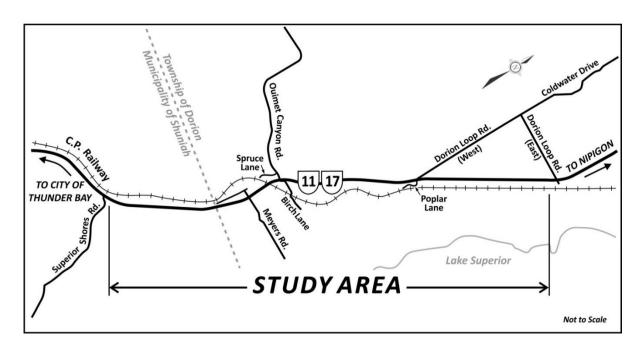
APPENDIX

C PIC #2 DISPLAY PANELS

Welcome to Public Information Centre #2 HIGHWAY 11/17 FOUR-LANING OUIMET to DORION

Detail Design



February 21, 2018







WELCOME

Welcome to the second Public Information Centre (PIC) for the Preliminary Design, Detail Design and Class Environmental Assessment Study for the four-laning of Highway 11/17 from 2.83 km west of Ouimet Overhead easterly 8.63 km.

The purpose of this PIC is to allow the opportunity for interested parties to review and comment on:

- The Detail Design Plan;
- Anticipated environmental impacts and mitigation measures;
- Additional revisions to the plan presented at PIC #1; and
- Next steps in the study.

Representatives from the Ministry of Transportation (MTO) and WSP (*formerly MMM Group Limited*) are available to discuss the project with you. Please ask questions and share your opinions with us. We encourage you to fill out a comment sheet with your comments and concerns.

If you have any accessibility requirements to participate in this project, please let one of the Project Team members know so that we may accommodate you.



Share Opinions



Information presented today is available online at: www.hwy11-17four-laningfromouimettodorion.ca

Please Sign-in at the Front Desk







PURPOSE OF STUDY



Highway 11/17

The purpose of this study is to build upon the Planning and Preliminary Design (completed in 1997), which determined the planning requirements for the four-laning of Highway 11/17.

This project is being conducted in accordance with the requirements of the Ministry of Transportation's (MTO) *Class Environmental Assessment for Provincial Transportation Facilities* (amended 2000) as a Group 'B' undertaking. Throughout the study process, input will be sought from the public and external agencies.







BACKGROUND

- In 1989, the Province made an announcement to four-lane Highway 11/17 from Thunder Bay to 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 Red Rock Township West Boundary was completed. An Environmental Study Report (ESR) was filed in January 1997 and received environmental clearance.
- Public Information Centre (PIC) #1 was held during Preliminary Design on April 13, 2016 at the Dorion Public School to present the overall study process, existing environmental conditions, and the proposed changes to the preliminary design identified in the 1997 Environmental Study Report.
- In October 2016, an Addendum to the 1997 ESR was prepared to document any changes to the original design decisions (i.e. highway alignment revisions in some sections, modifications to public access, and an increase in right-of-way width from 90 m to 110 m (minimum) and filed for a 30-day public review period.
- MTO received a number of Part II Order Requests ("Bump-Up") during the
 public review period to elevate this project to an Individual Environmental
 Assessment. The Part II Order Requests raised objections to the proposed
 design changes documented in the ESR Addendum. The Minister of
 Environment and Climate Change reviewed the Part II Order Requests, and
 in September 2017, MTO received EA approval to proceed with the
 proposed plan.







HIGHWAY 11/17 FOUR-LANING PROJECT BENEFITS



Example of a Four-Laned Highway 11/17

- Allowance for an alternative route system in the event of the closure of an existing highway.
- Reduced delays caused by slower moving vehicles.
- Improved movement of goods and services will have a positive economic impact on the area.
- Reduced collisions and decreased severity of some types of collisions.
- Addresses future travel demand along the highway.







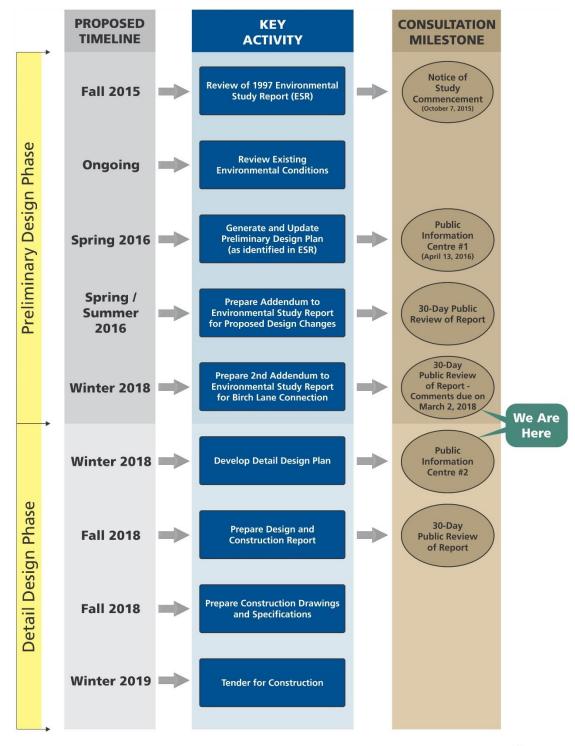
Highway 11/17 Four-Laning

from 2.83 km west of Ouimet Overhead easterly 8.63 km

Detail Design & Class EA Study

Public Information Centre #2

STUDY PROCESS









SUMMARY OF PUBLIC INFORMATION CENTRE #1

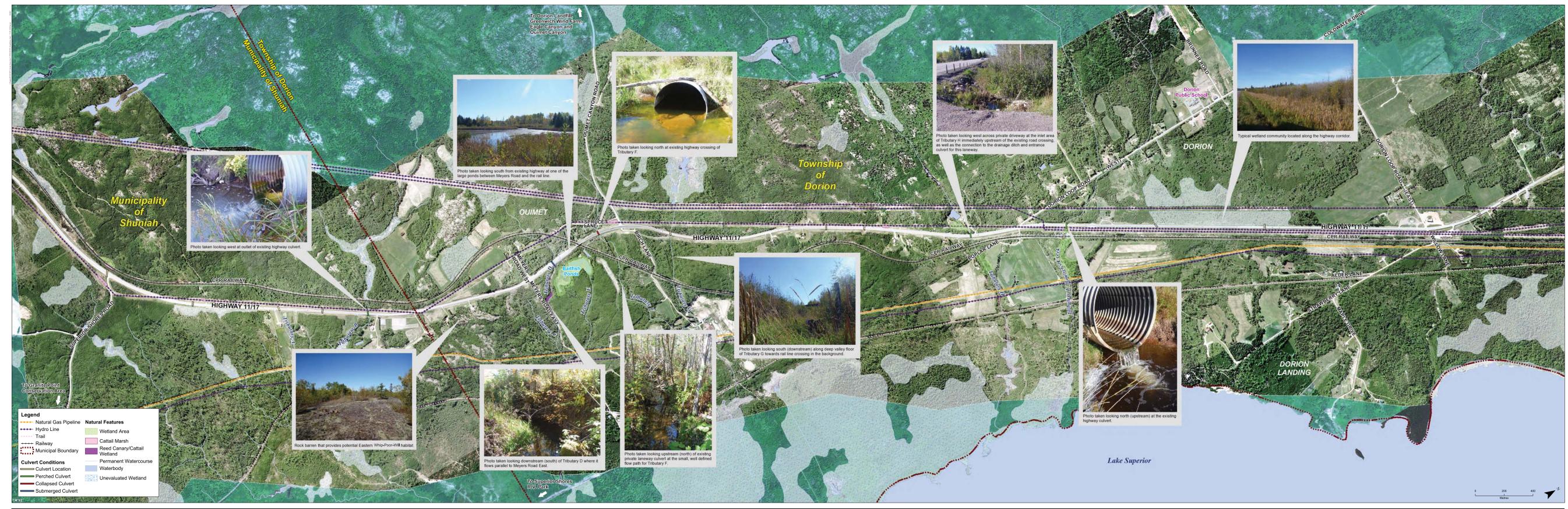
The first Public Information Centre (PIC) #1 was held on April 21, 2016 at the Dorion Public School in the Township of Dorion. Approximately 100 people, including external agencies, and local interest groups attended the PIC. The majority of the PIC attendees were residents along Highway 11/17 within 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	MTO/S Desmance / Action Tokon
Received from PIC #1	MTO'S Response / Action Taken
General support for the four-laning of Highway 11/17 and positive comments regarding completed section of 4-laning providing improved travel times and safety through the area.	Comments were noted by the Ministry.
Concerns with not providing median crossover and full access at Meyers Road.	Based on the comments received at and following Public Information Centre (PIC) #1 from local residents and the Township of Dorion, the Ministry will provide a full median crossing at Meyers Road for the interim until the future construction of the Ouimet Canyon Road interchange.
Safety concerns regarding the proposed at-grade crossing at Spruce Lane due to poor sightlines and visibility, and high train speed.	Based on the comments received at and following PIC #1 from local residents and the Township of Dorion, the Ministry is no longer proposing an at-grade crossing at Spruce Lane. A full median crossing will be provided at Meyers Road for the interim until the future construction of the Ouimet Canyon Road interchange.
Concerns with removing access to private properties on Birch Lane south of the proposed highway and requests to maintain public access to Birch Lane.	The Ministry further reviewed the feasibility of providing a road connection to this area. The proposed plan now includes a connection between Meyers Road and Birch Lane. The ESR Addendum documenting the proposed Birch Lane connection has been filed and is available for public review until March 2, 2018 . Please see Birch Lane display
Inquiries about funding and construction timing.	panel for additional details. A provincial funding commitment for the construction of the four-laning of this portion of Highway 11/17 is included in the 2016 Ontario Budget. Construction of the new four-lane highway is anticipated to start as early as 2019.
Request to reinstating the 1997 approved Poplar Lane plan into the Preferred Plan.	The Ministry does not support a significant realignment of Poplar Lane to the West Dorion Loop Road intersection in consideration of Ministry requirements and the associated impacts/costs. The Ministry determined the connection of Poplar Lane to the Service Road extension is preferred for the following reasons: • Provides full access to the four-laned Highway 11/17 for all residents along the Service Road and Poplar Lane; • Minimizes impacts to natural environment; • Reduces private property impacts; • Avoids a new rail crossing for Poplar Lane; and • Reduces costs by using the existing highway as a service road and avoids costs
Concerns about project impacts to significant environmental features within	for a new road connection from Poplar Lane. The review of alignment and access alternatives will minimize impacts to natural environmental features. Further review of minimizing impacts and the development
the study area. Property specific questions / concerns.	of proposed mitigation measures will continue in the Detail Design phase. MTO will continue working with affected property owners and compensate those owners whose private property is physically impacted by the proposed improvements on a one-on-one basis.

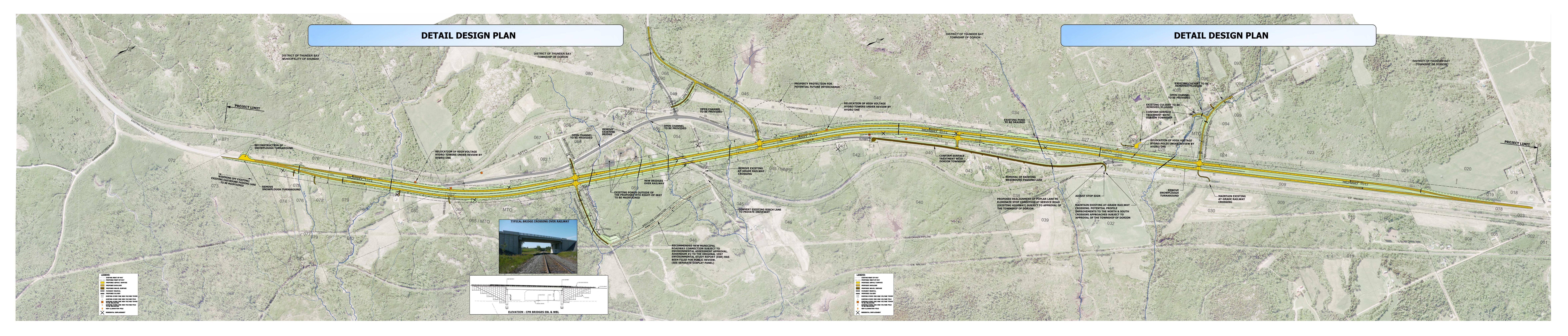




EXISTING ENVIRONMENTAL CONDITIONS

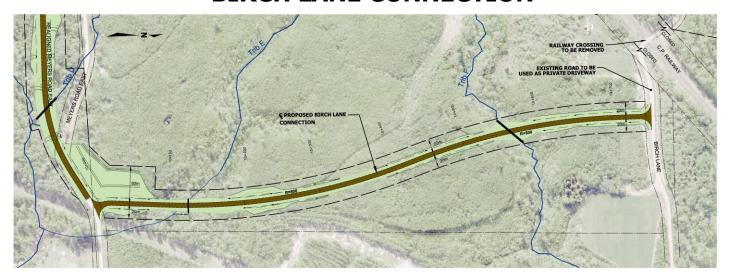








BIRCH LANE CONNECTION



- The 1997 EA Approved Plan did not provide access from Birch Lane to the new four-lane divided highway and the preferred alternative shown at the PIC in April 2016 recommended full closure of Birch Lane.
- In consideration of concerns raised at the PIC, further discussions with the Township of Dorion and additional review by MTO, a new public road connection between Meyers Road East and Birch **Lane** is recommended.
- A second Addendum to the 1997 ESR has been prepared to document the proposed design change and to incorporate this new road connection into the Approved Plan. The Ministry filed this Addendum to the ESR for public review in January 2018, which is currently available on the project website and at the following locations:

Township of Dorion Clerk's Office

170 Dorion Loop Road Dorion, Ontario

Dorion Public Library 170 Dorion Loop Road Dorion, Ontario

Municipality of Shuniah Clerk's Office

420 Leslie Avenue Thunder Bay, Ontario

Red Rock, Ontario

Red Rock Public Library 42 Salls Street

Ministry of the Environment and Climate Change

Thunder Bay Regional Office 435 James Street South Thunder Bay, Ontario

- The Addendum will be available for a 30-day review period ending **Friday, March 2, 2018**. If after consulting with ministry staff and consultants, you have serious unresolved concerns regarding the new connection between Meyers Road and Birch Lane, you may request a Part II Order ("bump-up") from the Ministry of the Environment and Climate Change (77 Wellesley Street West, 11th Floor, Toronto, Ontario, M7A 2T5).
- If no requests are received by Friday, March 2, 2018, the proposed changes will meet the requirements of the Class EA and the public road connection between Meyers Road and Birch Lane will be incorporated into the Detail Design Plan and documented in the Design and Construction Report.



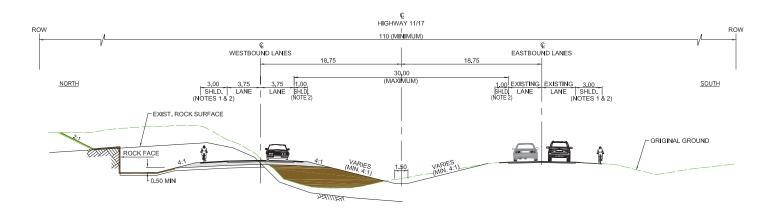




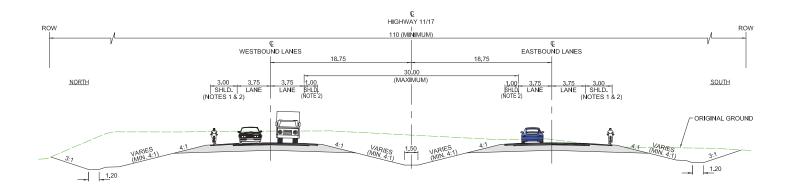
Highway 11/17 Four-Laning from 2.83 km west of Ouimet Overhead easterly 8.63 km

Detail Design & Class EA Study
Public Information Centre #2

TYPICAL SECTIONS



TYPICAL SECTION - HIGHWAY 11/17 NEW LANES PARALLEL TO EXISTING HIGHWAY N.T.S.



TYPICAL SECTION - HIGHWAY 11/17 ALL LANES ON NEW ALIGNMENT N.T.S.

NOTES:

- 1. A 3.0m FULLY PAVED RIGHT SHOULDER WILL BE PROVIDED ALONG EASTBOUND AND WESTBOUND HIGHWAY 11/17 WITHIN THE STUDY AREA TO ACCOMMODATE CYCLISTS.
- 2. RUMBLE STRIPS WILL BE INSTALLED ON THE OUTER AND MEDIAN SHOULDERS.





ENVIRONMENTAL EFFECTS AND PROPOSED MITIGATION MEASURES

Issue/Concern	Proposed Mitigation	
Natural Environment		
Erosion and	• Installation of temporary erosion and sediment control measures prior to the start of construction.	
Sediment	• All sediment-laden water removed during construction will be filtered before being discharged back into the environment (minimum of 30 m from any waterbody).	
Control	Banks disturbed by construction of this project will be immediately stabilized to prevent erosion and/or sedimentation.	
Vegetation	• Vegetation removal will be minimized and the boundaries for vegetation removals will be clearly marked in the field prior to clearing.	
	• Significant Woodlands within the study area will be treated as environmentally sensitive areas and entry will be restricted. The detail design of the highway will maintain	
	the hydrology to the significant woodland and minimize impacts to the significant feature to the extent possible.	
Wildlife	• Some vegetation within the highway right-of-way will be cleared for construction purposes, and to deter wildlife movement across the highway.	
	• Vegetation removals will be completed during the appropriate timing window to protect breeding migratory birds and their nests, in accordance with the Migratory Birds	
	Convention Act.	
	• The highway drainage design will maintain positive drainage and avoid creation of depressions and pooling areas that will retain salt and attract animals to the highway	
	edges.	
Aquatic	• All in-water work will be completed within the appropriate timing window (i.e. from June 16 to August 31).	
Resources	• Culverts that support a fishery will be designed to provide fish passage.	
	• Any temporarily stockpiled soil, debris or other excess materials, and any construction-related materials, will be properly contained in areas separated at least 30 m from	
	any watercourses.	
Cocial and Cultu	No equipment is allowed to enter either watercourse or its tributary unless authorized by the appropriate environmental agencies/permits.	
Social and Cultural Environment		
Archaeology	• An archaeological assessment has been completed and determined that no further archaeological assessment is required.	
Noise	• Traffic volumes on Highway 11/17 and associated noises levels are not anticipated to significantly increase as a result of the highway four-laning.	
	• A noise assessment was completed based on the criteria outlined in MTO's <i>Environmental Guide for Noise</i> (October, 2006) which determined that noise barrier walls are	
	not warranted for the proposed improvements to Highway 11/17. NTO/s standard mitigation to control construction poise and dust will be implemented.	
Contamination	MTO's standard mitigation to control construction noise and dust will be implemented. All contaminated properties will be property managed prior to construction.	
Groundwater	 All contaminated properties will be property managed prior to construction. Door-to-door surveys will be completed where reliance on groundwater has been identified to confirm well locations and document public concern. This information will 	
Groundwater	be used in the development of the well-testing strategy for construction.	
	Water well surveys will be completed prior to and during construction to establish baseline water quality and quantities, as required.	
	 All water quality and quantity concerns raised during construction will be reviewed and responded to accordingly. 	
Property	 Proposed changes result in new property impacts. MTO will negotiate with individual owners for property purchase in accordance with standard MTO procedures. 	
Engineering	- 1 toposed changes result in new property impacts. The will negotiate with individual owners for property parchase in accordance with standard PTTO procedures.	
Utilities	Hydro One is currently reviewing the relocation of utility towers as part of a separate environmental assessment study conducted by Hydro One.	
Rock Blasting	 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, 	
Rock Diagning	means to control fly rock, blast vibration monitoring, etc.).	
	means to constant in read black installed intering, etc.)	







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 and Climate Change (MOECC) 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 MOECC 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.







DEVELOPMENT OF THE WELL TESTING STRATEGY

During Design

- Identify areas of potential sensitivity to construction operations (significant excavation or fill placement).
- Identify areas with known groundwater concerns.
- Complete a door-to-door survey in the upcoming months within a minimum 500 m boundary of the study limits. The boundary will be expanded near sensitive areas (e.g. areas of significant earth/rock removal/placement and blasting). The purpose of the survey is to confirm well locations and to document public concerns.
- Prepare a comprehensive pre-construction well-testing strategy for water quality and quantity.
- Develop specific requirements for incorporation into contract.

Pre-Construction

- Prior to construction, make arrangements with residents to conduct baseline water quality and quantity testing on wells defined in the contract.
- Provide residents the results of well testing and point of contact information for questions or concerns.

During Construction

- Notify area residents of the commencement of construction work and provide point of contact information for questions or concerns.
- Review water quality and quantity concerns raised during construction and respond accordingly.

Please provide your input and feedback on the strategy noted above. The Project Team will review and further develop the strategy in light of comments received at this Public Information Centre.







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
 Environment and Climate Change. The limits are the most restrictive within North
 America to ensure public safety and reduce the chance of structural damage.







ASSOCIATED HYDRO ONE WORK

- To accommodate the MTO's project, Hydro One is required to modify and/or relocate several transmission structures located adjacent to Highway 11/17.
- Hydro One's structure relocation will be subject to the Class Environmental Assessment (EA) for Minor Transmission Facilities, and the company will begin its



consultation as part of the Class EA in the coming months.

• First Nations and Métis communities, local municipalities, residents, interest groups and other parties will be notified of consultation opportunities.

CONTACT INFORMATION

If you would like more information, or have any questions relating to Hydro One's please contact:

Hydro One

Tel: 1-877-345-6799

e-mail: Community.Relations@HydroOne.com





NEXT STEPS

Following the completion of the Detail Design Study, a Design and Construction Report (DCR) will be prepared, for a 30 day public review period. The DCR will document the Class EA process undertaken and environmental impacts and mitigation measures.

The Project Team will:

Activity	Anticipated Timeline
 Review the comments received during the 30-day public review period of the second ESR Addendum documenting the new public road connection between Meyers Road East and Birch Lane. 	Winter 2018
 Review the comments received during and following PIC #2 and respond to any questions. 	Winter/Spring 2018
 Finalize mitigation measures for the detail design to minimize impacts. 	Winter/Spring 2018
Complete property acquisition (MTO).	Fall 2018
Finalize the detail design plan.	Fall 2018
 Prepare the Design and Construction Report and submit for a 30-day public review period. 	Fall 2018
Submit the project for tender.	Winter 2019
 Start of Construction (dependant on securing Environmental Approvals) 	Spring 2019

Please visit the project website for updates at:

www.hwy11-17four-laningfromouimettodorion.ca







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.

Rick Inman Senior Project Manager

Ministry of Transportation 615 James Street South Thunder Bay, ON P7E 6P6

Tel: 1-800-465-5034 or (807) 473-2049

Fax: (807) 473-2168

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e-mail: greg.moore2@wsp.com

Please feel free to ask questions and fill out a comment sheet before you leave. Comments can be left in the box provided or forwarded to the Project Team by **March 21, 2018**.

Information presented today is also available on the project website: www.hwy11-17four-laningfromouimettodorion.ca



