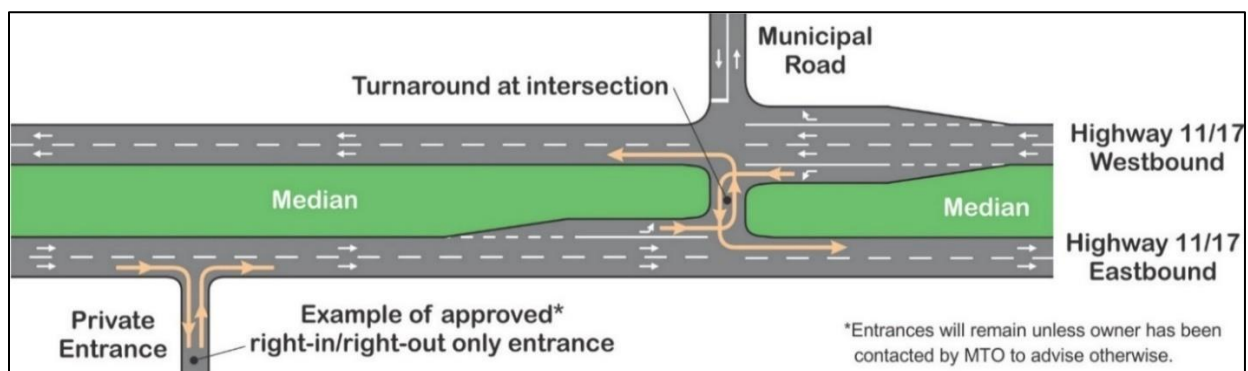
#### Valley Creek

New structural culverts crossing Valley Creek will be constructed as part of the newly twinned highway alignment. A new culvert will be installed under the westbound lanes while the culvert under the existing eastbound lane culvert will be replaced. Please note a portion of Valley Creek between the two culverts will be realigned and naturalized, as shown on the Detail Design Plan in the next slide.

#### Entrance Modifications

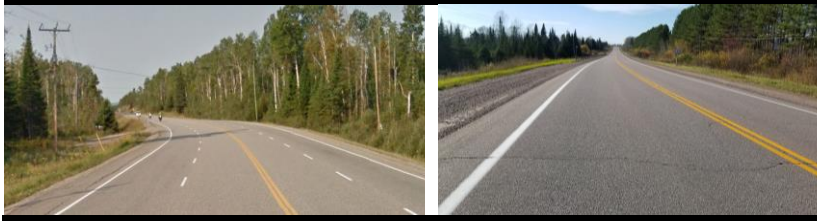
Due to the introduced median between the eastbound and westbound highway lanes, property accesses will become limited to right-in / right-out movements to and from the driveway, as shown below and on the Detail Design plan.

At all times during construction, access to all entrances will remain available. Where necessary, temporary extensions of entrances to connect to the operating lanes during staging will be provided. Some (permanent) minor entrance modifications may be required at select properties; these will be discussed with affected property owners prior to completion of design.



Typical Example of Private Access to Proposed Highway 11/17

A link to an interactive map showing the Detail Design Plan and is available on the project website



## DETAIL DESIGN PLAN (1 of 2)

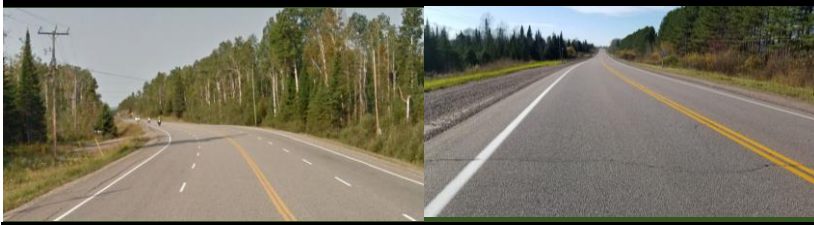
**SEPARATE FILE**





## DETAIL DESIGN PLAN (2 of 2)

**SEPARATE FILE**



Highway 11/17 Four-Laning  
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Detail Design & Class EA Study

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## CONSTRUCTION STAGING



- Duration of construction is anticipated to be 2-3 years.
- During this time, full road closures are not anticipated; one lane of traffic in each direction on Highway 11/17 will be maintained at all times during construction.
- Localized single lane, two-way traffic operation under flagging along Highway 11/17 may be required at the tie-ins at the east and west project limits from time to time.
- Access to side roads will be maintained for the majority of construction, and short-term closure (e.g. 1-2 days) may be required to tie-in realigned side roads to existing roads. Any affected property owners will be notified prior to this closure.



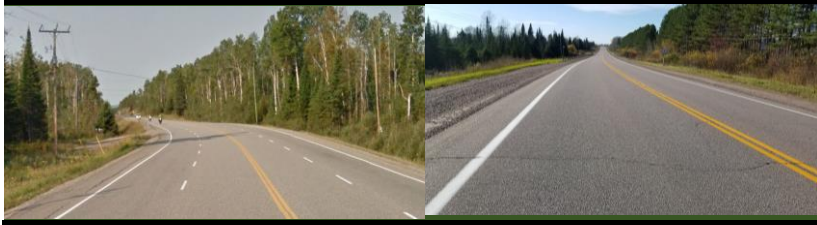


## ENVIRONMENTAL EFFECTS AND PROPOSED MITIGATION MEASURES TERRESTRIAL ENVIRONMENT

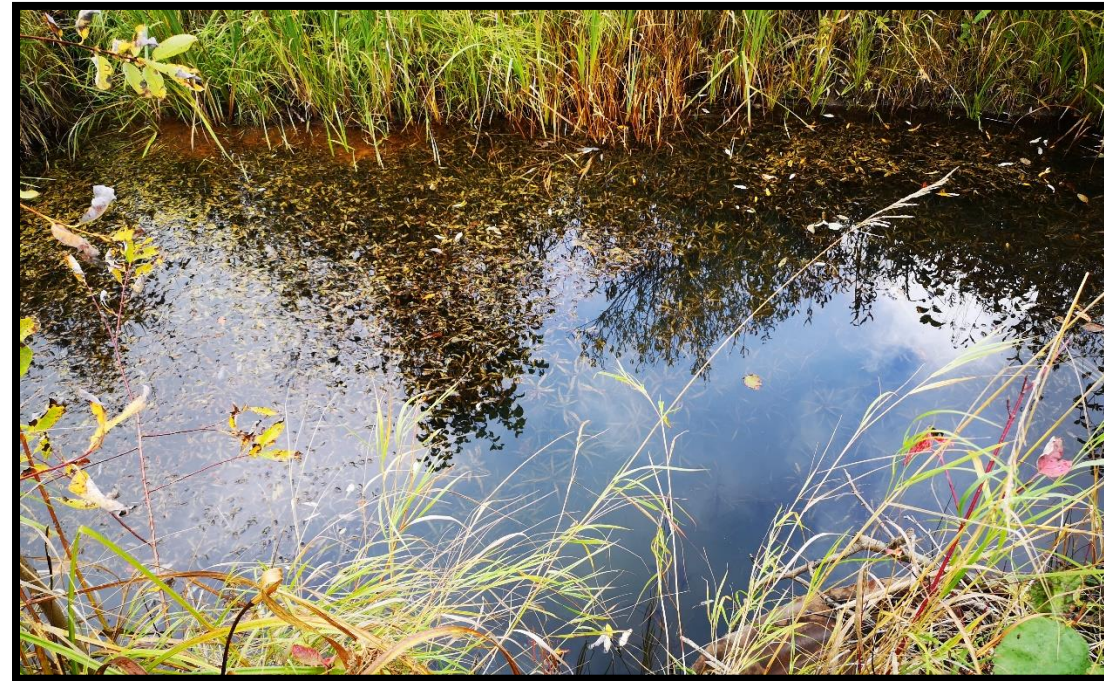


Environmental Effects	Proposed Mitigation Measures
<ul style="list-style-type: none"> <li>Removal of vegetation within the widened right-of-way (ROW) will be required to accommodate the new lanes, however, twinning the Highway 11/17 parallel to the existing highway minimizes effects to wildlife, and avoids potential impacts/fragmentation of intact, undisturbed features and associated wildlife habitats further away from the highway.</li> <li>Wildlife using the edge areas along the existing highway is expected to be generally tolerant of highway related effects, and therefore it is not anticipated that sensitive or rare species are using these edge areas. The existing highway has already generally modified and affected wildlife movement patterns.</li> <li>A mineral lick has been identified in the study area which may attract wildlife to the highway, elevating the risk of wildlife (e.g. deer, moose) mortality in the area.</li> <li>Some increased road mortality of wildlife is expected since animals will now have to cross four lanes of traffic.</li> </ul>	<ul style="list-style-type: none"> <li>Vegetation removals will be minimized and the boundary for vegetation removals will be clearly marked in the field prior to clearing to protect trees not slated for removal.</li> <li>Appropriate timing constraints will be applied to vegetation removals to protect breeding migratory birds and their nests (in accordance with the <i>Migratory Birds Convention Act</i> (MBCA 1994)), and other wildlife (e.g. bats).</li> <li>The removal of the mineral lick is recommended to reduce attraction of wildlife to the highway and in turn reduce potential for wildlife mortality through vehicle collisions.</li> <li>Vegetation within the new ROW will be cleared only to the extent required for construction purposes and in some cases, to improve driver sightlines and visibility. This will also assist with deterring wildlife movement across the highway.</li> <li>Temporary erosion and sediment control measures will be installed in sensitive areas prior to construction and will be maintained during construction.</li> </ul>





## ENVIRONMENTAL EFFECTS AND PROPOSED MITIGATION MEASURES AQUATIC ENVIRONMENT



Environmental Effects	Proposed Mitigation Measures
<ul style="list-style-type: none"> <li>The permanent realignment of Valley and Little Valley Creeks will be required to accommodate the proposed works; this will include installation of new culverts, and replacement of existing culverts on new alignments.</li> <li>Tributary A (of Lake Superior) will require the replacement of the existing culvert on a new alignment, and the installation of three additional culverts to accommodate the new westbound lanes, Highway 582 extension and the Stewart Lake Connection (including minor channel tie-ins at new culvert ends).</li> <li>The effects of the realignments and channel tie-ins are not anticipated to result in significant impacts on resident fish's use of the habitat for general lifecycle functions as there is no anticipated loss of specialized or critical habitat; any habitat being lost and/or enclosed within the new culverts is common and well represented throughout the tributaries.</li> <li>Culverts have been designed to maintain and enhance fish passage through the new channel (i.e. WC-12 standards).</li> </ul>	<ul style="list-style-type: none"> <li>All affects to fish and fish habitat can be mitigated through the implementation of MTO's standard environmental protection mitigation measures for construction in and around waterbodies such that direct impacts to fish and fish habitat will be avoided.</li> <li>All in-water work will be completed during the appropriate timing window and during the low flow period to protect fish.</li> <li>Culverts that support a fishery have been designed to provide fish passage and meet hydraulic requirements, while non-fisheries culverts have been designed solely to meet hydraulic requirements.</li> <li>Any temporarily stockpiled soil, debris or other excess materials, and any construction-related materials, will be properly contained (e.g. within silt fencing) in areas at least 30 m from the watercourses.</li> <li>Sensitive areas (e.g. banks) disturbed by construction will be stabilized to prevent erosion and/or sedimentation.</li> <li>Sediment-laden water removed from the work area will be filtered before being discharged; sediments will be deposited a minimum of 30 m from any watercourse / waterbody.</li> </ul>





## ENVIRONMENTAL EFFECTS AND PROPOSED MITIGATION MEASURES SOCIAL ENVIRONMENT



Environmental Effects	Proposed Mitigation Measures
<p><u>Groundwater</u></p> <ul style="list-style-type: none"> <li>There is the potential to affect groundwater quality and quantities during construction.</li> <li>Groundwater-taking assessments are underway to determine if a water-taking permit is required for construction.</li> </ul> <p><u>Contamination</u></p> <ul style="list-style-type: none"> <li>Phase 1-2 Environmental Site Assessments were completed within the study area which identified several areas with impacted soils.</li> </ul> <p><u>Noise and Air Quality</u></p> <ul style="list-style-type: none"> <li>A noise assessment was completed as part of the study based on the criteria outlined in MTO's <i>Environmental Guide for Noise</i> (October, 2006) which determined noise mitigation measures (e.g. noise barrier walls) are not warranted for the proposed improvements to Highway 11/17.</li> <li>Traffic volumes on Highway 11/17 and associated noises levels are not anticipated to significantly increase as a result of the highway four-laning.</li> </ul>	<p><u>Groundwater</u></p> <ul style="list-style-type: none"> <li>Water well surveys will be completed prior to and during construction to establish baseline water quality and quantities, as required.</li> <li>All necessary water-taking permit(s), if required, will be obtained from the Ministry of Environment, Conservation and Parks prior to start of construction.</li> </ul> <p><u>Contamination</u></p> <ul style="list-style-type: none"> <li>Any contaminated soils will be properly managed during construction in accordance with relevant Ministry of Environment, Conservation and Parks policies and guidelines, and applicable legislation.</li> <li>In the event of a spill of material during construction, the Contractor will be responsible for all notification, containment and cleanup required by provincial and federal legislation.</li> </ul> <p><u>Noise and Air Quality</u></p> <ul style="list-style-type: none"> <li>MTO's standard mitigation to control construction noise and dust will be implemented during construction.</li> </ul>





## ENVIRONMENTAL EFFECTS AND PROPOSED MITIGATION MEASURES CULTURAL ENVIRONMENT



Environmental Effects	Proposed Mitigation Measures
<p><u>Built Heritage Resources and Cultural Heritage Landscapes</u></p> <ul style="list-style-type: none"> <li>No built heritage resources or cultural heritage landscapes were identified during the study, as such, no cultural heritage mitigation measures are required.</li> </ul> <p><u>Archaeology</u></p> <ul style="list-style-type: none"> <li>Archaeological assessments are ongoing but have been completed for the majority of the study area to assess archaeological potential.</li> </ul>	<p><u>Archaeology</u></p> <ul style="list-style-type: none"> <li>An archaeological assessment has been scheduled in Summer/Fall 2021 for the remaining areas in the study requiring archaeological clearance.</li> <li>All impacted areas will be environmentally cleared of archaeological potential prior to the start of construction.</li> <li>During construction there is always the chance of encountering archaeological material. If this occurs, all work in the area will stop and appropriate government authorities and Indigenous Communities will be contacted.</li> </ul>

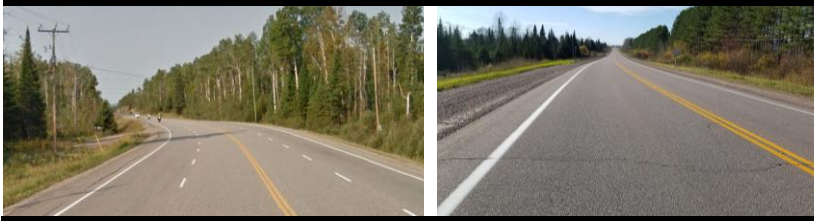




## ENVIRONMENTAL EFFECTS AND PROPOSED MITIGATION MEASURES TECHNICAL/ENGINEERING CONSIDERATIONS



Environmental Effect	Proposed Mitigation Measures
<p><u>Utilities</u></p> <ul style="list-style-type: none"> <li>Impacts to existing utility infrastructure were identified as a result of the recommended plan, including: Bell Canada, Hydro One, and minor impacts to localized TC Energy equipment.</li> </ul> <p><u>Rock Blasting</u></p> <ul style="list-style-type: none"> <li>To construct the new Highway 11/17, rock blasting is required to remove bedrock and produce roadway fill material and/or aggregate material.</li> <li>Rocking-blasting will not be required within 500 m of any properties.</li> </ul>	<p><u>Utilities</u></p> <ul style="list-style-type: none"> <li>Utility relocations will be completed in advance of construction and are anticipated to occur in Summer / Fall 2021.</li> <li>Utility companies are responsible for identifying and obtaining any environmental permits or approvals that may be required to undertake their work.</li> </ul> <p><u>Rock Blasting</u></p> <ul style="list-style-type: none"> <li>Safety is paramount during every blast. Rock blasting completed for MTO highway construction contracts follow strict limits for noise and vibrations produced from blasting which are set and regulated by the Ministry of Labour and the Ministry of the Environment, Conservation and Parks.</li> <li>Prior to blasting, the Contractor must prepare and submit a detailed rock blast plan that will address a wide range of requirements (e.g. pre-blast surveys for buildings, means to control fly rock, blast vibration monitoring, etc.).</li> </ul>



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## **ENVIRONMENTAL CONSIDERATIONS**

### **Mineral Aggregates**

Mineral aggregates, such as good quality sand and gravel, are a vital construction material required for Ministry of Transportation undertakings. The *Aggregate Resources Act* ensures that environmental concerns associated with aggregate extraction operations are addressed. In accordance with this legislation, MTO reviews possible environmental concerns associated with aggregate operations (excluding commercial licensed operations) expressed by Government Agencies, local municipalities and the public, when applicable to site-specific projects.

### **Waste Management**

A MTO and Ministry of the Environment, Conservation and Parks (MECP) protocol identifies material-by-material management options both inside and outside the construction area, which includes the right-of-way and property with a boundary contiguous to the right-of-way. All excess materials may be reused or recycled. Inside the right-of-way, materials such as asphalt, concrete, swamp material, wood, earth, and rock may be reused as a construction material or managed as fill. Materials also may be temporarily stockpiled in preparation for these uses.

Management of excess materials outside the right-of-way, stockpiling, and wood management depends on local circumstances.

Site protection is provided by the imposition of constraints and for the protection of water and air quality adapted from existing legislation. The constraint on the management of these materials also involves discussions and written agreements with property owners and may involve consultation with MECP and other authorities. Where an excess material management option cannot meet constraints, another option must be pursued, or the material must be disposed of as waste.

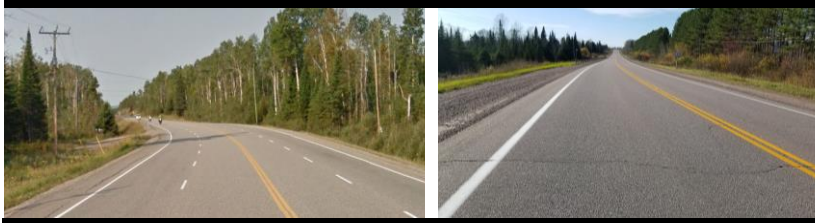
### **Emergency Spill Response**

Direct responsibility for containment and clean-up of spills and abandoned materials on MTO highway facilities rests with the owner of the material and person in control of the material at the time of the spill or abandonment.

Where spills or abandoned materials occur on MTO highway facilities, MTO may assist where persons legally responsible cannot be located or not able to respond. MTO assistance may include notification of authorities, provision of equipment and materials, and traffic management.

In the event of a spill of MTO material by MTO staff, MTO undertakes all notification, containment and cleanup responsibilities required by provincial and federal legislation.





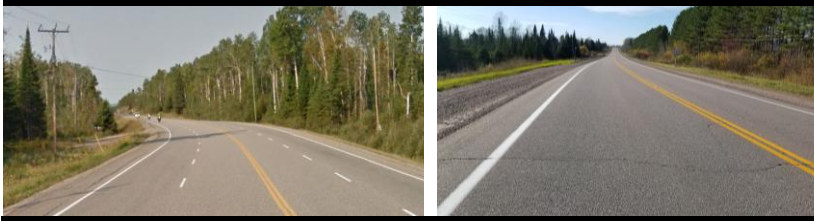
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## ROCK BLASTING

- Blasting during MTO highway construction contracts is required to remove bedrock and produce roadway fill material and/or aggregate material.
- Holes are drilled in the rock and filled with explosives and detonated to fracture the rock. The smaller rock fragments can then be managed with heavy equipment.
- During a blast, energy in the form of shock waves and pressure gas is released that create both ground and air vibrations. The energy confined in the rock exerts pressure to fracture the bedrock. The ground vibrates sending shock waves out in all directions that decrease as the distance from the source increases.
- The actual strength of a vibration is dependent on a wide range of factors at the time of the blast (e.g. amount of explosives detonated at one time, distance from the blast site, local subsurface conditions, weather conditions, etc.). Blasters are able to control and minimize vibrations by setting off the explosives in sequence, with delays of a few thousandths of a second.
- Weather and atmospheric conditions including the close proximity of large bodies of water play a role in vibration magnitudes. These factors can influence the air concussions by reflecting them back to the ground causing a higher level of air blast than would normally be experienced. This may cause the blast to be perceived by surrounding residents to be much larger than the actual blast.
- Safety is paramount during every blast. Rock blasting completed for MTO highway construction contracts follow strict limits for noise and vibrations produced from blasting which are set and regulated by the Ministry of Labour and the Ministry of the Environment, Conservation and Parks. The limits are the most restrictive within North America to ensure public safety and reduce the chance of structural damage.





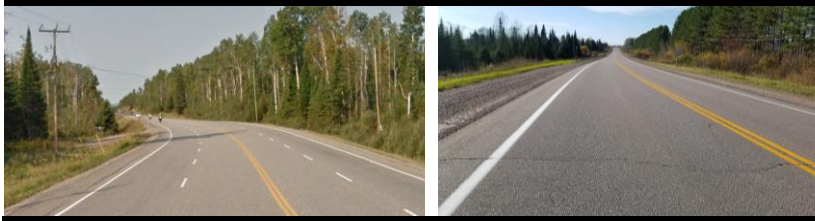
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**Public Information Centre #2**

## **NEXT STEPS**

- 1 • Review the comments received during the requested two-week period for PIC #2
- 2 • Review and respond to all comments and questions received during PIC #2
- 3 • Complete property acquisition (MTO) and undertake the remaining field investigations
- 4 • Finalize the Detail Design plan
- 5 • Finalize mitigation measures for the Detail Design to minimize impacts
- 6 • Prepare the Design and Construction Report and submit for 30-day public review period
- 7 • Advertise the project for tender
- 8 • Start of Construction is dependent upon securing environmental approvals and availability of funding, and is anticipated to begin as early as Winter 2021/Spring 2022 (anticipated duration of construction is 2-3 years).

**Please continue visiting the project website for updates  
<https://hwy11-17-hwy582tocoughlin.com>**



Highway 11/17 Four-Laning  
from west of Highway 582 to Coughlin Rd  
Detail Design & Class EA Study

Public Information Centre #2

## FREEDOM OF INFORMATION AND PROTECTION OF PRIVACY

Information collected during this study will be used to assist the Ministry of Transportation in meeting the requirements of the Ontario *Environmental Assessment Act*. This material will be maintained on file for use during the study and may be included in the study documentation.

Information collected will be used in accordance with the *Freedom of Information and Protection of Privacy Act*. With the exception of personal information, all comments will become part of the public record.

## CONTACT INFORMATION

You are encouraged to contact the Project Team members noted below if you have questions or comments on the study and information presented today.

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Please feel free to email any comments or questions to either of the contacts listed above, or by visiting the project website at anytime during the study

[www.hwyl1-17-hwyl582tocoughlin.com](http://www.hwyl1-17-hwyl582tocoughlin.com)