



ENBRIDGE GAS INC.

# Environmental Report

Mohawks of the Bay of Quinte and Shannonville Community  
Expansion Project

### Territorial Land Acknowledgement

*The proposed Mohawks of the Bay of Quinte and Shannonville Community Expansion Project is located on the traditional lands of the Anishinaabeg (Ah-nish-in-a-beg), Haudenosaunee (Ho-den-no-show-nee), and Huron-Wendat peoples on lands connected with the Crawford Purchase of 1783 and the Simcoe Deed (Treaty 3½). Most recently, the land is home to the Mohawks of the Bay of Quinte within the Tyendinaga Mohawk Territory. This land continues to be home to diverse Indigenous peoples (e.g., First Nations and Métis) whom we recognize as contemporary stewards of the land and vital contributors of our society.*



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## Acronyms and Abbreviations

|               |   |
|---------------|---|
| ANSI          | Area of Natural and Scientific Interest   |
| CBC           | Christmas Bird Count  |
| C&M           | Construction and Maintenance (Manual)   |
| CHAR          | Cultural Heritage Assessment Report   |
| CHSR          | Cultural Heritage Screening Report  |
| COSEWIC       | Committee on the Status of Endangered Wildlife in Canada  |
| CSP           | corrugated steel pipe   |
| dbh           | diameter at breast height   |
| DFO           | Fisheries and Oceans Canada   |
| DFO Agreement | <i>DFO and Enbridge Gas Inc. Agreement related to Watercourse Crossings for Pipeline Construction and Maintenance in Ontario between Her Majesty the Queen in Right of Canada, as represented by the Minister of Fisheries, Oceans and the Canadian Coast Guard and Enbridge Gas Inc.</i> |
| Dillon        | Dillon Consulting Limited   |
| EA            | environmental assessment  |
| ECCC          | Environment and Climate Change Canada   |
| ELC           | Ecological Land Classification  |
| Enbridge Gas  | Enbridge Gas Inc.   |
| EPP           | Environmental Protection Plan   |
| ER            | Environmental Report  |
| ESA           | <i>Endangered Species Act</i>   |
| ha            | hectare(s)  |
| HVA           | Highly Vulnerable Aquifer   |
| IBA           | Important Bird and Biodiversity Area  |
| IPZ           | Intake Protection Zone  |
| km            | kilometre(s)  |
| LIO           | Land Information Ontario  |
| LTC           | Leave-to-Construct  |
| LUG           | Legacy Union Gas  |
| m             | metre(s)  |
| masl          | metres above sea level  |
| MBCA          | <i>Migratory Birds Convention Act</i>   |
| mbgs          | metres below ground surface   |
| MECP          | Ministry of Environment, Conservation and Parks   |
| MHSTCI        | Ministry of Heritage, Tourism, Sport and Culture Industries   |
| MMAH          | Ministry of Municipal Affairs and Housing   |
| MNR           | Ministry of Natural Resources   |
| MNRF          | Ministry of Natural Resources and Forestry  |

|                |  |
|----------------|--|
| MOE            | Ministry of Energy   |
| MTO            | Ministry of Transportation   |
| NDMNRF         | Ministry of Northern Development, Mines, Natural Resources and Forestry  |
| NHIC           | Natural Heritage Information Centre  |
| NHRM           | Natural Heritage Reference Manual  |
| NPS            | nominal pipe size  |
| NRCan          | Natural Resources Canada   |
| O&M            | Operations and Maintenance   |
| OBA            | Ontario Butterfly Atlas  |
| OBBA           | Ontario Breeding Bird Atlas  |
| OEB            | Ontario Energy Board   |
| OEB Guidelines | <i>Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario, 7th Edition</i> |
| OGS            | Ontario Geological Survey  |
| OWRA           | <i>Ontario Water Resources Act</i>   |
| PPR            | Preliminary Preferred Route  |
| PSW            | Provincially Significant Wetland   |
| RLEMP          | Reserve Land Environmental Management Program  |
| SAR            | species at risk  |
| SARA           | <i>Species at Risk Act</i>   |
| SARO           | Species at Risk in Ontario (List)  |
| SCC            | Species of Conservation Concern  |
| SWH            | Significant Wildlife Habitat   |
| the Project    | Mohawks of the Bay of Quinte and Shannonville Community Expansion Project  |
| TK             | Traditional Knowledge  |
| TMHC           | TMHC Inc.  |
| TOC            | Trees of Canada  |
| WHPA           | Well Head Protection Area  |
| WWIS           | Water Well Information System  |
| XHP            | extra high pressure  |

## Executive Summary

Enbridge Gas Inc. (Enbridge Gas) retained Dillon Consulting Limited to conduct an environmental and cumulative effects assessment (the Study) for the Mohawks of the Bay of Quinte and Shannonville Community Expansion Project (the Project) located in Tyendinaga Mohawk Territory and the Township of Tynendinaga, Ontario. If approved, construction of the Project is anticipated to begin in spring 2023.

Enbridge Gas has identified a Preliminary Preferred Route that will tie-in to an existing 4-inch polyethylene pipeline near the intersection of Wyman Road and York Road in the Tyendinaga Mohawk Territory. The distribution portion of the Project includes the installation of approximately 17.3 kilometres (km) of nominal pipe size (NPS) 2-inch to 4-inch diameter polyethylene pipeline. In addition, a station rebuild is required to accommodate additional customers onto the distribution system and will be constructed at the existing Enbridge Gas pressure regulating station located at the intersection of York Road and Highway 49, in the northwest corner.

The Study results have been documented in this Environmental Report, which conforms to the Ontario Energy Board (2016) *Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario, 7th Edition*.

Stakeholder engagement and Indigenous consultation are an important component of the Project. Early and frequent consultation with directly and indirectly affected Indigenous communities, property owners, government agencies, and the public was an integral part of the Study.

The Study involved undertaking an inventory of physical, natural, and socio-economic features within the Study Area. This information was used to produce maps identifying features that could be impacted by pipeline construction and operation.

Community expansion projects are based on information submitted by the communities requesting the service as well as Enbridge Gas best practices, such as utilizing existing road rights-of-way and information procured through the Environmental Assessment and Consultation process. Based on the information currently available, there are no alternative routes for the Project that would accomplish this goal.

Mitigation measures are recommended to reduce potential negative effects to the environment. These recommendations, in combination with the Legacy Union Gas Construction and Maintenance Manual 2022, are anticipated to effectively protect the physical, natural, and socio-economic features along the pipeline route. Dillon does not anticipate any significant adverse effects from the construction and operation of the Project with the implementation of the mitigation measures recommended in this report.



## 1.0 Introduction

Enbridge Gas Inc. (Enbridge Gas) has retained Dillon Consulting Limited (Dillon) to undertake an environmental study for the proposed Mohawks of the Bay of Quinte and Shannonville Community Expansion Project located within the Tyendinaga Mohawk Territory and the Township of Tyendinaga, Ontario. If approved, construction may begin in spring 2023.

### 1.1 Description of the Project

Enbridge Gas has identified a Preliminary Preferred Route (PPR) that will tie-in to an existing 4-inch polyethylene pipeline near the intersection of Wyman Road and York Road in the Tyendinaga Mohawk Territory. The distribution portion of the Project includes the installation of approximately 17.3 kilometres (km) of nominal pipe size (NPS) 2-inch to 4-inch diameter polyethylene pipeline. In addition, a station rebuild is required to accommodate additional customers onto the distribution system and will be constructed at the existing Enbridge Gas pressure regulating station located at the intersection of York Road and Highway 49, in the northwest corner (see Figure 1).

The PPR in Shannonville, within the Township of Tyendinaga, includes a total of approximately 1.9 km of pipeline that runs along the following streets: York Road (from Queen Street to just past the intersection with Brock Street/Upper Slash Road), Queen Street, Beach Road, Young Street, Atsia Court, Gore Street, and Howard Street.

The PPR in Tyendinaga Mohawk Territory includes a total of approximately 15.4 km of pipeline including, approximately 7 km of pipeline along York Road, 2.8 km of pipeline along Ridge Road, 1.1 km of pipeline along Wyman Road, 3.7 km of pipeline along Lower Slash Road, and 0.8 km along Homeland Drive.

The Project is planned to be installed mainly within existing road rights-of-way with additional temporary working space potentially required for lay-down, storage and excess soils management.

### 1.2 Project Need and Justification

Community expansion projects are based on information submitted by the communities requesting the service as well as Enbridge Gas best practices, such as utilizing existing road rights-of-way and information procured through the Environmental Assessment and Consultation process. Based on the information currently available, there are no alternative routes for the Project that would accomplish this goal.





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FILE LOCATION: K:\2022\223566 EGI MBQ\Product\Client\Project Overview\F1\_ProjectOverview.mxd



## ENBRIDGE GAS INC.

MOHAWKS OF THE BAY OF QUINTE  
AND SHANNONVILLE  
COMMUNITY EXPANSION PROJECT

### PROJECT OVERVIEW

FIGURE I

- Existing Enbridge Station (Deseronto PRS)
- Preliminary Preferred Route
- Rail Line
- Highway
- County Road
- Local Road
- Watercourse
- Waterbody
- Tyendinaga Mohawk Territory Boundary



SCALE 1:35,000

0 250 500 1,000 Metres



MAP DRAWING INFORMATION:  
DATA PROVIDED BY MNRF

MAP CREATED BY: ZJB  
MAP CHECKED BY: AL  
MAP PROJECTION: NAD 1983 CSRS UTM Zone 18N



PROJECT: 22-3566

STATUS: DRAFT

DATE: 2022-06-29



### 1.3 Environmental and Cumulative Effects Assessment

Dillon conducted a Study to identify potential environmental and socio-economic effects that the Project could have on the existing physical, natural, and socio-economic environment. Mitigation measures designed to reduce environmental and socio-economic effects were also developed as part of the Study. The Study results have been documented in this Environmental Report (ER), which conforms to the OEB (2016) *Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario, 7th Edition* (OEB Guidelines).

### 1.4 Regulatory Framework

The Study was prepared to meet the requirements of the OEB. More information on the regulatory process is provided in the following subsections.

#### 1.4.1 Ontario Energy Board

The Project is being planned in accordance with OEB regulations. The OEB acts as a regulatory body to protect the public interest, to determine that the Project is necessary, and to ensure that Enbridge obtains the necessary approvals to meet health, safety, and environmental standards and regulations.

For OEB approval, the ER must document that municipal, provincial, and federal agencies, as well as the concerns of Indigenous communities, were considered. Concerns identified by landowners and the public should also be addressed.

Once complete, the ER is circulated to the Ontario Pipeline Coordinating Committee (OPCC). The OPCC coordinates the Ontario government's review of natural gas facility projects that require OEB approval. The OPCC's goal is to reduce adverse environmental effects that could arise from projects by reviewing environmental and routing reports.

If requested, the ER is also circulated to Indigenous communities, landowners adjacent to the project, and to interest groups, such as municipalities and the local conservation authority. Where possible, all outstanding issues are resolved prior to submission of an application to the OEB.

The OEB may order a written or oral hearing, based upon the complexity of the project and the level of public concern. Enbridge plans to file a Leave-to-Construct (LTC) Application with the OEB in Q4 2022. If approved by the OEB, construction of the Project is anticipated to start in the spring of 2023.

#### 1.4.2 Impact Assessment Agency of Canada

Federal government involvement under the *Impact Assessment Act* (SC 2019, c. 28, s. 1) is required for specific types of projects. The types of projects that require federal review and approval are listed as

“designated projects” in the *Physical Activities Regulations* (SOR/2019-285), or are designated through Ministerial discretion.

The Tyendinaga Mohawk Territory lands are considered federal lands under Section 82 of the *Impact Assessment Act* and, although projects on federal lands are not considered “designated” under the *Physical Activities Regulations*, they cannot be carried out unless the applicable federal authority (in this case, Indigenous Services Canada) has determined that doing so is not likely to cause significant adverse environmental effects. Environment and Climate Change Canada (ECCC) may also have a responsibility to determine whether the Project is likely to cause significant adverse environmental effects, should a permit under Section 73 of the *Species at Risk Act* (SARA) (SC 2002, c. 29) be required.

### 1.4.3 Other Potential Permits, Approvals, or Notifications

In addition to OEB approval, other regulatory approvals may be required for the Project, as shown in Table 1. An appropriate amount of time should be scheduled to obtain all necessary permits and approvals prior to construction.

**Table 1: Potential Permits, Approvals, or Notifications**

| Agency                                       | Legislation   | Permit/Approval/Notification  |
|--|---|---|
| Indigenous Services Canada                   | <i>Impact Assessment Act</i> (SC 2019, c. 28, s. 1)   | Indigenous Services Canada is the responsible federal authority under the <i>Impact Assessment Act</i> for the portion of the Project that occurs on the Tyendinaga Mohawk Territory, which is classified as federal land. Indigenous Services Canada requires a Project Description Form be completed as part of the federal Environment Review Process. |
|  | <i>Indian Act</i> (RSC, 1985, c. I-5)   | An extension is required to Enbridge Gas’ existing permit for gas distribution infrastructure within the Tyendinaga Mohawk Territory.   |
| Environment and Climate Change Canada (ECCC) | <i>SARA</i> (SC 2002, c. 29) and <i>Migratory Birds Convention Act (MBCA)</i> , 1994 (SC 1994, c. 22) | SARA contains general prohibitions that make it an offence to kill, harm, harass, capture or take a federally listed SAR or damage or destroy their critical habitat on federal lands (or other designated lands). A permit may be required for activities that affect federally listed SAR and/or their habitat. See Section 4.2.8 of this report.       |

| Agency   | Legislation  | Permit/Approval/Notification  |
|--|--|---|
| Fisheries and Oceans Canada (DFO)                                    | <i>Fisheries Act</i> (RSC, 1985, c. F-14)  | Enbridge Gas will abide by the <i>DFO and Enbridge Gas Inc. Agreement related to Watercourse Crossings for Pipeline Construction and Maintenance in Ontario between Her Majesty the Queen in Right of Canada, as represented by the Minister of Fisheries, Oceans and the Canadian Coast Guard and Enbridge Gas Inc.</i> (the DFO Agreement).<br><br>If Enbridge Gas cannot abide by the DFO Agreement, a project review by DFO is required.  |
| Ministry of Environment, Conservation and Parks (MECP)               | <i>Endangered Species Act (ESA)</i> , 2007 (SO 2007, c. 6) and <i>Ontario Regulation (O. Reg.) 242/08</i>        | A permit or approval is required for activities that may affect a provincially listed SAR (Endangered or Threatened) and/or their habitat. See Section 4.2.8 of this report.  |
|  | <i>Ontario Water Resources Act (OWRA)</i> (RSO 1990, c. O.40) and <i>O. Reg. 387/04: Water Taking Regulation</i> | Registration under the Environmental Activity and Sector Registry (EASR) is required if the Project will result in dewatering of more than 50,000 litres per day (L/day) but less than 400,000 L/day. A Permit to Take Water (PTTW) will be required if water taking is greater than 400,000 L/day.   |
| Ministry of Heritage, Sport, Tourism and Culture Industries (MHSTCI) | <i>Ontario Heritage Act</i> (RSO 1990, c. O.18)  | Archaeological clearance is required prior to any ground disturbances and/ or site alterations. A Stage 1 Archaeological Assessment was completed for the Project and is anticipated to be submitted to the MHSTCI for review following the 42-day OPCC review period. A copy of the report is provided in Appendix A. The report recommended a Stage 2 Archaeological Assessment be completed for the Project.<br><br>A Cultural Heritage Screening Report (CHSR) was completed for the Project and is provided in Appendix B. The CHSR includes the MHSTCI Cultural Heritage Checklist. The CHSR recommended a Cultural Heritage Assessment be completed for the Project. |
| Ministry of Transportation (MTO)                                     | <i>Public Transportation and Highway Improvement Act</i> (RSO 1990, c. P.50)                                     | Encroachment Permits are required for Project works that will occur within a 395 m radius around a highway interchange/intersection, or within 45 m of the highway property limit. Based on consultation with MTO, Encroachment Permits are anticipated to be required at the intersection of York Road and Highway 49 and at the corner of Highway 49 and Lower Slash Road.  |

| Agency              | Legislation   | Permit/Approval/Notification   |
|---------------------|---|--|
| Quinte Conservation | <i>Conservation Authorities Act (RSO 1990, c. C.27) and O. Reg. 319/09: Quinte Conservation Authority: Regulation of Development, Interference with Wetlands and Alterations to Shorelines and Watercourses</i> | Permit required for work near a wetland, watercourse, or steep slope within the Quinte Conservation Regulated Area.  |
| Tyendinaga Township | Noise By-Law (No. 82-14)  | A Noise By-law Exemption is required from Tyendinaga Township if construction noises will occur outside of the allowable hours identified in the By-law (Monday to Friday, 11:00 pm to 7:00 am; Saturday, 8:00 pm to 7:00 am). |

## Study Process

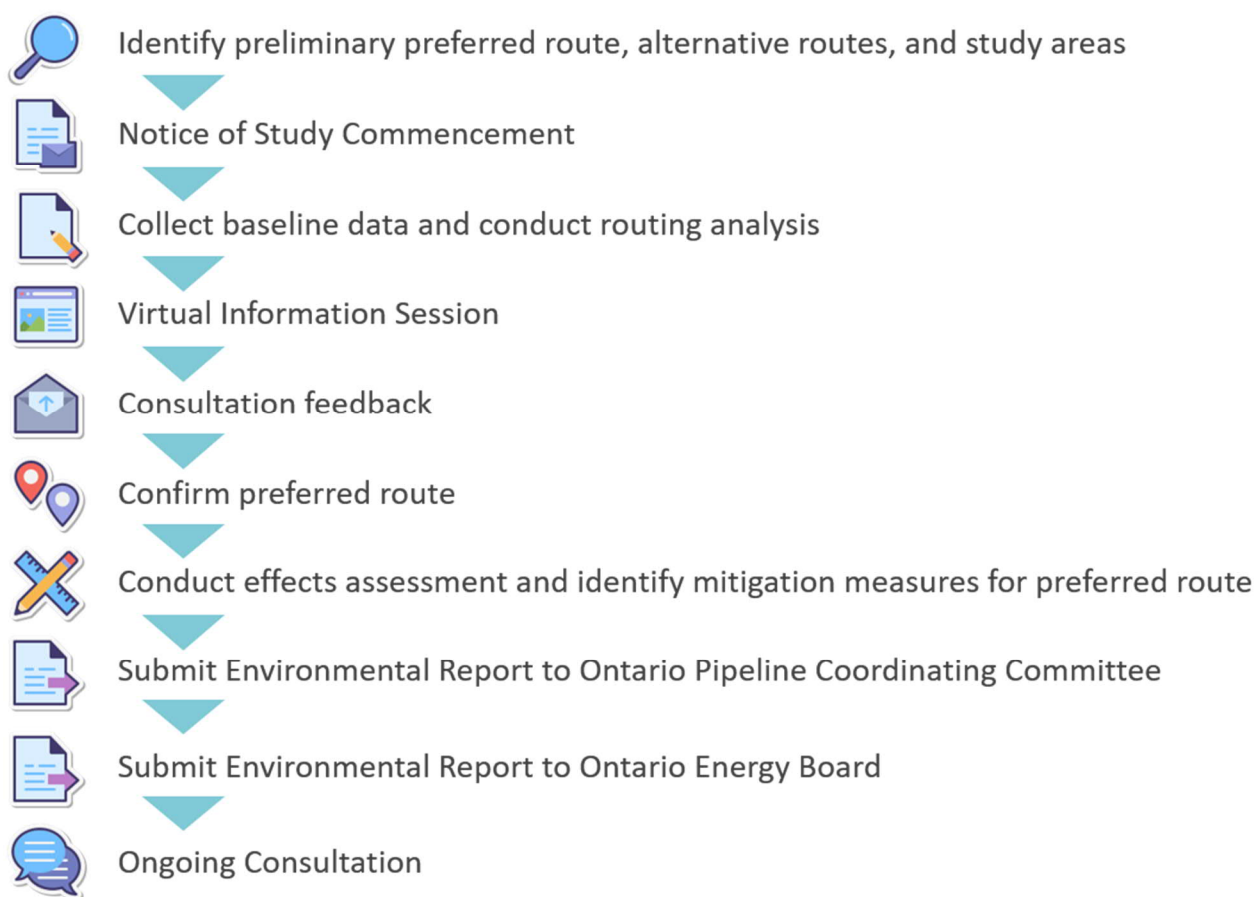
The Study process followed three main steps:

1. Identification of Study Areas and Environmental Inventory
2. Routing Constraints Analysis
3. Effects Assessment and Proposed Mitigation Measures

Stakeholder engagement and Indigenous consultation was conducted throughout the Study (see Section 3.0). The Study process is illustrated in Figure 2 and described in further detail in the following subsections.

**Figure 2: Environmental Assessment (EA) Process and Consultation Flow Chart**

### EA Process and Consultation Flow Chart



## 2.1 Study Methods

The Study methods were designed to achieve the following objectives:

- Select a Study Area;
- Collect environmental and socio-economic data to evaluate the potential routes;
- Provide opportunities for Indigenous communities, agencies, potentially-affected landowners, and the general public to comment on the Project;
- Choose a Preferred Route for the pipeline that reduces adverse effects to the physical, natural, and socio-economic environment; and,
- Identify and recommend environmental protection and mitigation measures to be implemented during pipeline construction.

The Study was conducted between April and June 2022.

### 2.1.1 Identification of Study Area and Environmental Inventory

The first step of the Study involved identifying the Study Area for the Project. The Study Area boundaries were determined based on the pre-established start and end points of the pipeline and included areas that are most likely to be directly or indirectly affected by the Project.

To address potential adverse effects on indirectly-affected Indigenous communities, stakeholders and landowners, Dillon conducted desktop studies that encompassed 125 m on each side of the potential routes for a total width of 250 m (Figure 3).

An environmental and socio-economic constraints inventory and a features mapping exercise was conducted. Dillon mapped features based on both primary and secondary sources including data collected through site reconnaissance activities, contact with local, provincial, and federal agencies, and discussions with stakeholders. Based on Dillon's experience conducting studies of a similar nature and, in accordance with the OEB Guidelines, the mapping generally included topographical features, natural environment features, natural hazard information, and relevant land use planning information.

The purpose of collecting applicable data to compile features mapping was to assist the Study team, Enbridge Gas, Indigenous communities, the public, regulatory agencies, and interested parties in understanding how the environment may be affected by the Project. Feature maps serve as the baseline for route evaluation and for assessing the potential adverse effects resulting from construction and operation of the pipeline.

To confirm potential adverse effects on directly-affected Indigenous communities, stakeholders and landowners, Dillon undertook a field program that encompassed 30 m on each side of the potential routes (centreline) for a total width of 60 m (Project footprint). This was done to encompass the pipeline right-of-way, as well as potential temporary workspace required to accommodate pipeline construction.



Primary and secondary source data was collected and used to develop the environmental and socio-economic baseline setting for the Project. Primary sources include data retrieved during field studies, and secondary sources include data obtained through the review of electronic databases, published reports, existing literature, journals, information letters, and information received from Project stakeholders. Proper record-keeping practices were exercised to maintain data and results for future use. Methods used to retrieve information included internet research and correspondence with agencies and other stakeholders. A list of key secondary sources is included in Table 2. Secondary sources reviewed as part of the Stage 1 Archaeological Assessment are included in Appendix A.

Table 2: Key Data Records and Sources

| Source   | Records Reviewed   |
|--|--|
| <b>PROVINCIAL</b>  |  |
| Land Information Ontario (LIO)<br>(Government of Ontario 2022a)  | <ul style="list-style-type: none"> <li>Interactive Online Mapping Tool (accessed June 2022)</li> </ul>   |
| Natural Heritage Information Centre (NHIC) (Ministry of Northern Development, Mines, Natural Resources and Forestry [NDMNRF] 2022) | <ul style="list-style-type: none"> <li>GIS database of occurrence records for natural heritage features. Uses 1 km squares based on the military grid reference system. Reviewed to determine historical occurrence records of: <ul style="list-style-type: none"> <li>Species of Conservation Concern (SCC) and SAR;</li> <li>Rare and exemplary plant communities;</li> <li>Wildlife concentration areas; and</li> <li>Natural areas.</li> </ul> </li> <li>NHIC 1 km squares reviewed: 18UP2095, 18UP2096, 18UP2194, 18UP2195, 18UP2196, 18UP2197, 18UP2294, 18UP2295, 18UP2296, 18UP2297, 18UP2394, 18UP2395, 18UP2396, 18UP2494, 18UP2495, 18UP2496, 18UP2594, 18UP2595, 18UP2596, 18UP2692, 18UP2693, 18UP2694, 18UP2695, 18UP2696, 18UP2792, 18UP2793, 18UP2794, 18UP2795, 18UP2796, 18UP2892, 18UP2893, 18UP2894, 18UP2895, 18UP2896, 18UP2993, 18UP2994, 18UP2995, 18UP2996, 18UP2997, 18UP2998, 18UP3093, 18UP3094, 18UP3095, 18UP3096, 18UP3097, 18UP3098, 18UP3195, 18UP3196, 18UP3197, 18UP3198, 18UP3296, 18UP3297, 18UP3298, 18UP3397</li> </ul> |
| <b>FEDERAL</b>   |  |
| SAR Public Registry (Government of Canada 2022a)   | <ul style="list-style-type: none"> <li>Schedule 1 of SARA reviewed to confirm status of SAR/SCC.</li> </ul>  |
| <b>CONSERVATION AUTHORITY</b>  |  |
| Quinte Conservation  | <ul style="list-style-type: none"> <li>O. Reg. 319/09</li> <li>Online Regulated Area mapping</li> <li>Quinte Conservation Watershed Report Card (2018)</li> </ul>  |

| Source   | Records Reviewed  |
|--|---|
| <b>WILDLIFE ATLASES</b>  |   |
| Atlas of the Mammals of Ontario (Dobbyn 1994) and Mammals of the Western Hemisphere (NatureServe 2007) | <ul style="list-style-type: none"> <li>• Distribution data for mammals overlapping the Study Area.</li> </ul>   |
| Christmas Bird Count (Birds Canada 2022a)  | <ul style="list-style-type: none"> <li>• Christmas Bird Count (CBC) records for the (Belleville Region) ONBV program that overlaps the Study Area.</li> </ul>                         |
| Important Bird and Biodiversity Areas, BirdLife International, Birds Canada and Nature Canada          | <ul style="list-style-type: none"> <li>• Important Bird and Biodiversity Area (IBA) records for the Napanee Limestone Plain IBA (ON152) overlapping the Study Area.</li> </ul>        |
| Traditional Knowledge of Tyendinaga Mohawk Territory (Mohawks of the Bay of Quinte 2022a)              | <ul style="list-style-type: none"> <li>• Important species and SAR with the potential to occur within the Tyendinaga Mohawk Territory based on Traditional Knowledge (TK).</li> </ul> |
| Ontario Breeding Bird Atlas (Cadman et al. 2007)   | <ul style="list-style-type: none"> <li>• Breeding bird historical occurrence records for the 10 km grid squares overlapping the Study Area: 18UP29 and 18UP39.</li> </ul>             |
| Ontario Reptile and Amphibian Atlas (Ontario Nature 2022)  | <ul style="list-style-type: none"> <li>• List of reptile and amphibian species occurrences for the 10 km grid squares overlapping the Study Area: 18UP29 and 18UP39.</li> </ul>       |
| Ontario Butterfly Atlas (Toronto Entomologists' Association 2022)                                      | <ul style="list-style-type: none"> <li>• Lepidoptera historical occurrence records for the 10 km grid squares overlapping the Study Area: 18UP29 and 18UP39.</li> </ul>               |
| <b>PREVIOUS ENVIRONMENTAL REPORTS</b>  |   |
| Mohawks of the Bay of Quinte (2006)  | <ul style="list-style-type: none"> <li>• Natural Heritage Report – Tyendinaga Mohawk Territory</li> </ul>   |
| <b>PLANNING AND POLICY</b>   |   |
| Provincial Policy Statement (Ministry of Municipal Affairs and Housing [MMAH] 2020)                    | <ul style="list-style-type: none"> <li>• Policy directions related to infrastructure development and the environment.</li> </ul>  |
| County of Hastings Official Plan (Hastings County 2018a)   | <ul style="list-style-type: none"> <li>• Policy directions related to infrastructure development and the environment.</li> <li>• Land use designations.</li> </ul>                    |





**ENBRIDGE GAS INC.**  
MOHAWKS OF THE BAY OF QUINTE  
AND SHANNONVILLE COMMUNITY  
EXPANSION PROJECT

**PROJECT STUDY AREAS**  
FIGURE 3

- Existing Enbridge Station (Deseronto PRS)
- Project Footprint (30 m)
- Study Area (125 m)
- Preliminary Preferred Route
- Rail Line
- Highway
- County Road
- Local Road
- Watercourse
- Waterbody
- Tyendinaga Mohawk Territory Boundary

SCALE 1:35,000

0 250 500 1,000 Metres



MAP DRAWING INFORMATION:  
DATA PROVIDED BY MNR

MAP CREATED BY: ZJB  
MAP CHECKED BY: AL  
MAP PROJECTION: NAD 1983 CSRS UTM Zone 18N



PROJECT: 22-3566  
STATUS: DRAFT  
DATE: 2022-06-22



### 2.1.2 Routing Constraints Analysis

A typical routing study for the Project was not feasible due to route options being limited based on the existing infrastructure in the area and Enbridge Gas' intent to provide service to the areas requested by the community. Each community expansion project comes with its own complexities, regulatory requirements, permits, and consultation timelines, which are all factors in determining a project's start time and specific pipe location.

### 2.1.3 Effects Assessment and Proposed Mitigation Measures

The next step in the Study process involved an assessment of the potential environmental and socio-economic effects of the Project, along with the identification of mitigation measures, for the Preferred Route. The objective of the effects assessment was to:

- Predict and analyze the nature and extent of Project effects;
- Identify mitigation measures to protect valued components; and,
- Determine the significance of any effects remaining following mitigation (i.e., residual effects), including the significance of combined effects (where applicable).

Criteria were used to assess the significance of residual effects. For the purposes of this assessment, a "significant residual effect" is defined as a permanent or long-term residual effect of high magnitude that has a high probability of occurrence and cannot be technically or economically mitigated.

The study methods for the cumulative effects assessment are described in Section 7.0.

Mitigation measures were identified that conform to the Legacy Union Gas (LUG) Construction and Maintenance (C&M) Manual, as well as the relevant permitting authority requirements, including the OEB. The development of the mitigation measures was also based on Dillon's professional experience and field study, feedback received as part of the consultation program, industry best practices, and guidelines provided by local conservation authorities and other agencies. Recommended mitigation measures are described in Section 6.0.

If approved, Enbridge Gas plans to begin construction of the Project in the spring of 2023 with construction completion anticipated for early 2024. Construction will involve a number of distinct steps that may have some environmental effects. These steps are described below and are depicted in Appendix C.

- **Right-of-Way Preparation:** Involves staking or marking the pipeline location, identifying where other utilities are located, clearing vegetation (only as required), sweeping for wildlife, placing wildlife exclusion fencing (as required), and grading to allow for the movement of equipment and preparation of workspace. In roadways, asphalt is removed and disposed of at landfills or licensed

facilities. In vegetated areas, topsoil along the right-of-way is stripped and stored in piles for replacement after construction. Crews re-stake the centre point of trench line/route.

- **Pipe Delivery and Pipe Preparation:** Trucks will deliver pipes in sections to avoid having to stack large quantities of pipe. Crews lay out or string sections of the pipe along the right-of-way.
- **Joining Pipe Sections:** Pipes are fused into one long piece, following the contour of the land. Visual inspections will be undertaken to confirm the integrity of the joints.
- **Trenching/HDD:** Pipeline is installed via open trench or trenchless construction methods. Backhoes, excavators, or other machinery are used to dig trenches along the staked or marked points. Entry and exit pits will be identified for specific trenchless construction activities.
- **Lowering the Pipe:** Crews use side booms/cranes to lower the pipe into the trench or through the drilled passage.
- **Backfilling:** Excavated material is either reused or clean fill is brought in to backfill the trench. Large stones and other debris materials are removed from the backfill to prevent pipeline damage. Subsoil and topsoil are then laid over the trench. Anything disturbed by construction (such as fences and pavement) is repaired or replaced. Vegetative cover is replaced by sodding or seeding where required.
- **Testing:** The new pipeline will be nitrogen tested or hydrostatically tested. The pipeline is sealed then pressurized with nitrogen or filled with water and tested at a pressure higher than actual operating pressures. Nitrogen and hydrostatic tests check for leaks and confirm pipeline strength. If hydrostatically tested, water for the test may be obtained from the local municipality and either disposed of at a licensed facility or discharged in accordance with local by-laws.
- **Clean-up:** The construction area is carefully cleaned up after the trench/drill hole is completed or backfilled. All construction material and equipment is removed when construction is completed. A final grading of the area is done and excess soil is also removed. Slope stability and re-establishment of vegetation is carefully monitored following construction. Enbridge Gas will complete any reclamation work necessary following pipeline construction.

Activities during operations include, but are not limited to, periodic site visits, vehicle use, remote surveillance and monitoring, and integrity digs.

Potential Project interactions with the physical, natural, and socio-economic environment are identified in Table 3. The setting information presented in Section 4.0 provides the context and rationale for potential interactions, which are assessed in Section 6.0.

**Table 3: Interaction Matrix**

| Component                   | Interaction with the Project (Y/N) |            |
|-----------------------------|------------------------------------|------------|
|                             | Construction                       | Operations |
| Physiography and Topography | N                                  | N          |
| Surficial Geology and Soils | Y                                  | Y          |

| Component  | Interaction with the Project (Y/N) |            |
|--|------------------------------------|------------|
|  | Construction                       | Operations |
| Bedrock  | N                                  | N          |
| Groundwater  | Y                                  | Y          |
| Atmospheric Environment  | Y                                  | Y          |
| Aquatic Environment  | Y                                  | Y          |
| Wetlands   | Y                                  | Y          |
| Areas of Natural and Scientific Interest and Other Environmentally Significant Areas | Y                                  | N          |
| Terrestrial Habitat and Vegetation   | Y                                  | Y          |
| Wildlife and Wildlife Habitat  | Y                                  | Y          |
| Species at Risk  | Y                                  | Y          |
| Planning Policies  | N                                  | N          |
| Existing and Planned Land Use  | N                                  | N          |
| Population, Employment, and Economic Activities                                      | N                                  | N          |
| Human Occupancy and Resource Use   | Y                                  | N          |
| Infrastructure and Services  | Y                                  | N          |
| Indigenous Community Land and Resource Use   | N                                  | N          |
| Archaeological and Cultural Heritage Resources                                       | Y                                  | N          |

## 2.2

## Stakeholder Engagement and Indigenous Consultation

Stakeholder engagement and Indigenous consultation are requirements of the Project. Early and frequent consultation and engagement with directly and indirectly affected Indigenous communities, property owners, government agencies, and the public was an integral part of this Study. The objectives of the consultation and engagement process were to:

- Identify all potentially affected parties;
- Provide information to the parties on relevant components of the Study;
- Obtain input from these parties;
- Mitigate and, where appropriate, accommodate for impacts on Aboriginal and Treaty Rights, and,
- Integrate information received into the decision-making process.

A number of methods were utilized to achieve these objectives, including:

- Identification of key community members and interest groups during the Study Area definition phase including Indigenous communities, local businesses, the local conservation authority, federal and provincial government agencies, as well as directly and indirectly impacted landowners;

- Preparation and completion of a comprehensive stakeholder engagement and Indigenous consultation program (**Section 3.0**);
- The provision of key Project information to Indigenous communities;
- Circulation of notices via Canada Post to approximately 2,200 residents and businesses in the Study Area;
- Advertisement of the Project in a local newspaper (Belleville Intelligencer) for two weeks prior to the Virtual Information Session, as well as in the May edition of the Mohawks of the Bay of Quinte Community Newsletter;
- A Twitter, Instagram, and Facebook ad campaign geo-targeted to individuals within the Project area;
- A Virtual Information Session website to present the Project and facilitate public and stakeholder participation;
- An in-person Open House information session for the Mohawks of the Bay of Quinte community, held on May 30, 2022 on the Tyendinaga Mohawk Territory;
- Provision of Project information and updates via the Enbridge Gas website;
- Receipt of and response to public input through letters, e-mails, and phone calls;
- Analysis of Project comment forms from the Virtual Information Session and the Mohawks of the Bay of Quinte in-person Open House; and,
- Circulation of information at key points in the process to Indigenous communities and all stakeholders including government agencies, residents, and other interested parties.

The stakeholder engagement and Indigenous consultation program also included early and frequent contact with regulatory agencies to provide or request information regarding the Project. Details of the stakeholder engagement and Indigenous consultation program are provided in Section 3.0.

## 3.0 Stakeholder Engagement and Indigenous Consultation Program

A comprehensive stakeholder engagement and Indigenous consultation program was undertaken for the Project. This section provides an overview of the consultation and engagement activities undertaken as part of the Study.

### 3.1 Objectives

The objectives of the consultation and engagement program were to:

- Inform potentially affected Indigenous communities, individuals, and organizations about the Project;
- Protect Aboriginal and Treaty Rights;
- Seek and facilitate the involvement of potentially affected Indigenous communities, individuals, and organizations;
- Make all reasonable efforts to identify the interests and meet the needs of Indigenous communities and participants;
- Provide Indigenous communities and participants with the information they required to participate in a meaningful way;
- Consider identified issues/concerns during Project design and when making Project approval decisions;
- Incorporate feedback and evolve, as necessary, in response to the input and needs (access, format, etc.) of Indigenous communities and participants; and,
- Communicate to Indigenous communities and participants how their input affected outcomes (i.e., Project design and review/approval decisions).

### 3.2 Consultation Activities

From the outset, and throughout the Study process, Enbridge Gas stressed the importance of consulting with Indigenous communities, area residents, community organizations, and government agencies. To meet the Study consultation requirements set by the OEB and set the stage for achieving Enbridge Gas' consultation objectives, as well as meet the legal duty to consult with Indigenous communities, the stakeholder engagement and Indigenous consultation plan called for a series of communication and consultation activities that would inform the Study.

Communication activities included letters of invitation/notification, newspaper ads, a Virtual Information Session presented via a Project website hosted by Dillon, an in-person Open House for the Mohawks of the Bay of Quinte, a geo-targeted Twitter, Facebook, and Instagram ad campaign, and the



Enbridge Gas Project specific website. In addition, meetings by telephone and correspondence by electronic mail were also undertaken by the Project team.

### 3.2.1 Contact List

A list of regulatory agencies and interest groups active in the area was compiled through research and published information including government listings, previous studies completed in the area, the internet, and telephone calls. A contact list was developed that subdivided the groups into the following categories:

- Indigenous Communities;
- Federal and Provincial Elected Officials;
- Federal Agencies;
- Provincial Agencies, including the OPCC and local Conservation Authority;
- Municipal Agencies and Elected Officials; and,
- Interest Groups.

All of the stakeholder groups listed above are included in the Contact List provided in Appendix D.

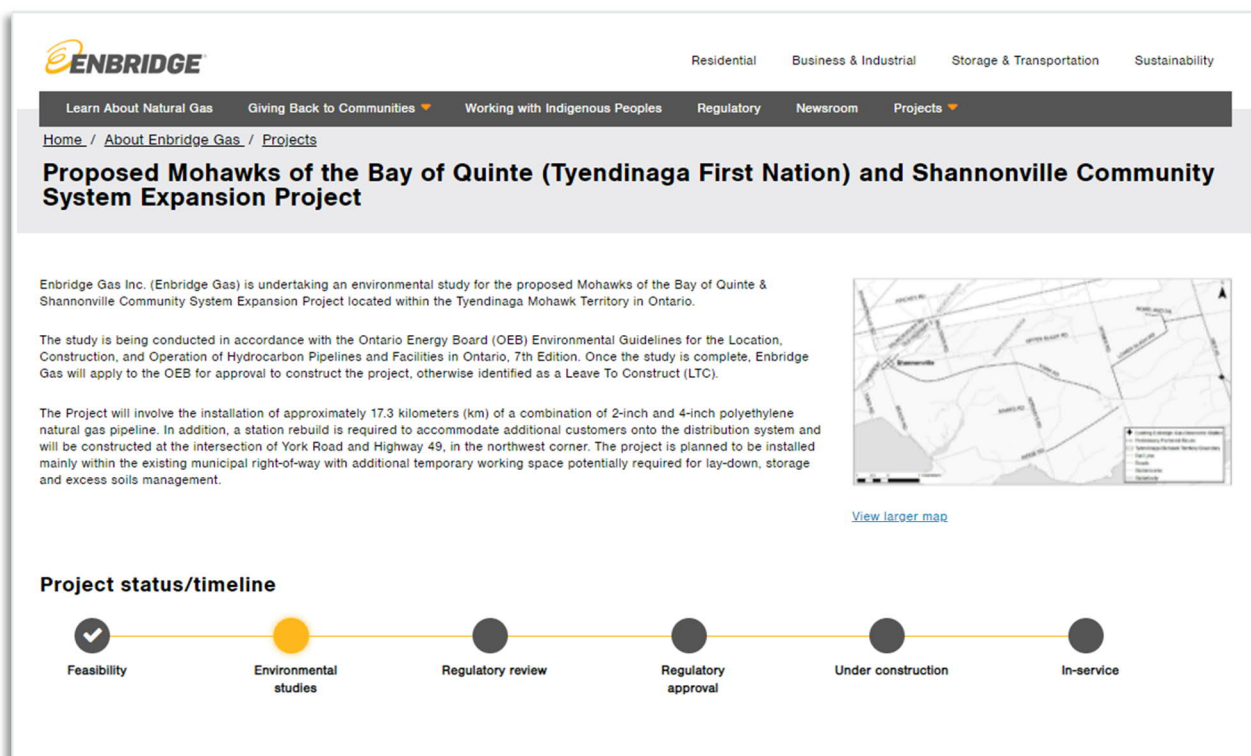
### 3.2.2 Project Website and Project Email

As a component of the consultation and engagement program, Enbridge Gas created a Project-specific website in order to make information accessible to as many groups as possible. By including all information in a downloadable format, Enbridge Gas provided a simple and expeditious method of communicating with stakeholders. Dillon also hosted a separate Project website to facilitate the Virtual Information Session; further details on the Virtual Information Session and associated website are provided in Section 3.2.5.

Dillon created a Project-specific email inbox ([MBQCommunityEA@dillon.ca](mailto:MBQCommunityEA@dillon.ca)) that was used to communicate directly with stakeholders. The Project-specific email inbox will be monitored, and emails will continue to be responded to throughout the OEB process and until substantial construction on the Project is complete.

All material presented at the Virtual Information Session, in Project notices, and in Project reports is posted on the Enbridge Gas Project website at [www.enbridgegas.com/MBQCommunityEA](http://www.enbridgegas.com/MBQCommunityEA). The final ER will be posted on the Enbridge Gas Project website in a downloadable format once it has been submitted to the OEB for review. Figure 4 shows a snapshot of the Enbridge Project website.

Figure 4: Snapshot of Enbridge Gas Project Website



### 3.2.3 Public Notice

A Notice of Study Commencement and Virtual Information Session (Notice) was mailed to approximately 2,200 residences and businesses in the Study Area during the week of May 2, 2022 via Canada Post. A copy of the Notice is provided in Appendix E.

Newspaper notices ran in the Belleville Intelligencer on May 3 and May 10, 2022, and the Notice was placed in the May version of the Mohawks of the Bay of Quinte Community Newsletter.

Enbridge Gas ran social media ads for the Virtual Information Session on Twitter, Instagram, and Facebook from May 16-29, 2022, geo-targeted to the surrounding Project area. Figure 5 shows the ads that were placed on Enbridge Gas' social media accounts.

Notice of the in-person Open House held on May 30, 2022 was provided on the Mohawks of the Bay of Quinte website and Facebook page on May 20, 2022, with a reminder on the day of the Open House.

Consultation logs for interest group and public correspondence are provided in Appendix F.

Figure 5: Social Media Ads



### 3.2.4 Contact Letters

Letters requesting environmental and socio-economic data and inviting government agencies (i.e., federal, provincial, and municipal) to the Virtual Information Session were distributed the week of May 2, 2022.

To expedite the process, agency letters were sent by electronic mail (copies of the letters sent to agencies are provided in Appendix G). Consultation logs for agency correspondence are provided in Appendix F, along with the interest group and public consultation logs.

### 3.2.5 Virtual Information Session and In-Person Open House

#### 3.2.5.1 Virtual Information Session

A Virtual Information Session was conducted to engage with the public and stakeholders and facilitate participation in the ER process. Dillon hosted the Virtual Information Session via a Project-specific website ([www.MBQvirtualinfosession.ca](http://www.MBQvirtualinfosession.ca)) that was active for 2 weeks from Monday, May 16, 2022 to Sunday, May 29, 2022.

The purpose of the Virtual Information Session was to provide an opportunity for the public and stakeholders to comment on the Study and planning process, and the proposed routes. The Virtual Information Session was designed to achieve the following objectives:

- Introduce participants to the Project, the Study process, and consultation plans; and,

- Seek feedback from participants on local environmental and socio-economic considerations, issues, or concerns that should be addressed as part of the Study.

On the Virtual Information Session website, a video presentation was available providing an overview of the Project and environmental assessment process. A copy of the video transcript was also provided for download. The video presentation discussed the following:

- Information on the Virtual Information Session and how to stay informed and participate;
- Enbridge Gas Commitment and Environment, Health and Safety Policies;
- Land Acknowledgement;
- Purpose of the Virtual Information Session;
- Consultation Approach;
- Enbridge's Indigenous Peoples Policy;
- Project Overview and Project Map;
- Regulatory Framework (OEB);
- Environmental Study Process;
- Determining the PPR;
- Consultation and Engagement;
- Natural Environment Considerations;
- Socio-Economic Considerations;
- Archaeology and Cultural Heritage Considerations;
- Pipeline Design, Construction and Safety;
- General Construction Overview;
- Horizontal Directional Drilling Overview;
- Mitigation and Monitoring;
- Environmental Assessment Process and Project Schedule;
- Continuous Stakeholder Engagement; and,
- Information on how to stay informed.

Copies of the presentation and the video transcript are provided in Appendix H.

#### **Results from Virtual Information Session**

The Virtual Information Session website was viewed by 889 unique visitors. The majority of visitors to the site (approx. 50%) were associated with IP addresses from Belleville, followed by Napanee (approx. 10%) and Deseronto (approx. 6%).

Visitors to the Virtual Information Session were encouraged to submit a comment form – either through the online comment form or by downloading a PDF of the comment form (see Appendix I) and submitting it to the Project email. Of the 889 unique site visits, only three people submitted comments. Two of the commenters indicated they were supportive of the Project and that they wanted to see the

natural gas pipeline system expand further to reach more residents within the community. The third commenter stated they have no opinion at this time and felt that they did not receive sufficient information on the Project or the OEB process, but did not provide additional comments elaborating on their position or what additional information they would have liked to see. Two of the commenters identified as being members of an Indigenous community.

Despite the minimal comments received through the Virtual Information Session, there was engagement with stakeholders through the Project email or by telephone including correspondence with federal and provincial government agencies (e.g., Indigenous Services Canada, MECP, MTO, and MHSTCI), and the County of Hastings, as well as extensive collaboration and consultation with the Mohawks of the Bay of Quinte.

### 3.2.5.2 In-Person Open House

The in-person Open House was held at the Mohawks of the Bay of Quinte Community Centre at 1807 York Road, Deseronto on May 30, 2022 from 4:00 PM to 7:00 PM. Both Enbridge Gas and Dillon representatives were present to provide Project information and respond to questions or concerns.

The purpose of the in-person Open House was to provide an opportunity for the Mohawks of the Bay of Quinte community to comment on the Study and planning process, and the potential routes.

A modified version of the presentation slides that were provided during the Virtual Information Session were printed on 36-inch wide x 24-inch high foam core panels and placed on easels around the meeting space (see Appendix J). A large map showing the proposed pipeline route with aerial imagery was also printed on a foam core panel and was displayed flat on a table for ease of review and discussion. A comment form was offered to all attendees to gather feedback on the Project and the Open House itself (see Appendix K).

#### Results from In-Person Open House

There were 10 people who attended the in-person Open House and two people who completed the comment form.

One attendee noted they supported the Project and the other attendee indicated they had "no opinion at this time", although they also stated they had concerns with the Project conflicting with Indigenous peoples' health and environmental rights.

## 3.3 Indigenous Consultation

On February 16, 2022, an email was sent to the Ministry of Energy (MOE) providing notification of Enbridge Gas' intent to submit an LTC Application to the OEB for the Project and requesting the MOE's assessment of Duty-to-Consult requirements.

In a letter dated April 7, 2022, the MOE determined that the Project may have the potential to affect Aboriginal and Treaty Rights and provided a list of the following communities that should be consulted:

- Mohawks of the Bay of Quinte First Nation;
- Williams Treaties First Nations:
  - Alderville First Nation
  - Beausoleil First Nation
  - Chippewas of Georgina Island First Nation
  - Chippewas of Rama First Nation
  - Curve Lake First Nation
  - Hiawatha First Nation
  - Mississaugas of Scugog Island First Nation
- Kawartha Nishnawbe; and,
- Huron-Wendat Nation.

Letters, accompanied by the Notice of Study Commencement and Virtual Information Session, were sent to the Indigenous communities on May 2, 2022 to introduce the Project and provide an opportunity to comment. The notification letter invited the communities to provide input and comments regarding the proposed Project, specifically regarding potential impacts that the Project may have on constitutionally protected Aboriginal or Treaty Rights and any measures for mitigating those impacts. Enbridge Gas also requested the opportunity to meet with each community to discuss the Project.

The Mohawks of the Bay of Quinte Environmental Services Supervisor met with Dillon on April 26, 2022 via video conference to discuss environmentally sensitive areas and species. This information was incorporated into the body of Section 4.2, wherever applicable, and in the effects assessment in Table 8.

Consultation with Indigenous communities, to date, is summarized in Appendix L. An Indigenous Consultation Report will be submitted as part of the LTC Application under separate cover.

### 3.4 Ongoing Engagement Activities

Although the ER is complete, Enbridge Gas is committed to ongoing communication with Indigenous communities, agencies, stakeholders, and the public.

Enbridge Gas will continue to actively engage all identified Indigenous groups in meaningful dialogue concerning the Project and endeavour to meet with each Indigenous community for the purposes of exchanging information regarding the Project, responding to inquiries, discussing issues and concerns regarding the Project; and will respond to communities in a timely manner. A full consultation record with Indigenous communities will be documented in the Indigenous Consultation Report to be submitted with the LTC Application under separate cover.



## 4.0 Physical, Natural, and Socio-Economic Environment Setting

This section describes the existing physical, natural, and socio-economic environment setting for lands that are located within the Study Area established for the Project.

### 4.1 Physical Environment

This subsection provides baseline information on the following components:

- Physiography and Topography;
- Surficial Geology and Soils;
- Bedrock; and,
- Groundwater.

#### 4.1.1 Physiography and Topography

The Project is located primarily within the physiographic region known as the Napanee Plain (Chapman and Putnam 2007), which is characterized by glaciolacustrine silts and till and drumlin fields (Chapman and Putnam 1984).

Topography in the Study Area generally ranges in elevation from approximately 76 metres above sea level (masl) to 102 masl, with the higher elevations found at drumlins located within the area and to the north. Generally the area slopes towards the Bay of Quinte to the south. The lowest point of elevation along the proposed pipeline route is at York Road where the route crosses Marysville Creek. The point of highest elevation is 1.2 km east of the intersection of York Road and Norways Road, where a drumlin is located.

#### 4.1.2 Surficial Geology and Soils

##### 4.1.2.1 Surficial Geology

Surficial geologic mapping indicates the Study Area lies within a mixed zone of Pleistocene-aged overburden deposits, composed of the following types:

- Fine-textured glaciomarine deposits comprised of silt and clay;
- Stone-poor, sandy silt to silty sand-textured till;
- Organic deposits in wetland areas; and,
- Silt and clay, minor sand and gravel, massive to well laminated.

The overburden thickness in the Study Area ranges from approximately 1 m to 20 m (Ontario Geological Survey [OGS] 1991). Portions of the route may have very shallow bedrock.

The surficial geology underlying the majority of proposed pipeline route is generally composed of fine-textured glaciomarine deposits comprised of silt and clay with minor sand and gravel. Organic deposits of peat and muck characterize wetland areas, particularly where York Road crosses Marysville Creek. Drumlins comprised of stone-poor, sandy silt to silty sand-textured till are located throughout the Project footprint.

#### 4.1.2.2 Soils

The Project is located primarily in a rural setting and encounters agricultural land, with some residential and industrial buildings. However, the Project footprint consists of heavily disturbed soils as a result of road and utility construction and related infilling.

A search of the Federal Contaminated Sites Inventory revealed two records of historical contamination (closed sites) within the Study Area around South Ells Lane and Lower Slash Road; however, these sites are largely associated with areas that are outside of the existing road rights-of-way where the proposed pipeline will mainly be installed (Treasury Board of Canada Secretariat 2022).

A search of the MECP (2022a) Record of Site Condition database revealed no records within the Study Area since July 1, 2011 (MECP 2022a).

Based on the presence of some historically contaminated sites (described above), and given the disturbed nature of the Project footprint, it is possible that historical contamination (i.e., soils or groundwater) may be encountered during Project construction.

#### 4.1.3 Bedrock

The Study Area lies over Upper Ordovician and Middle Ordovician bedrock consisting of shale and limestone (OGS 1991, Quinte Conservation 2008).

Underlying the overburden soils and occasionally exposed to the surface within the Study Area are a sequence of Ordovician-aged sedimentary rocks; the Bobcaygeon Formation and the Verulam Formation (Quinte Conservation 2008). These bedrock formations are characterized by crystalline limestone, calcarenite, and interbedded limestone and shale (OGS 1991, Quinte Conservation 2008).

The varying overburden thickness ranges from 1 m to 20 m. Short portions of the proposed pipeline route are located in an area of very shallow Paleozoic bedrock associated with the Verulam Formation at the intersection of Wyman Road and Lower Slash Road, York Road at South Ells Lane and at various points along York Road between Milltown Road and Shannonville.



The pipeline will be buried between 0.9 m to 1.2 m deep; however, the pipeline will be installed mainly in previously disturbed and infilled road rights-of-way, and it is unlikely that intact bedrock will be encountered during pipeline construction.

#### 4.1.4 Groundwater

The Study Area lies within the jurisdiction of Quinte Conservation in the Napanee River subwatershed. The proposed pipeline route is located in areas of potential groundwater discharge.

Detailed policy information for new development within mapped Well Head Protection Areas (WHPAs) and Intake Protection Zones (IPZs) have been developed by Quinte Conservation (2021). WHPAs and IPZs have been identified as areas that are particularly sensitive to surface water contamination (e.g., spills, leaks, surface leaching, etc.). The Project does not overlap WHPAs within the Bay of Quinte (Quinte Conservation 2021). However, the preferred route does overlap several IPZs for various surface water bodies in the area including the Salmon River, Marysville Creek, Selby Creek, and their associated tributaries within the Study Area (Quinte Conservation 2021).

Highly Vulnerable Aquifer (HVA) areas are considered particularly susceptible to contamination due to shallow, near-surface groundwater or a permeable soil layer above the aquifer (MECP 2022b). The potential route does not lie in HVA areas along the extent of its lineation. The construction and operation of a natural gas pipeline is not identified as a drinking water threat under the *Ontario Clean Water Act* (SO 2006, c. 22).

Well information contained in the MECP (2022c) Water Well Information System (WWIS) was reviewed in the vicinity of the proposed route to better understand local groundwater conditions. There were a total of 154 unique well IDs located within 100 m of the route. These records include 105 supply wells (residential/agricultural), 17 observation (monitoring/test) wells, 5 abandoned wells, and 27 records without status information available. The wells identified within 100 m of the route range in depth between 30.8 metres below ground surface (mbgs) and 3.7 mbgs, with an average depth of approximately 17.2 mbgs. Records of static water levels range between 15.2 masl and 0.6 masl with an average static level of 4.9 masl. Based on an evaluation of the drilling contractors' notes contained in the well logs, groundwater was found at depths ranging from 1.5 mbgs to 27.4 mbgs, with an average "water found" depth of 13.8 mbgs. Depth to bedrock records range between 18 mbgs and 0 mbgs with an average depth to bedrock of 3.7 mbgs.

## 4.2

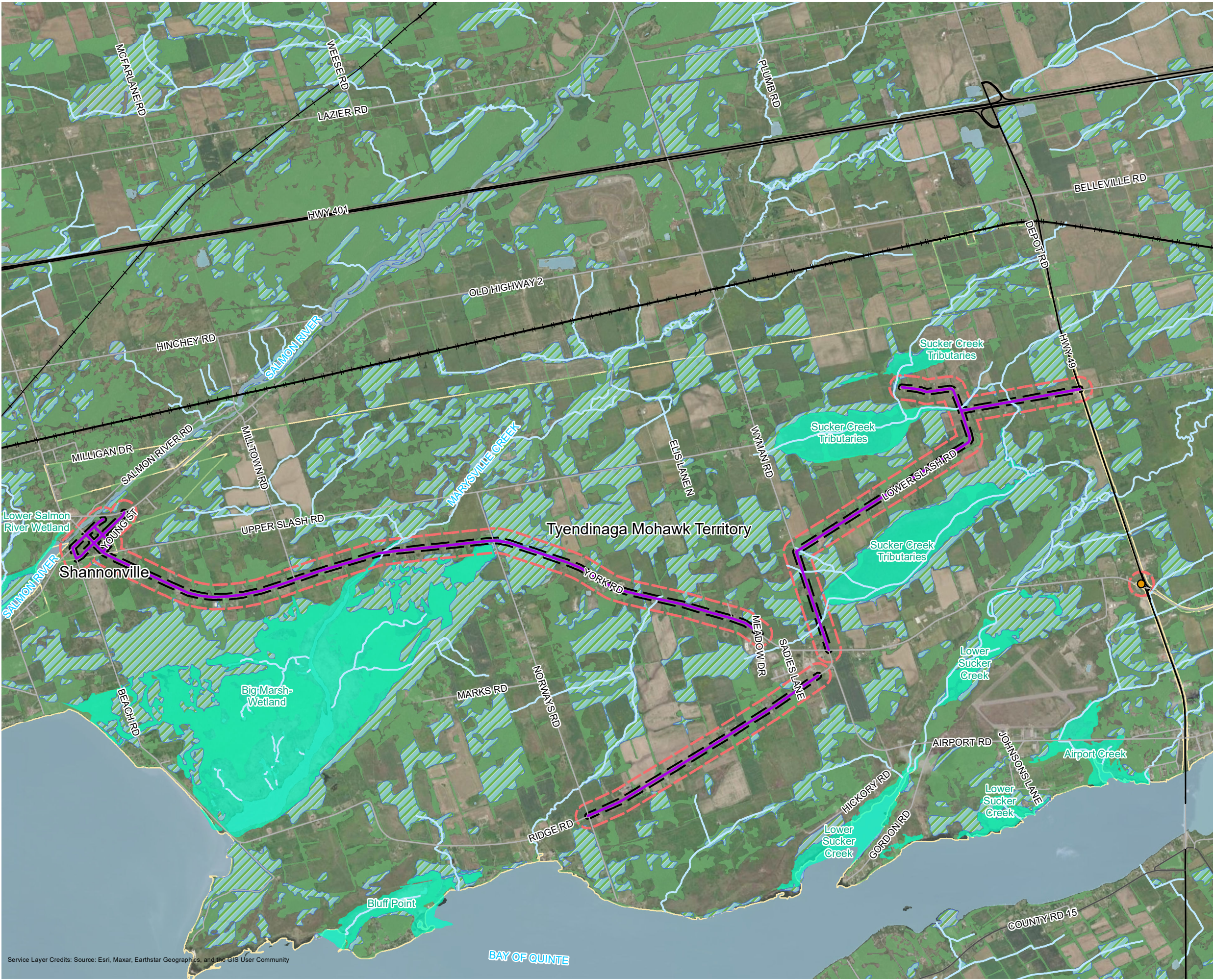
## Natural Environment

This subsection provides baseline information on the following components:

- Atmospheric Environment;
- Aquatic Environment;
- Wetlands;
- Areas of Natural and Scientific Interest and other Environmentally Sensitive Areas;
- Terrestrial Habitat and Vegetation;
- Wildlife and Wildlife Habitat; and
- Species at Risk.

Existing natural environment features obtained from background data sources are shown on Figure 6 and Ecological Land Classification (ELC) of the Study Area is shown on Figure 7.





ENBRIDGE GAS INC.

MOHAWKS OF THE BAY OF QUINTE  
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COMMUNITY EXPANSION PROJECT

EXISTING NATURAL FEATURES  
FIGURE 6

- Existing Enbridge Station (Deseronto PRS)
- Preliminary Preferred Route
- Project Footprint (30 m)
- Study Area (125 m)
- Tyendinaga Mohawk Territory Boundary
- Rail Line
- Highway
- County Road
- Local Road
- Watercourse
- Provincially Significant Wetland
- Unevaluated Wetland
- Wooded Area
- Waterbody

SCALE 1:38,041

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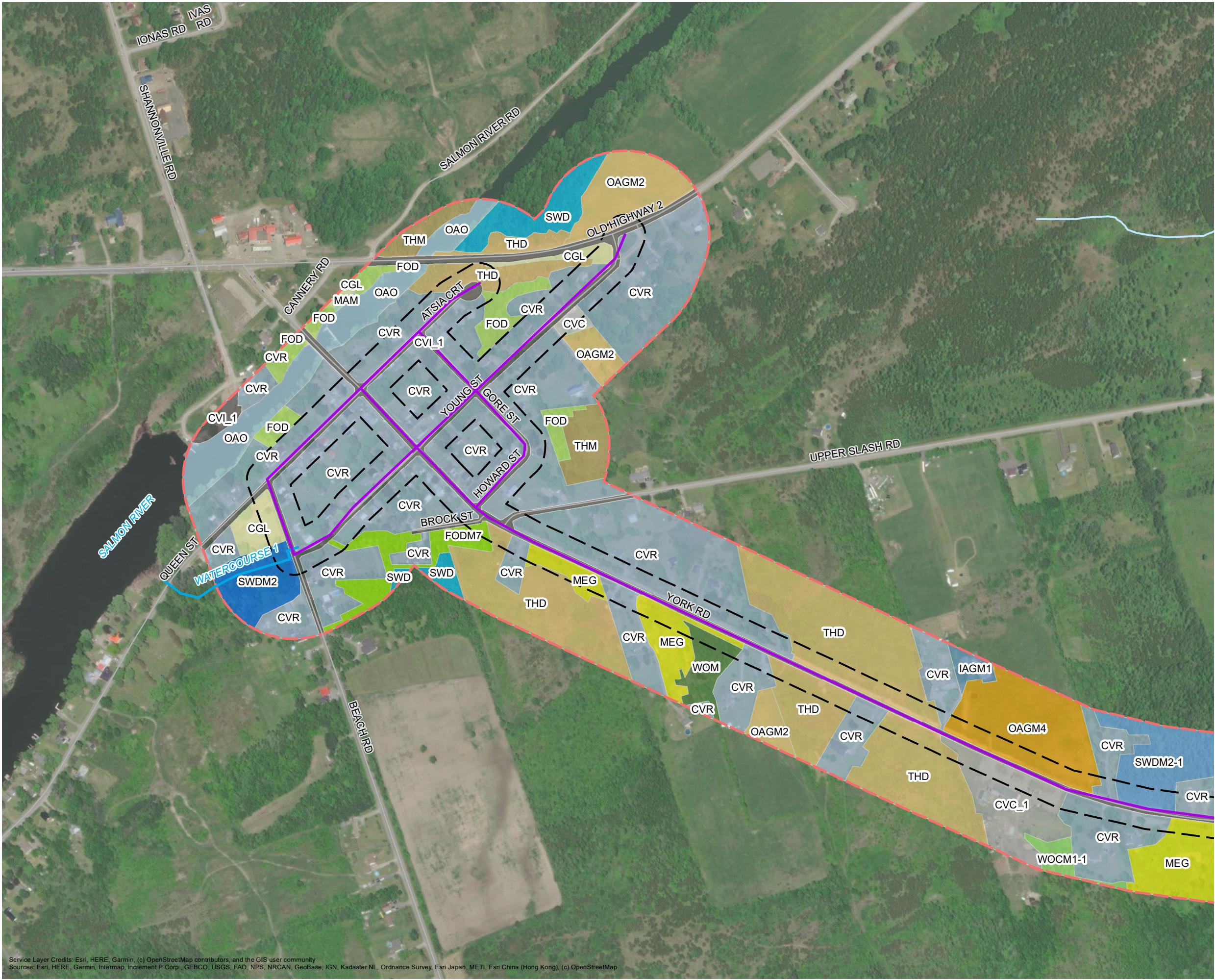
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MOHAWKS OF THE BAY OF QUINTE  
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COMMUNITY EXPANSION PROJECT

**ECOLOGICAL LAND CLASSIFICATION**  
FIGURE 7 MAP 1 OF 10

- Preliminary Preferred Route
- Project Footprint (30 m)
- Study Area (125 m)
- Watercourse (MNR)
- Unmapped Watercourse (Dillon, 2022)

Ecological Land Classification

- CGL-Green Lands
- CVC-Commercial and Institutional
- CVC\_I-Business Sector
- CVI\_I-Transportation and Utilities
- CVR-Residential
- FOD-Deciduous Forest
- FODM7-Fresh – Moist Lowland Deciduous Forest Ecosite
- IAGM1-Agricultural Buildings
- MAM-Meadow Marsh
- MEG-Graminoid Meadow
- OAGM2-Perennial Cover Crops
- OAGM4-Open Pasture
- OAD-Open Aquatic
- SWD-Deciduous Swamp
- SWDM2-I-Black Ash Mineral Deciduous Swamp Type
- SWDM2-Ash Mineral Deciduous Swamp Ecosite
- THD-Deciduous Thicket
- THM-Mixed Thicket
- WOCM1-I-Dry - Fresh Red Cedar Coniferous Woodland Type
- WOM-Mixed Woodland

SCALE 1:5,500  
0 25 50 100 Metres



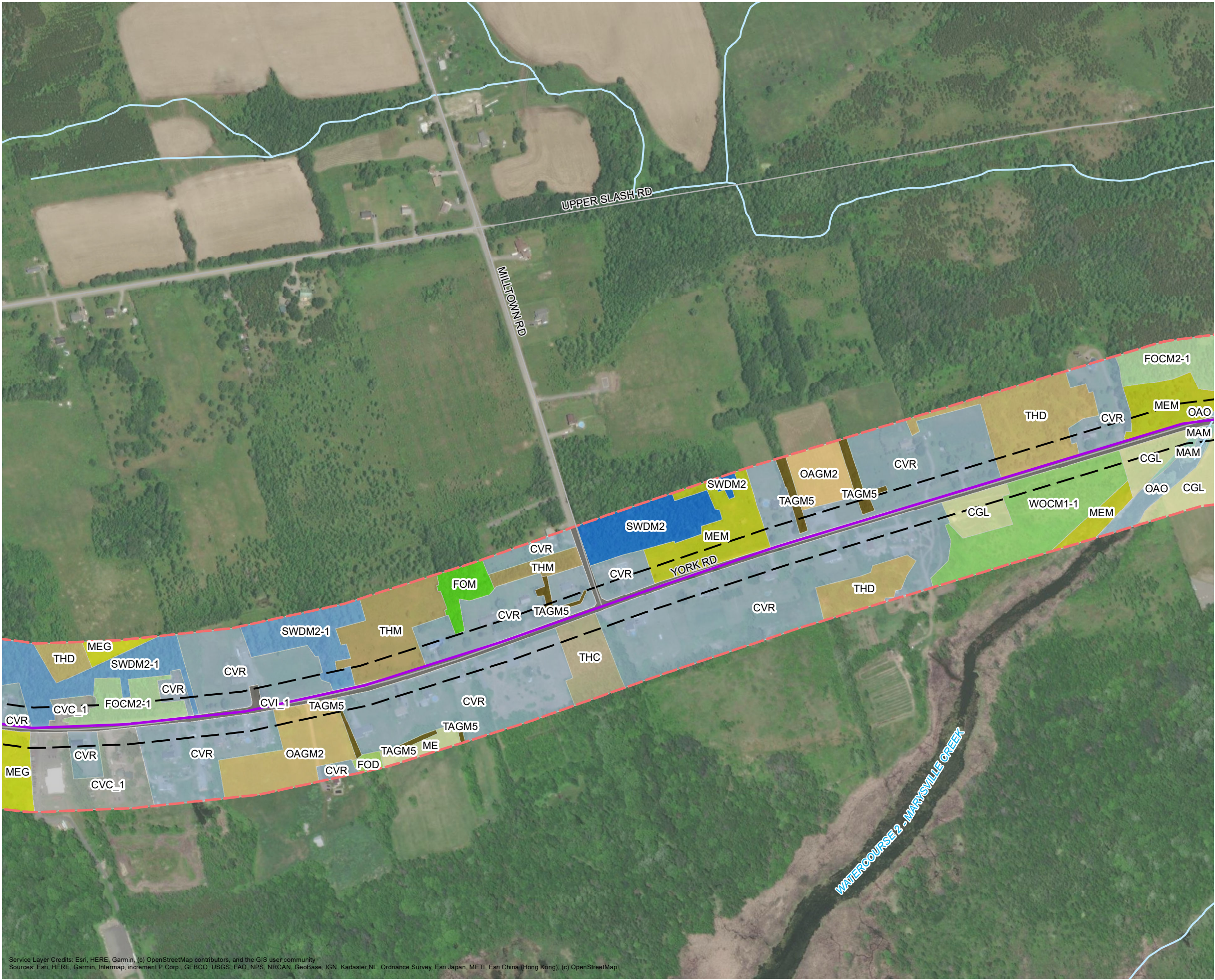
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**ENBRIDGE GAS INC.**  
MOHAWKS OF THE BAY OF QUINTE  
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COMMUNITY EXPANSION PROJECT

**ECOLOGICAL LAND CLASSIFICATION**  
FIGURE 7 MAP 2 OF 10

- Preliminary Preferred Route
- Project Footprint (30 m)
- Study Area (125 m)
- Watercourse (MNR)

Ecological Land Classification

- CGL-Green Lands
- CVC\_1-Business Sector
- CVI\_1-Transportation and Utilities
- CVR-Residential
- FOCM2:1 - Dry - Fresh Red Cedar Coniferous Forest
- FOD-Deciduous Forest
- FOM-Mixed Forest
- MAM-Meadow Marsh
- ME-Meadow
- MEG-Graminoid Meadow
- MEM-Mixed Meadow
- OAGM2-Perennial Cover Crops
- OAO-Open Aquatic
- SWDM2-1-Black Ash Mineral Deciduous Swamp Type
- SWDM2-Ash Mineral Deciduous Swamp Ecosite
- TAGM5-Fencerow
- THC-Coniferous Thicket
- THD-Deciduous Thicket
- THM-Mixed Thicket
- WOCM1-1-Dry - Fresh Red Cedar Coniferous Woodland Type

SCALE 1:5,500  
0 25 50 100 Metres



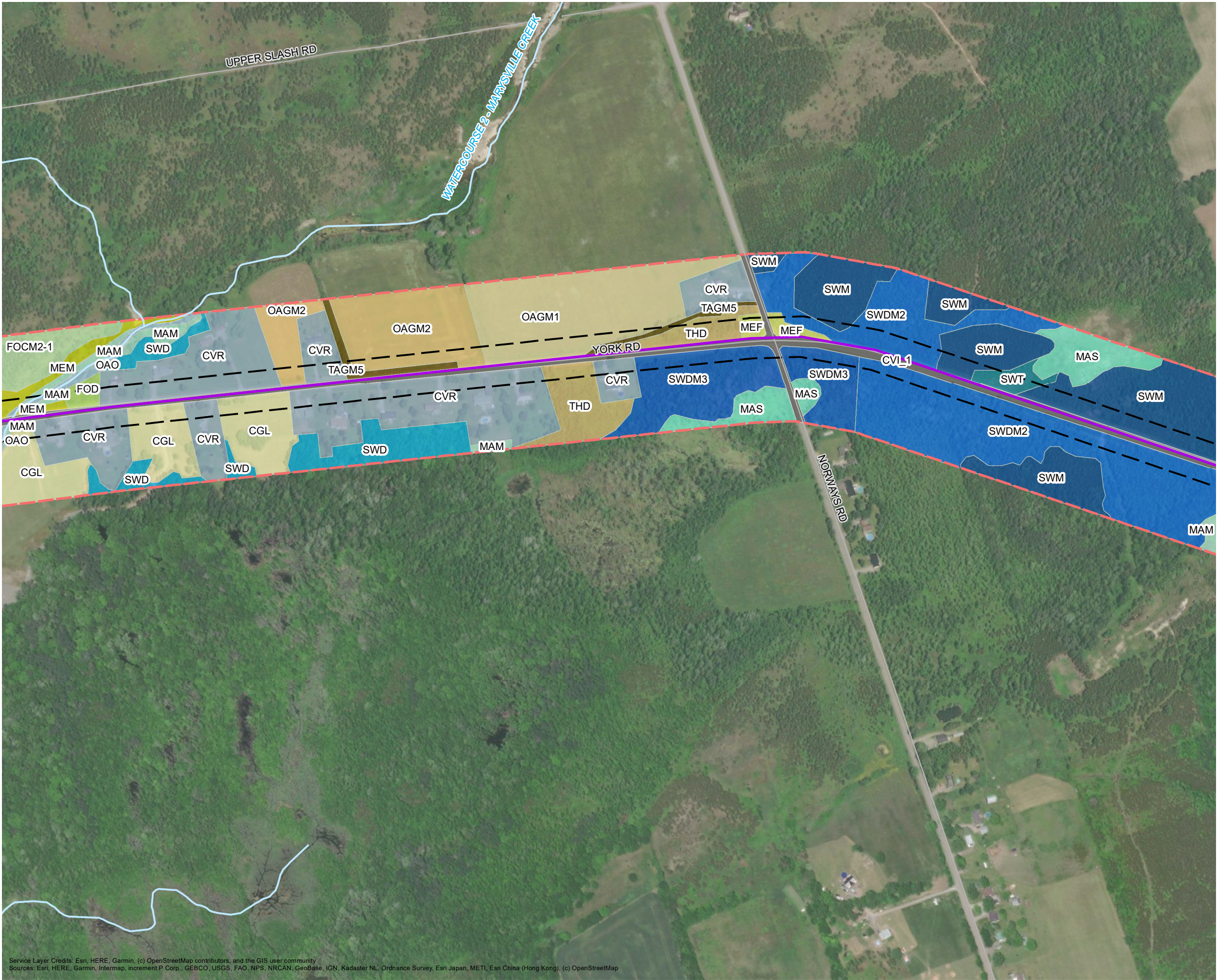
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**ENBRIDGE GAS INC.**  
MOHAWKS OF THE BAY OF QUINTE  
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COMMUNITY EXPANSION PROJECT

**ECOLOGICAL LAND CLASSIFICATION**  
FIGURE 7 MAP 3 OF 10

Preliminary Preferred Route

Project Footprint (30 m)

Study Area (125 m)

Watercourse (MNR)

Ecological Land Classification

- CGL-Green Lands
- CVI\_I-Transportation and Utilities
- CVR-Residential
- FOCM2:1 - Dry - Fresh Red Cedar Coniferous Forest
- FOD-Deciduous Forest
- MAM-Meadow Marsh
- MAS-Shallow Marsh
- MEF-Forb Meadow
- MEM-Mixed Meadow
- OAGM1-Annual Row Crops
- OAGM2-Perennial Cover Crops
- OAO-Open Aquatic
- SWD-Deciduous Swamp
- SWDM2-Ash Mineral Deciduous Swamp Ecosite
- SWDM3-Maple Mineral Deciduous Swamp Ecosite
- SWM-Mixed Swamp
- SWT-Thicket Swamp
- TAGM5-Fencerow
- THD-Deciduous Thicket

SCALE 1:5,500

0 25 50 100 Metres



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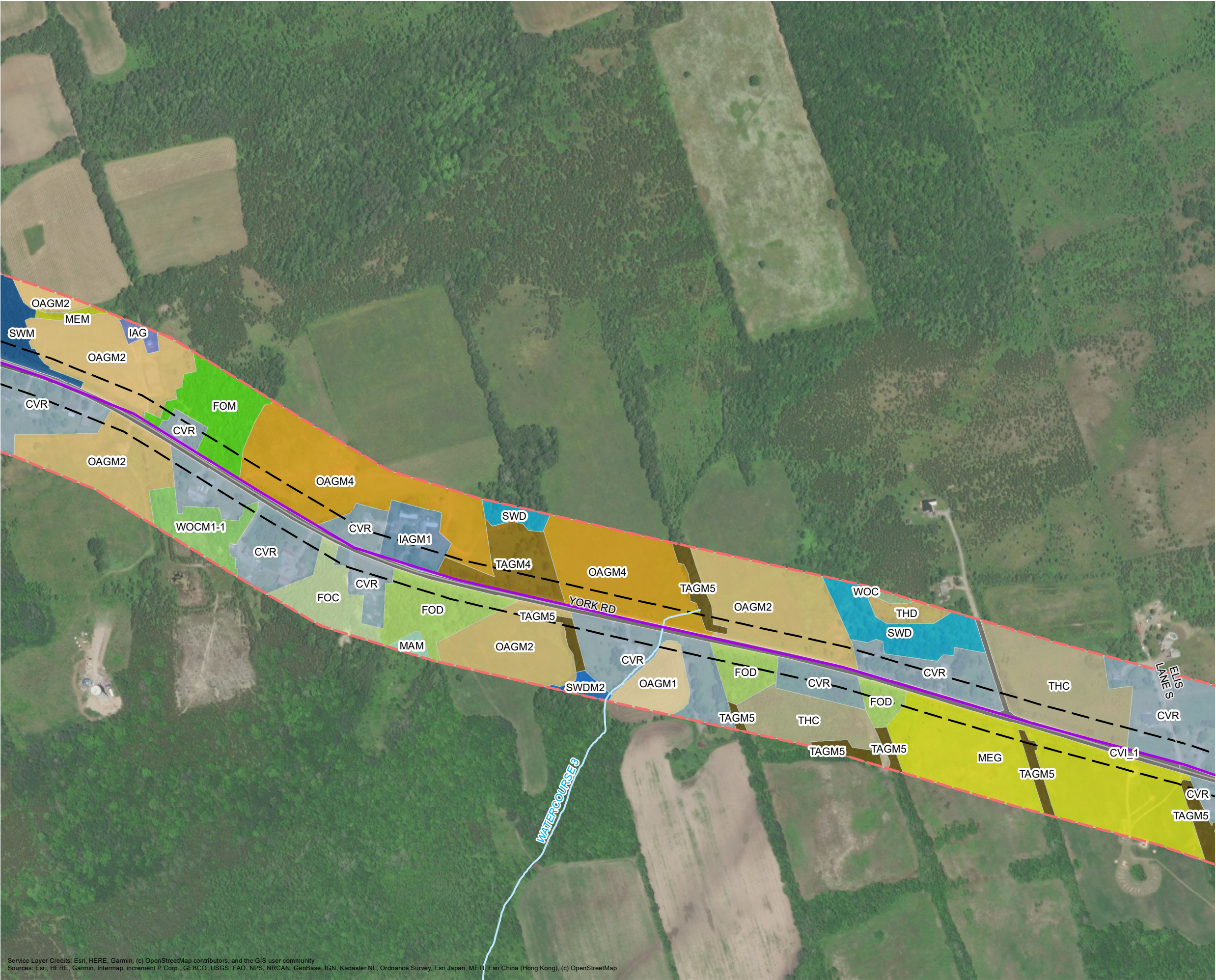


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**ENBRIDGE GAS INC.**  
MOHAWKS OF THE BAY OF QUINTE  
AND SHANNONVILLE  
COMMUNITY EXPANSION PROJECT

**ECOLOGICAL LAND CLASSIFICATION**  
FIGURE 7 MAP 4 OF 10

- Preliminary Preferred Route
  - Project Footprint (30 m)
  - Study Area (125 m)
  - Watercourse (MNRF)
- Ecological Land Classification
- CGL-Green Lands
  - CVL\_I-Transportation and Utilities
  - CVR-Residential
  - FOC-Coniferous Forest
  - FOD-Deciduous Forest
  - FOM-Mixed Forest
  - IAG-Agricultural Infrastructure
  - IAGM1-Agricultural Buildings
  - MAM-Meadow Marsh
  - MEG-Graminoid Meadow
  - MEM-Mixed Meadow
  - OAGM1-Annual Row Crops
  - OAGM2-Perennial Cover Crops
  - OAGM4-Open Pasture
  - SWD-Deciduous Swamp
  - SWDM2-Ash Mineral Deciduous Swamp Ecosite
  - SWM-Mixed Swamp
  - TAGM4-Treed Pasture
  - TAGM5-Fencerow
  - THC-Coniferous Thicket
  - THD-Deciduous Thicket
  - WOC-Coniferous Woodland
  - WOCM1-I-Dry - Fresh Red Cedar Coniferous Woodland Type

SCALE 1:5,500  
0 25 50 100 Metres



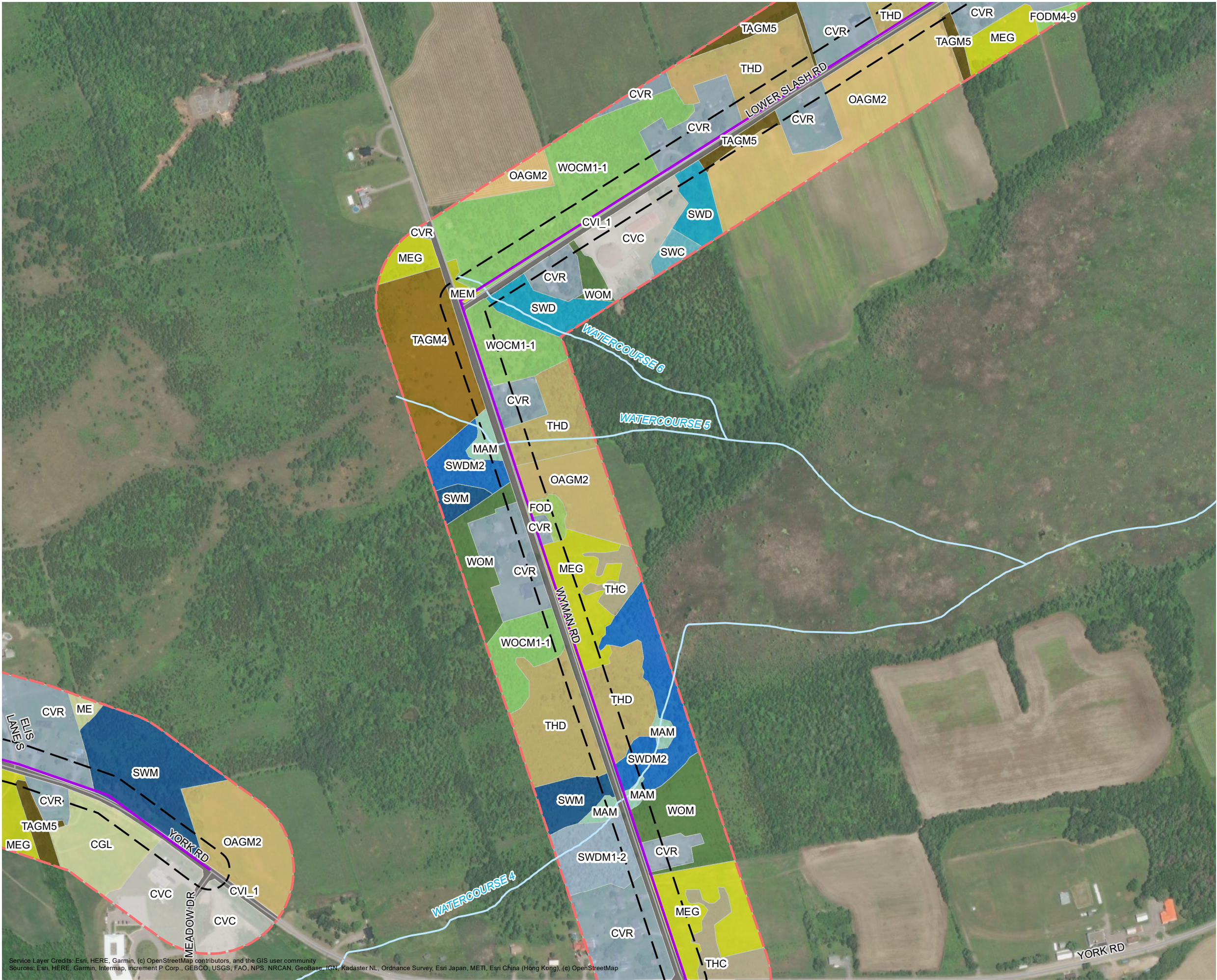
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**ENBRIDGE GAS INC.**  
MOHAWKS OF THE BAY OF QUINTE  
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COMMUNITY EXPANSION PROJECT

**ECOLOGICAL LAND CLASSIFICATION**  
FIGURE 7 MAP 5 OF 10

Preliminary Preferred Route

Project Footprint (30 m)

Study Area (125 m)

Watercourse (MNR)

Ecological Land Classification

- CGL-Green Lands
- CVC-Commercial and Institutional
- CVI\_1-Transportation and Utilities
- CVR-Residential
- FOD-Deciduous Forest
- FODM4-9-Dry - Fresh Basswood Deciduous Forest Type
- MAM-Meadow Marsh
- ME-Meadow
- MEG-Graminoid Meadow
- MEM-Mixed Meadow
- OAGM2-Perennial Cover Crops
- SWC-Coniferous Swamp
- SWD-Deciduous Swamp
- SWDM1-2-Bur Oak Mineral Deciduous Swamp Type
- SWDM2-Ash Mineral Deciduous Swamp Ecosite
- SWM-Mixed Swamp
- TAGM4-Treed Pasture
- TAGM5-Fencerow
- THC-Coniferous Thicket
- THD-Deciduous Thicket
- WOCM1-1-Dry - Fresh Red Cedar Coniferous Woodland Type
- WOM-Mixed Woodland

SCALE 1:5,500

0 25 50 100 Metres



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**ENBRIDGE GAS INC.**  
MOHAWKS OF THE BAY OF QUINTE  
AND SHANNONVILLE  
COMMUNITY EXPANSION PROJECT

**ECOLOGICAL LAND CLASSIFICATION**  
FIGURE 7 MAP 6 OF 10

- Preliminary Preferred Route
- Project Footprint (30 m)
- Study Area (125 m )
- Watercourse (MNR)

Ecological Land Classification

- CGL-Green Lands
- CVC-Commercial and Institutional
- CVI\_1-Transportation and Utilities
- CVR-Residential
- CVS\_1-Education
- FOD-Deciduous Forest
- MEG-Graminoid Meadow
- MEM-Mixed Meadow
- OAGM1-Annual Row Crops
- OAGM2-Perennial Cover Crops
- SWD-Deciduous Swamp
- TAGM5-Fencerow
- THC-Coniferous Thicket
- THD-Deciduous Thicket
- WOD-Deciduous Woodland

SCALE 1:5,500  
0 25 50 100 Metres



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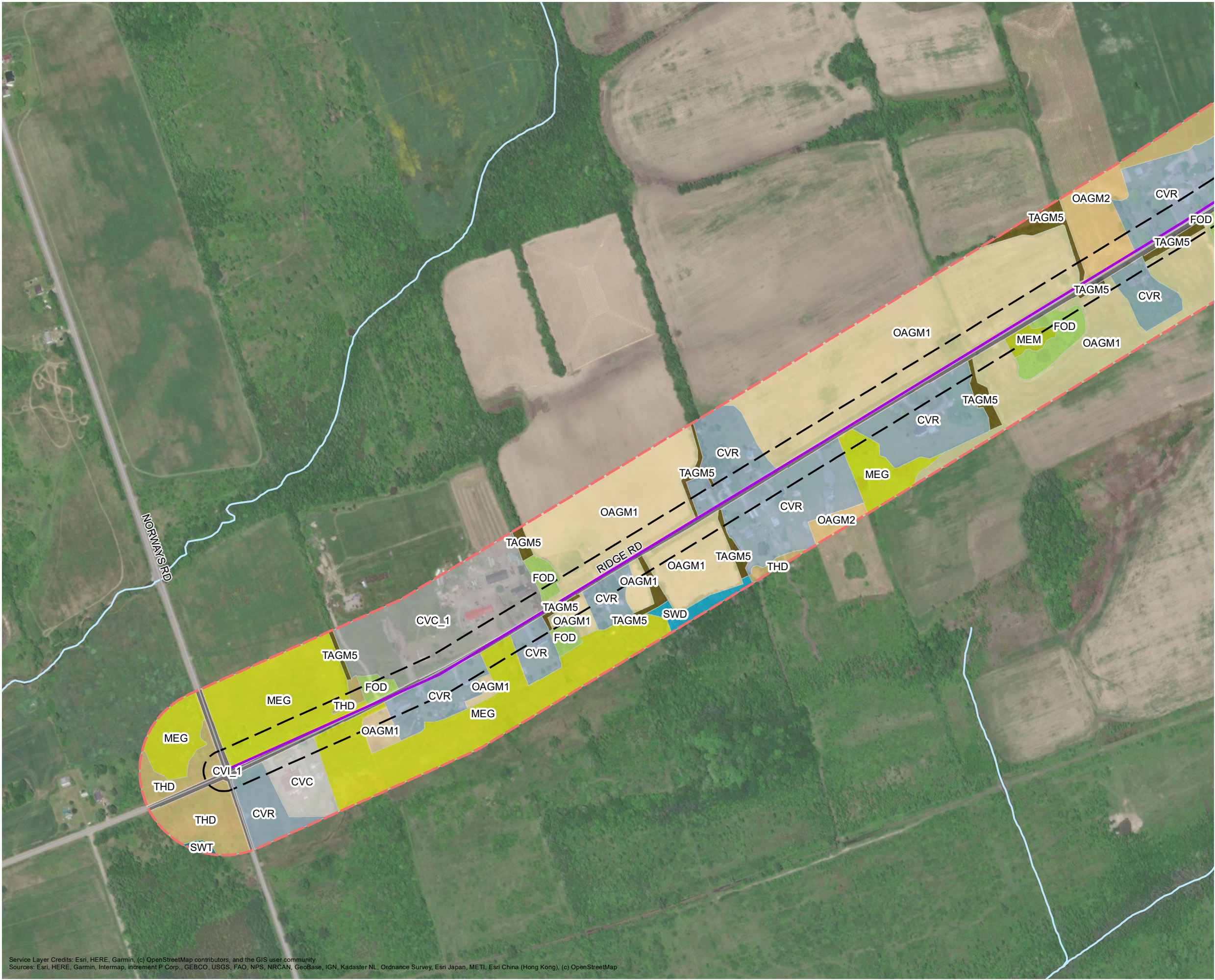
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**ENBRIDGE GAS INC.**  
MOHAWKS OF THE BAY OF QUINTE  
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COMMUNITY EXPANSION PROJECT

**ECOLOGICAL LAND CLASSIFICATION**  
FIGURE 7 MAP 7 OF 10

- Preliminary Preferred Route
- Project Footprint (30 m)
- Study Area (125 m)
- Watercourse (MNRF)

Ecological Land Classification

- CVC-Commercial and Institutional
- CVC\_I-Business Sector
- CVI\_I-Transportation and Utilities
- CVR-Residential
- FOD-Deciduous Forest
- MEG-Graminoid Meadow
- MEM-Mixed Meadow
- OAGM1-Annual Row Crops
- OAGM2-Perennial Cover Crops
- SWD-Deciduous Swamp
- SWT-Thicket Swamp
- TAGM5-Fencerow
- THD-Deciduous Thicket

SCALE 1:5,500  
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MAP DRAWING INFORMATION:  
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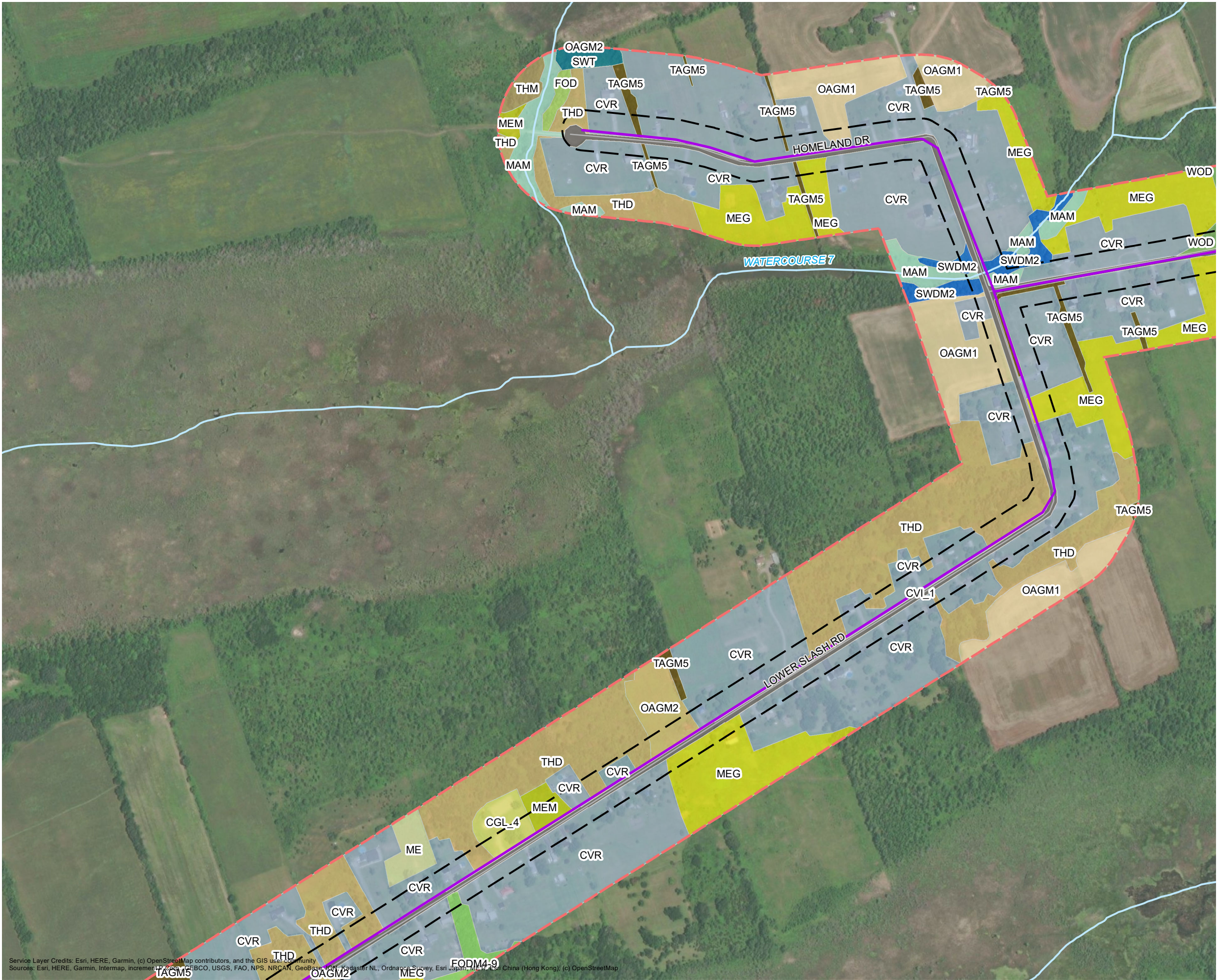
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**ENBRIDGE GAS INC.**  
MOHAWKS OF THE BAY OF QUINTE  
AND SHANNONVILLE  
COMMUNITY EXPANSION PROJECT

**ECOLOGICAL LAND CLASSIFICATION**  
FIGURE 7 MAP 8 OF 10

Preliminary Preferred Route

Project Footprint (30 m)

Study Area (125 m)

Watercourse (MNR)

Ecological Land Classification

- CGL\_4-Recreational
- CVL\_1-Transportation and Utilities
- CVR-Residential
- FOD-Deciduous Forest
- FODM4-9-Dry - Fresh Basswood Deciduous Forest Type
- MAM-Meadow Marsh
- ME-Meadow
- MEG-Graminoid Meadow
- MEM-Mixed Meadow
- OAGM1-Annual Row Crops
- OAGM2-Perennial Cover Crops
- SWDM2-Ash Mineral Deciduous Swamp Ecosite
- SWT-Thicket Swamp
- TAGM5-Fencerow
- THD-Deciduous Thicket
- THM-Mixed Thicket
- WOD-Deciduous Woodland

SCALE 1:5,500

0 25 50 100 Metres



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DATA PROVIDED BY MNR

MAP CREATED BY: ZJB  
MAP CHECKED BY: AL  
MAP PROJECTION: NAD 1983 CSRS UTM Zone 18N



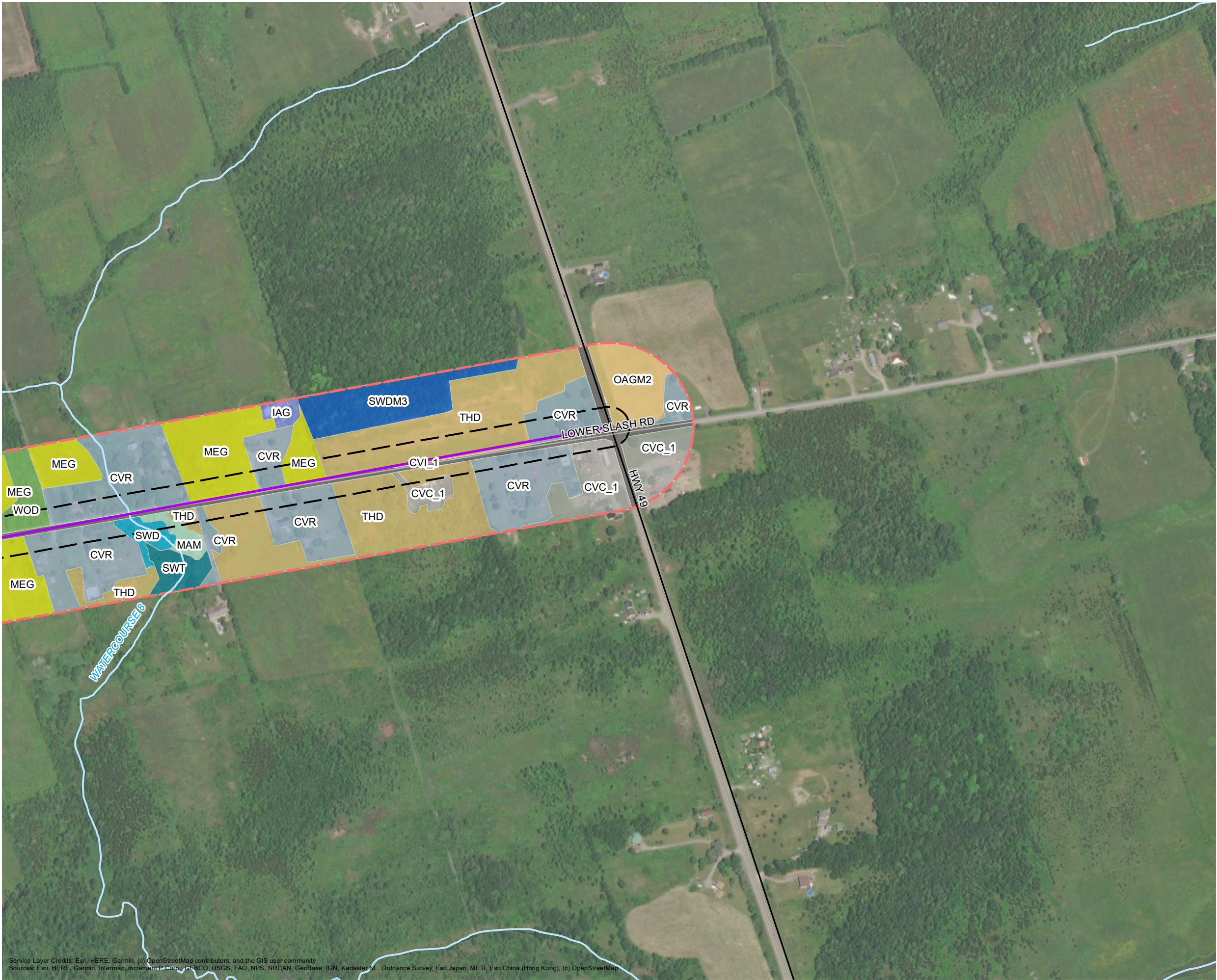
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**ENBRIDGE GAS INC.**  
MOHAWKS OF THE BAY OF QUINTE  
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COMMUNITY EXPANSION PROJECT

**ECOLOGICAL LAND CLASSIFICATION**  
FIGURE 7 MAP 9 OF 10

Preliminary Preferred Route

Project Footprint (30 m)

Study Area (125 m )

Watercourse (MNR)

Ecological Land Classification

CVC\_I-Business Sector

CVC\_I-Transportation and Utilities

CVR-Residential

IAG-Agricultural Infrastructure

MAM-Meadow Marsh

MEG-Graminoid Meadow

OAGM2-Perennial Cover Crops

SWD-Deciduous Swamp

SWDM3-Maple Mineral Deciduous Swamp Ecosite

SWT-Thicket Swamp

THD-Deciduous Thicket

WOD-Deciduous Woodland

SCALE 1:5,500

0 25 50 100 Metres



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**ENBRIDGE GAS INC.**  
MOHAWKS OF THE BAY OF QUINTE  
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COMMUNITY EXPANSION PROJECT

**ECOLOGICAL LAND CLASSIFICATION**  
FIGURE 7 MAP 10 OF 10

- Preliminary Preferred Route
- Project Footprint (30 m)
- Study Area (125 m )
- Watercourse (MNR)
- Existing Enbridge Station (Deseronto PRS)

Ecological Land Classification

- CGL-Green Lands
- CVC\_3-Heavy Industry
- CVL\_1-Transportation and Utilities
- CVR-Residential
- MEM-Mixed Meadow

SCALE 1:5,500  
0 25 50 100 Metres



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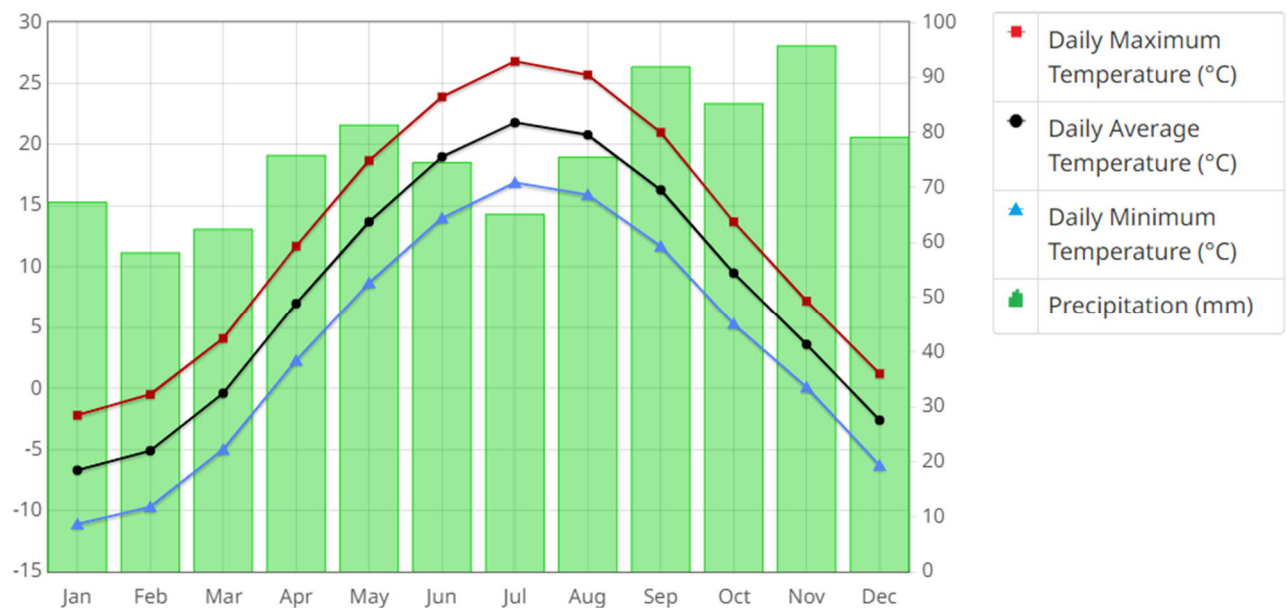
## 4.2.1 Atmospheric Environment

### 4.2.1.1 Climate

Climate averages are commonly used to describe the climatic conditions of a particular location in Canada. At the end of each decade, ECCC updates its climate averages for several locations across Canada and for as many climatic characteristics as possible. The climate averages and extremes are obtained from Canadian climate stations with at least 15 years of data between 1981 and 2010 (ECCC 2022).

Figure 8 shows temperature and precipitation data averaged over the period from 1981 to 2006 (25 years) taken at the Belleville Co-operative Climate Network Station, located approximately 15 km west of the Study Area.

**Figure 8: Temperature and Precipitation Graph for 1981 to 2010 – Belleville Co-operative Climate Network Station**



Source: ECCC 2022

### 4.2.1.2 Air Quality

According to the MECP, overall air quality in Ontario has improved significantly over the past decade due to a substantial decrease in harmful pollutants such as nitrogen dioxide, sulphur dioxide and carbon monoxide that are emitted by vehicles and industry. There has also been a significant decrease in fine particulate matter which is emitted directly into the atmosphere as a by-product of fuel combustion or formed indirectly in the atmosphere through chemical reactions. Fine particulate matter, including

smoke, fumes and dust can have various negative health effects, especially on the respiratory system (Ministry of the Environment and Climate Change 2015).

#### 4.2.2 Aquatic Environment

A combination of desktop review of available agency resources and preliminary field investigations were conducted to determine the location of existing surface water features and the potential for fish habitat to occur within the Study Area. As part of the preliminary field investigations conducted on May 19, 2022, aquatic habitat assessments were completed to confirm the location of surface water features within the Study Area that intersect the proposed pipeline route. Locations of features identified during background review and confirmed during preliminary field investigations are shown on Figure 6.

##### 4.2.2.1 Surface Water

The Study Area is located within the jurisdiction of Quinte Conservation which manages the watersheds of all streams draining into the Moira, Napanee and Salmon rivers. A total of four subwatersheds are located within the Quinte Conservation watershed, encompassing a total area of 5,921 square kilometers. The Study Area is located within the Napanee River subwatershed, within the larger Napanee Region Watershed. The Salmon River and Napanee River and associated tributaries within this subwatershed flow southward and eventually discharge into the Bay of Quinte.

A total of eight surface water features are located within the Study Area and are shown on Figure 7. With the exception to Watercourse 1, the watercourses were previously mapped and identified during background review. As part of the preliminary field investigations on May 19, 2022, aquatic habitat assessments were undertaken for each surface water feature to characterize the potential for fish and fish habitat. Aquatic habitat assessments were completed wherever the proposed pipeline route intersected a watercourse. A summary of the surface water features and the results of the aquatic habitat assessment including location descriptors are provided below:

- Watercourse 1 – Originates southwest of Beach Road where roadside ditches generate flow for this feature. The feature continues southwest through a woodland as a defined natural channel and travels approximately 200 m southwest through the ash mineral deciduous swamp (SWDM2) until it crosses Queen Street via a perched corrugated steel pipe (CSP) culvert before discharging into the Salmon River. Minimal flow was observed and the feature is believed to convey ephemeral flow as the result of high precipitation events and freshet. The perched downstream side of the CSP likely acts as a barrier to fish access for the upstream portions of Watercourse 1. The wetted width and wetted depth of the feature measured approximately 0.5 m and 0.06 m, respectively. Potential fish habitat observed on-site included occasional emergent in-stream graminoids, and abundant riparian trees associated with the woodland. The dominant substrate was observed as a silty clay.
- Watercourse 2 (Marysville Creek) – Crosses York Road within the approximate centre of the proposed route alignment for York Road or approximately 1.1 km west of the intersection of York Road and Norways Road. Marysville Creek is a permanent feature that conveys moderate flow southward via a meandering natural channel through the Big Marsh-Wetland Provincially Significant

Wetland (PSW) for approximately 3.6 km before discharging into the Bay of Quinte. The wetted width and wetted depth of the feature measured approximately 10.0 m and 0.5 m, respectively. Potential fish habitat observed onsite included an abundance of emergent in-stream graminoids along both banks, and rare to occasional submerged rocks. The dominant substrate along the eastern bank of the feature was observed as a silty/sandy clay.

- Watercourse 3 – Crosses York Road via a plastic corrugated pipe culvert approximately 1.8 km west of the intersection of York Road and Wyman Road. Minimal flow was observed and the feature is believed to convey intermittent or ephemeral flow as the result of high precipitation events and freshet. Watercourse 3 travels approximately 3.25 km southwest through a variety of landscapes including woodland, meadow and agricultural areas until discharging into the Bay of Quinte. The wetted width and wetted depth of the feature measured approximately 0.15 m and 0.06 m respectively. This portion of Watercourse 3 occurs adjacent to residential property (CVR) and agricultural fields (open pasture [OAGM4] and annual row crops [OAGM1]) and occurs as a defined channel. Abundant Green Algae (*Chlorophyta*) was observed within the downstream portion of the feature. Potential fish habitat observed on-site was limited to an abundance of emergent in-stream graminoids throughout the feature. The dominant substrate was observed as a muck and clay.
- Watercourse 4 – Crosses Wyman Road via a CSP culvert approximately 250 m north of the intersection of York Road and Wyman Road. Moderate flow was observed and the feature is believed to convey intermittent flow throughout the year. Watercourse 4 travels approximately 300 m northeast through marsh (MAM) and ash mineral deciduous swamp (SWDM2) communities until reaching the expansive Sucker Creek Tributaries PSW complex that occurs east of Wyman Road and south of Lower Slash Road. This portion of Watercourse 4 occurs as a poorly defined natural channel through marsh and swamp communities. The wetted width and wetted depth of the feature measured approximately 0.30 m and 0.08 m, respectively. Potential fish habitat observed on-site was limited to an abundance of emergent in-stream graminoids throughout the feature. The dominant substrate was observed as sandy/silty clay.
- Watercourse 5 – Crosses Wyman Road via a CSP culvert approximately 840 m north of the intersection of York Road and Wyman Road. Minimal flow was observed and the feature is believed to convey ephemeral flow as the result of high precipitation events and freshet. Watercourse 5 travels approximately 440 m east through deciduous thicket (THD) and a woodland community until reaching the aforementioned Sucker Creek Tributaries PSW complex. This portion of Watercourse 5 occurs as a defined natural channel that travels through marsh and thicket communities. The wetted width and wetted depth of the feature measured approximately 0.20 m and 0.05 m, respectively. Potential fish habitat observed on-site was limited to an abundance of emergent in-stream graminoids throughout the feature. The dominant substrate was observed as sandy/silty clay.
- Watercourse 6 – Crosses Lower Slash Road via a double CSP culvert approximately 50 m east of the intersection of York Road and Lower Slash Road. Very minimal flow was observed and the feature is believed to convey ephemeral flow as the result of high precipitation events and freshet. Approximately 5 m southeast of the outlet of the double CSP culvert, flow was observed to enter fractured bedrock which likely acts as a barrier to fish for the upstream portions of Watercourse 6



that occurs within the Project footprint. Watercourse 6 travels approximately 550 m southeast through deciduous swamp (SWD) and a woodland community (WOD) outside the Study Area until reaching the aforementioned Sucker Creek Tributaries PSW complex. The wetted width and wetted depth of the feature measured approximately 0.05 m and 0.01 m, respectively. Potential fish habitat observed on-site was limited to rock cobble, in-stream emergent graminoids and abundant riparian trees associated with the woodland. The dominant substrate was observed as pea-sized cobble and fractured surficial bedrock.

- Watercourse 7 – Crosses Homeland Drive via a double CSP culvert approximately 30 m north of the intersection of Homeland Drive and Lower Slash Road and originates from the Sucker Creek Tributaries PSW complex that occurs north and west of Lower Slash Road. Minimal to moderate flow was observed and the feature is believed to convey intermittent to permanent flow throughout the year. Watercourse 7 travels approximately 760 m east and then southeast through meadow marsh (MAM), ash mineral deciduous swamp (SWDM2) until reaching the aquatic assessment area for Watercourse 8. The wetted width and wetted depth of the feature measured approximately 1.5 m and 0.20 m respectively. Potential fish habitat observed on-site was limited rock cobble, in-stream emergent graminoids and abundant riparian trees associated with the woodland. The dominant substrate was observed as silty clay topped with a thin layer of muck.
- Watercourse 8 – Crosses Lower Slash Road via a concrete box culvert approximately 720 m west of the intersection of Lower Slash Road and Highway 2. Moderate flow was observed and the feature is believed to convey permanent flow throughout the year. Watercourse 8 travels approximately 380 m south of meadow marsh (MAM), deciduous swamp (SWD), deciduous thicket (THD) and open landscape areas outside of the Study Area until reaching the northernmost portion of the aforementioned Sucker Creek Tributaries PSW complex. The wetted width and wetted depth of the feature measured approximately 5.25 m and 0.35 m, respectively. Abundant Green Algae was observed within the downstream portion of the feature. Potential fish habitat observed on-site included small rock boulders, riparian trees, woody debris undercut banks and in-stream emergent graminoids. The dominant substrate was observed as sandy, silty clay with occasional layers of muck.

#### 4.2.2.2 Fish and Fish Habitat

Based on a review of available Aquatic Resource Area data from the NDMNRF (formerly MNRF) two of the watercourses that transect the Study Area have thermal regimes characterized as warm (Salmon River and Marysville Creek); however, no additional thermal regime information was available for the other watercourses and general fish community data was unavailable for watercourses or waterbodies within the Study Area.

A review of the DFO Online Aquatic SAR Mapping Tool, the MECP SAR records and the NHIC database identified eight aquatic species with the potential to occur within the Study Area, all of which are associated with the Salmon River, including:

- American Eel (*Anguilla rostrata*) – Listed as Endangered provincially;

- Channel Darter (*Percina copelandi*) – Listed as Endangered federally and Special Concern provincially;
- Critical habitat for Channel Darter in the Salmon River was identified as occurring within the Study Area based on DFO mapping;
- Eastern Pondmussel (*Ligumia nasuta*) – Listed as Special Concern federally and provincially;
- Rainbow mussel (*Villosa iris*) – Listed as Special Concern federally and provincially;
- River Redhorse (*Moxostoma carinatum*) – Listed as Special Concern federally and provincially;
- Eastern Sand Darter (Ontario population) (*Ammocrypta pellucida*) – Listed as Threatened federally and Endangered provincially;
- Silver Lamprey (*Ichthyomyzon unicuspis*) – Listed as Special Concern federally and provincially; and,
- Lake Sturgeon (Great Lakes - Upper St. Lawrence River population) (*Acipenser fulvescens* pop. 3) – Listed as Endangered provincially.

In addition, based on TK provided by the Mohawks of the Bay of Quinte, the following five aquatic species (not already identified above) have the potential to occur within the Tyendinaga Mohawk Territory lands which overlaps the Study Area:

- Grass Pickerel (*Esox americanus vermiculatus*) – Listed as Special Concern federally and provincially;
- Northern Brook Lamprey (*Ichthyomyzon fossor*) – Listed as Special Concern federally and provincially; and,
- Spotted Gar (*Lepisosteus oculatus*) – Listed as Threatened federally and Endangered provincially.

Due to the proximity of the Study Area to the Salmon River and the Bay of Quinte the SAR and SCC fish species listed above were identified as potentially occurring within the vicinity of the Study Area; however, based on the aquatic assessments conducted during the preliminary field investigations, with the exception to Watercourse 2 (Marysville Creek) and Watercourse 8 which may provide habitat for American Eel, Eastern Pondmussel and Grass Pickerel, watercourses that intersect the proposed pipeline route were observed to lack suitable fish habitat to support the above noted species. In addition to the first eight species listed above, Grass Pickerel also has the potential to inhabit the Salmon River. The Salmon River occurs within the western outskirts of the Study Area and does not intersect with the proposed pipeline route or the Project footprint. No other aquatic SAR or SCC were identified as potentially occurring within the Study Area. A complete list of fish species identified through background review is included in Appendix M.

Based on TK shared by the Mohawks of the Bay of Quinte, the portion of the Salmon River adjacent to Shannonville and within the Study Area was identified as a culturally significant area for the Mohawks of the Bay of Quinte community where a traditional annual Walleye spear-fishing event takes place during the spring spawning season, typically occurring throughout April and May.

### 4.2.3 Wetlands

Based on a desktop review of available agency mapping and TK provided by the Mohawks of the Bay of Quinte, two PSWs occur within the Study Area:

- Big Marsh-Wetland PSW – Associated with Marysville Creek and adjacent to and south of York Road; and
- Sucker Creek Tributaries PSW – Includes three large separate wetland complexes within the Study Area which are located as follows:
  1. East of Wyman Road and south of Lower Slash Road;
  2. West of the intersection of Lower Slash Road and Homeland Drive; and,
  3. North of Homeland Drive.

In addition, numerous unevaluated wetlands occur throughout the Study Area most of which form part of the PSWs listed above. Unevaluated wetlands and PSWs identified within and adjacent to the Study Area are shown on Figure 6. The presence/absence of wetlands identified during the background review were visually confirmed during preliminary ELC, the results of which are detailed in Section 4.2.6 and shown on Figure 7.

### 4.2.4 Woodlands

Based on a desktop review of available agency mapping and TK provided by the Mohawks of the Bay of Quinte, numerous woodlands occur within and adjacent to the Study Area (Figure 6).

Currently no formal guidance policy or document exists (e.g., Official Plan) for the Tyendinaga Mohawk Territory lands that details criteria for identifying woodland significance; however, the Mohawks of the Bay of Quinte in collaboration with the Bay of Quinte Remedial Action Plan and Lower Trent Conservation prepared a “Natural Heritage Report – Tyendinaga Mohawk Territory” in 2006 that identifies Significant Woodlands within the Tyendinaga Mohawk Territory lands.

Due to the time that has passed since the 2006 report, a dual approach for identifying significant woodlands was adopted using Figure 2 (Significant Woodlands) from the Mohawks of the Bay of Quinte 2006 Natural Heritage Report to focus on woodlands identified as significant in the past, as well as the woodland significance criteria established by the Natural Heritage Reference Manual (NHRM) for Policy 2.1 of the PPS (MNRF 2010). Woodlands within the Study Area were identified as Significant Woodland if they satisfied at least one of the following NHRM significance criteria:

- **Woodland size in relation to the planning area**
  - Where woodland cover is 30-60% (37% cover for the Napanee River subwatershed of Quinte Conservation which the Study Area is located), woodlands 50 hectares (ha) in size or larger are considered significant. In accordance with the NHRM, a bisecting opening 20 m or less in width between crown edges is not considered to divide a woodland into two separate woodlands. A

- few woodlands within the Study Area are comprised of an area equal to or greater than 50 ha, therefore this criteria is met.
- Presence of interior habitat
    - 8 or more ha of interior habitat where woodland cover is 30-60% is considered significant. Several woodlands within the Study Area contain at least 8 ha of interior habitat, therefore this criteria is met.
  - Proximity to other woodlands or other habitats
    - Where a woodland is located within proximity to another significant natural feature receiving ecological benefit from the woodland; i.e., fish habitat, SAR habitat, etc. Many of the woodlands within the Study Area contain watercourses, wetland units, and or potential SAR habitat, therefore this criteria is met.
  - **Water protection**
    - Woodlands are located in relation to a groundwater or surface water feature. Many of these woodlands contain wetlands and watercourses, therefore this criteria is met.
  - Woodland diversity
    - Woodlands contain high diversity of native forest species or diversity through a combination of composition and terrain. Many of these woodlands contain a diversity of native species and terrain (coniferous, deciduous and mixed forest, swamp communities and marsh communities), therefore this criteria is met.

Woodlands identified as significant are shown on Figure 9. Differences between Figure 9 of this ER and Figure 2 (Significant Woodlands) from the Mohawks of the Bay of Quinte 2006 Natural Heritage Report are believed to be the result of changes in woodland cover since the 2006 report was completed (i.e., removal of woodlands for cultural purposes or new woodland as the result of naturalization of meadows and agricultural fields).

Please note the identification of woodland significance within the Study Area was based on available background information and observations at the time (i.e., roadside assessment, aerial interpretation and available past reports). To confirm significance of woodlands within the Study Area, additional studies are recommended such as field verification of vegetation community types and boundaries with property access and/or the use of geospatial and remote sensing analysis.





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**SIGNIFICANT NATURAL FEATURES**  
FIGURE 9 MAP 1 OF 10

- Preliminary Preferred Route
- Project Footprint (30 m)
- Study Area (125 m)
- Wooded Area
- Significant Woodland
- Watercourse (MNR)
- Unmapped Watercourse (Dillon, 2022)
- Candidate Significant Wildlife Habitat**
  - Bat Maternity Colonies
  - Turtle Wintering Area
  - Amphibian Breeding Habitat

SCALE 1:5,500  
0 25 50 100 Metres



MAP DRAWING INFORMATION:  
DATA PROVIDED BY MNR

MAP CREATED BY: ZJB / DDR  
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MOHAWKS OF THE BAY OF QUINTE  
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COMMUNITY EXPANSION PROJECT

SIGNIFICANT NATURAL FEATURES

FIGURE 9 MAP 2 OF 10

- Preliminary Preferred Route
- Project Footprint (30 m)
- Study Area (125 m)
- Wooded Area
- Significant Woodland
- Watercourse (MNRF)

Candidate Significant Wildlife Habitat

- Reptile Hibernaculum
- Raptor Wintering Area
- Bat Maternity Colonies
- Turtle Wintering Area
- Migratory Butterfly Stopover Area
- Amphibian Breeding Habitat

SCALE 1:5,500  
0 25 50 100 Metres



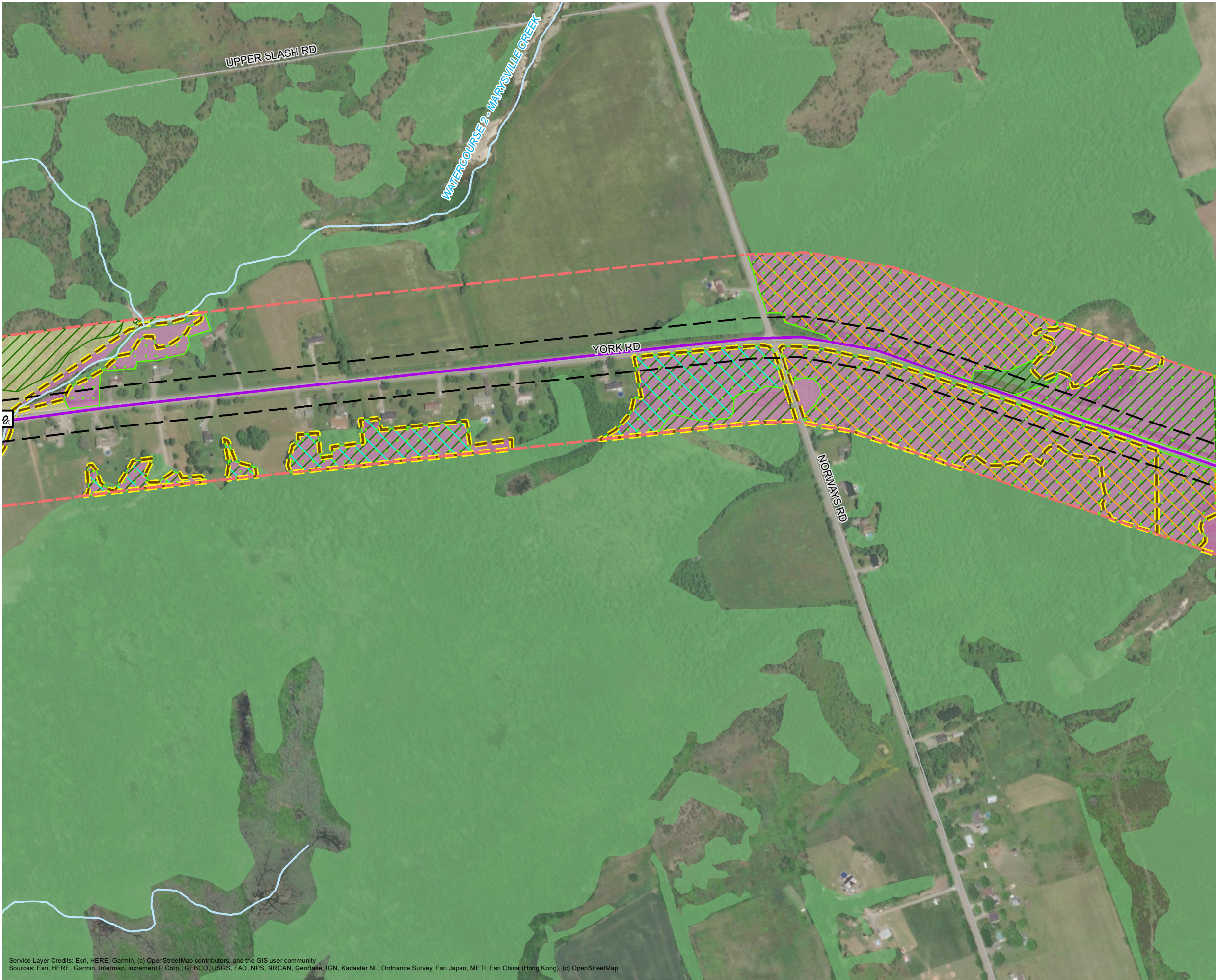
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COMMUNITY EXPANSION PROJECT

**SIGNIFICANT NATURAL FEATURES**

FIGURE 9 MAP 3 OF 10

- Preliminary Preferred Route
- Project Footprint (30 m)
- Study Area (125 m)
- Wooded Area
- Significant Woodland
- Watercourse (MNRF)

**Candidate Significant Wildlife Habitat**

- Reptile Hibernaculum
- Bat Maternity Colonies
- Turtle Wintering Area
- Migratory Butterfly Stopover Area
- Landbird Migratory Stopover Aarea
- Amphibian Breeding Habitat
- Woodland Area-Sensitive Bird Breeding Habitat

SCALE 1:5,500  
0 25 50 100 Metres



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SIGNIFICANT NATURAL FEATURES

FIGURE 9 MAP 4 OF 10

- Preliminary Preferred Route
- Project Footprint (30 m)
- Study Area (125 m)
- Wooded Area
- Significant Woodland
- Watercourse (MNR)

Candidate Significant Wildlife Habitat

- Raptor Wintering Area
- Bat Maternity Colonies
- Turtle Wintering Area
- Migratory Butterfly Stopover Area
- Amphibian Breeding Habitat

SCALE 1:5,500  
0 25 50 100 Metres



MAP DRAWING INFORMATION:  
DATA PROVIDED BY MNR

MAP CREATED BY: ZJB / DDR  
MAP CHECKED BY: AL  
MAP PROJECTION: NAD 1983 CSRS UTM Zone 18N

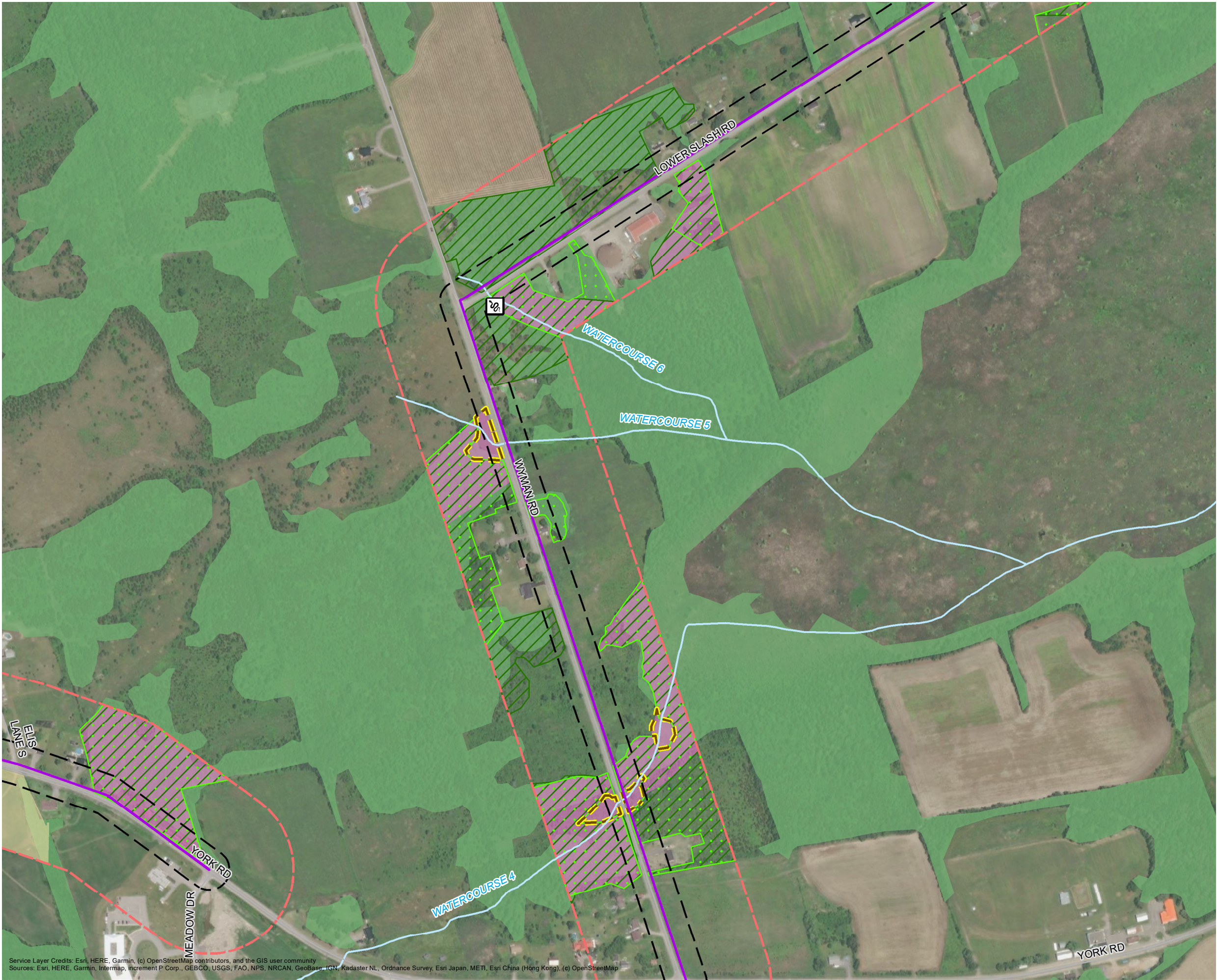


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- Preliminary Preferred Route
- Project Footprint (30 m)
- Study Area (125 m)
- Wooded Area
- Significant Woodland
- Watercourse (MNRF)

**Candidate Significant Wildlife Habitat**

- Reptile Hibernaculum
- Bat Maternity Colonies
- Turtle Wintering Area
- Migratory Butterfly Stopover Area
- Amphibian Breeding Habitat

SCALE 1:5,500  
0 25 50 100 Metres



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SIGNIFICANT NATURAL FEATURES

FIGURE 9 MAP 6 OF 10

- Preliminary Preferred Route
- Project Footprint (30 m)
- Study Area (125 m)
- Wooded Area
- Significant Woodland
- Watercourse (MNR)

Candidate Significant Wildlife Habitat

- Raptor Wintering Area
- Bat Maternity Colonies
- Migratory Butterfly Stopover Area
- Amphibian Breeding Habitat

SCALE 1:5,500  
0 25 50 100 Metres



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**SIGNIFICANT NATURAL FEATURES**

FIGURE 9 MAP 7 OF 10

- Preliminary Preferred Route
- Project Footprint (30 m)
- Study Area (125 m)
- Wooded Area
- Significant Woodland
- Watercourse (MNRF)

**Candidate Significant Wildlife Habitat**

- Raptor Wintering Area
- Bat Maternity Colonies
- Migratory Butterfly Stopover Area
- Amphibian Breeding Habitat

SCALE 1:5,500  
0 25 50 100 Metres



MAP DRAWING INFORMATION:  
DATA PROVIDED BY MNRF

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MAP CHECKED BY: AL  
MAP PROJECTION: NAD 1983 CSRS UTM Zone 18N



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MOHAWKS OF THE BAY OF QUINTE  
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COMMUNITY EXPANSION PROJECT

SIGNIFICANT NATURAL FEATURES

FIGURE 9 MAP 8 OF 10

- Preliminary Preferred Route
- Project Footprint (30 m)
- Study Area (125 m)
- Wooded Area
- Significant Woodland
- Watercourse (MNRF)

Candidate Significant Wildlife Habitat

- Bat Maternity Colonies
- Turtle Wintering Area
- Amphibian Breeding Habitat

SCALE 1:5,500  
0 25 50 100 Metres



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SIGNIFICANT NATURAL FEATURES

FIGURE 9 MAP 9 OF 10

- Preliminary Preferred Route
- Project Footprint (30 m)
- Study Area (125 m)
- Wooded Area
- Significant Woodland
- Watercourse (MNRF)

Candidate Significant Wildlife Habitat

- Reptile Hibernaculum
- Bat Maternity Colonies
- Turtle Wintering Area
- Amphibian Breeding Habitat

SCALE 1:5,500  
0 25 50 100 Metres



MAP DRAWING INFORMATION:  
DATA PROVIDED BY MNRF

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MAP CHECKED BY: AL  
MAP PROJECTION: NAD 1983 CSRS UTM Zone 18N



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COMMUNITY EXPANSION PROJECT

SIGNIFICANT NATURAL FEATURES

FIGURE 9 MAP 10 OF 10

- Preliminary Preferred Route
- Project Footprint (30 m)
- Study Area (125 m)
- Existing Enbridge Station (Deseronto PRS)
- Wooded Area
- Watercourse (MNR)

SCALE 1:5,500  
0 25 50 100 Metres



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#### 4.2.5 Areas of Natural and Scientific Interest and Other Environmentally Significant Areas

Based on a review of background resources and available agency mapping, the Study Area was identified as occurring within the Napanee Limestone Plain IBA. IBAs are discrete sites that support specific groups of birds such as threatened birds, large groups of birds, and birds restricted by range or by habitat. IBAs are identified using an internationally agreed upon set of criteria based on being globally important for the conservation of bird populations (Birds Canada 2022b). The Napanee Limestone Plain IBA meets the criteria of being a nationally significant area containing species and species habitat for threatened species and species recognized as being congregatory.

There are no designated Areas of Natural and Scientific Interest in the Study Area.

#### 4.2.6 Terrestrial Habitat and Vegetation

Preliminary ELC surveys were conducted using the ELC System for Southern Ontario, and second approximation classifications (Lee et al. 1998, Lee 2008) were used to classify and map ecological communities within the Study Area. The ecological community polygon boundaries were determined through a review of aerial photography and further refined during the preliminary field investigations conducted on May 19, 2022. Current ELC mapping is provided on Figure 7. These surveys were completed during the early growing season without soil assessment and access was restricted to the existing road right-of-way, therefore natural features were generally only identified to the community class level of the ELC hierarchy.

Lands within the Study Area most adjacent to the location of the proposed pipeline route were generally primarily classified as 'constructed' or 'cultural' communities; however, many natural communities also occur adjacent to the proposed pipeline route. Cultural communities most frequent within the Study Area included residential properties (CVR) and agricultural fields such as annual row crops (OAGM1) and perennial cover crops (OAGM2). Most of the residential properties (CVR) were observed to contain expansive manicured lawns that often connected, forming large contiguous areas of manicured greenspaces. Natural communities encountered within the Study Area were diverse in habitat type, with the most frequent community types identified as deciduous thicket (THD), graminoid meadow (MEG), Mixed Swamp (SWM), Ash Mineral Deciduous Swamp (SWDM2) and Dry - Fresh Red Cedar Coniferous Woodland (FOCM2-1). Based on historical aerial imagery many of the deciduous thicket (THD) and graminoid meadow (MEG) communities identified within the Study Area are believed to have originated as agricultural fields which have been left to naturalize. A full list of ELC community types, and their total area within the Study Area is provided in Table 4.

**Table 4: ELC Communities within the Study Area**

| ELC Community Code      | ELC Community Type                         | Area (ha) |
|-------------------------|--|-----------|
| <b>CULTURAL</b>         |  |           |
| CGL                     | Green Lands                                | 10.22     |
| CGL_4                   | CGL_4-Recreational                         | 0.61      |
| CVC                     | Commercial and Institutional               | 5.74      |
| CVC_1                   | Business Sector                            | 9.06      |
| CVC_3                   | Heavy Industry (Pipeline transfer Station) | 0.14      |
| CVI_1                   | Transportation and Utilities               | 20.89     |
| CVR                     | Residential                                | 135.05    |
| IAG                     | Agricultural Infrastructure                | 0.33      |
| IAGM1                   | Agricultural Buildings                     | 1.05      |
| OAGM1                   | Annual Row Crops                           | 24.78     |
| OAGM2                   | Perennial Cover Crops (Hayfield)           | 29.8      |
| OAGM4                   | Open Pasture                               | 8.5       |
| TAGM4                   | Treed Pasture                              | 3.86      |
| TAGM5                   | Fencerow                                   | 5.59      |
| <b>NATURAL (UPLAND)</b> |  |           |
| <i>Forest</i>           |  |           |
| FOC                     | FOC-Coniferous Forest                      | 1.01      |
| FOCM2-1                 | Dry – Fresh Red Cedar Coniferous Forest    | 2.41      |
| FOD                     | Deciduous Forest                           | 8.32      |
| FODM4-9                 | Dry - Fresh Basswood Deciduous Forest      | 0.48      |
| FODM7                   | Fresh – Moist Lowland Deciduous Forest     | 0.98      |
| FOM                     | Mixed Forest                               | 1.89      |
| <i>Woodland</i>         |  |           |
| WOC                     | Coniferous Woodland                        | 0.08      |
| WOCM1-1                 | Dry - Fresh Red Cedar Coniferous Woodland  | 9.9       |
| WOD                     | Deciduous Woodland                         | 3.33      |
| WOM                     | Mixed Woodland                             | 3.09      |
| <i>Thicket</i>          |  |           |
| THC                     | Coniferous Thicket                         | 5.67      |
| THD                     | Deciduous Thicket                          | 43.59     |
| THM                     | Mixed Thicket                              | 3.24      |



| ELC Community Code       | ELC Community Type                   | Area (ha) |
|--------------------------|--------------------------------------|-----------|
| <i>Meadow</i>            |                                      |           |
| ME                       | Meadow                               | 0.9       |
| MEF                      | Forb Meadow                          | 0.29      |
| MEG                      | Graminoid Meadow                     | 30.72     |
| MEM                      | Mixed Meadow                         | 5.99      |
| <i>NATURAL (WETLAND)</i> |                                      |           |
| <i>Swamp</i>             |                                      |           |
| SWC                      | Coniferous Swamp                     | 0.26      |
| SWD                      | Deciduous Swamp                      | 7.81      |
| SWDM1-2                  | Bur Oak Mineral Deciduous Swamp Type | 1.09      |
| SWDM2                    | Ash Mineral Deciduous Swamp          | 13.6      |
| SWDM2-1                  | Black Ash Mineral Deciduous Swamp    | 4.01      |
| SWDM3                    | Maple Mineral Deciduous Swamp        | 4.51      |
| SWM                      | Mixed Swamp                          | 10.49     |
| SWT                      | Thicket Swamp                        | 1.11      |
| <i>Marsh</i>             |                                      |           |
| MAM                      | Meadow Marsh                         | 3.36      |
| MAS                      | Shallow Marsh                        | 1.63      |
| <i>AQUATIC SYSTEM</i>    |                                      |           |
| OAQ                      | Open Aquatic                         | 3.08      |

#### 4.2.7 Wildlife and Wildlife Habitat

A records review of the sources provided in Table 2 identified a number of flora and fauna species with historical occurrence records within the vicinity of the Study Area. The majority of species identified are considered Secure or Common (S-Rank of S5 or S4) in the province of Ontario. A complete list of flora and fauna species identified through background review is included in Appendix M.

##### 4.2.7.1

#### Flora

Roadside botanical surveys were conducted throughout the Study Area as part of the preliminary field investigations. Species nomenclature was based on the Ontario Plant List (Newmaster *et al.* 1998). Surveys consisted of roadside area searches and scanning the interior of adjacent habitats from the extents of the existing road right-of-way to determine the presence, richness and abundance of flora species within the Study Area.



S-Ranks are rarity rankings applied to species at the provincial level. Generally, S-Ranks of S1 to S3 (i.e., extremely rare to rare-uncommon in Ontario), as defined by the NHIC, could qualify as rare.

A total of 74 plant species were documented in the Study Area (Appendix M) during the roadside botanical surveys conducted on May 19, 2022, of which 44 species (58%) are listed as native species considered to be common (S-Rank of S4) to very common (S-Rank of S5) in the province of Ontario, and 30 species (42%) are listed as introduced species (S-Rank of SE, SNA, and SU). One species, Black Ash (*Fraxinus nigra*) is listed as Endangered provincially (S-rank of S4); however, the MECP has temporarily suspended protections for Black Ash for a period of two years from the time the species was added to the Species at Risk in Ontario (SARO) list and during this time, proponents will not need to seek authorizations for activities that impact Black Ash and its habitat. A full list of the botanical species observed within the Study Area during the preliminary field investigation and associated S-Rank has been included in Appendix M.

In addition to those species observed during the roadside botanical surveys, five flora species were identified during background review which have also been included in Appendix M and flagged with an asterisk. Of the five flora species, Butternut (*Juglans cinerea*), considered to be rare to uncommon in Ontario (S-Rank of S3) and Ogden's Pondweed (*Potamogeton ogdenii*), considered to be possibly extirpated (historical) (S-Rank of SH), are listed as Endangered provincially and federally and Four-leaved Milkweed (*Asclepias quadrifolia*), considered to be extremely rare in Ontario (S-Rank of S1), is listed Endangered provincially. The remaining flora species are considered SCC: Limestone Hedge-hyssop (*Gratiola quartermantiae*) (S-Rank of S2), and Prairie Dropseed (*Sporobolus heterolepis*) (S-Rank of S3).

#### 4.2.7.2

#### Fauna

- **Birds** – the records review identified 165 bird species as having the potential to occur in the vicinity of the Study Area. Of the 165 species, 10 are listed as SAR provincially and 11 are listed as SAR federally; 9 species are considered SCC.
- **Fish** – the records review identified 9 fish species as having the potential to occur in the vicinity of the Study Area. Of the 9 species, 4 are listed as SAR provincially and 3 are listed as SAR federally; 5 species are considered SCC.
- **Mollusc** – the records review identified 2 mollusc species as having the potential to occur in the vicinity of the Study Area. Of the 2 species, both are considered SCC.
- **Mammals** – the records review identified 47 species as having the potential to occur in the general vicinity of the Study Area. Of the 47 species, 5 are listed as SAR provincially and 4 are listed as SAR federally; none are considered SCC.
- **Herptiles** – the records review identified 10 species as having the potential to occur in the general vicinity of the Study Area. Of the 10 species, 2 are listed as SAR provincially and 3 are listed as SAR federally; 7 species are considered a SCC.



- Lepidoptera – the records review identified 4 species as having the potential to occur in the general vicinity of the Study Area. Of the 4 species, 2 are listed as SAR provincially and 2 species are considered a SCC.

A complete list of fauna species identified through background review is included in Appendix M.

#### 4.2.7.3 Incidental Wildlife Observations

Incidental wildlife observations recorded during the preliminary field investigation completed on May 19, 2022 included live wildlife observations and indirect wildlife evidence (i.e., sounds, scat, tracks, feeding sites, road kill, dens, and dams).

In total, 22 bird species (American Crow [*Corvus brachyrhynchos*], American Goldfinch [*Carduelis tristis*], American Robin [*Turdus migratorius*], Black-capped Chickadee [*Poecile atricapillus*], Blue Jay [*Cyanocitta cristata*], Brown Thrasher [*Toxostoma rufum*], Canada Goose [*Branta canadensis*], Common Grackle [*Quiscalus quiscula*], Eastern Meadowlark [*Sturnella magna*], Eastern Phoebe [*Sayornis phoebe*], Eastern Wood-Pewee [*Contopus virens*], European Starling [*Sturnus vulgaris*], Gray Catbird [*Dumetella carolinensis*], Great Crested Flycatcher [*Myiarchus crinitus*], Mourning Dove [*Zenaida macroura*], Northern Cardinal [*Cardinalis cardinalis*], Rock Pigeon [*Columba livia*] and Wild Turkey [*Meleagris gallopavo*]) and one mammal species (Eastern Cottontail [*Sylvilagus floridanus*]) were observed during the preliminary field investigation. With the exception of Eastern Wood-Pewee, which is considered Special Concern federally and provincially and Eastern Meadowlark which is considered Threatened provincially and federally, all of the species observed are considered common in Ontario.

#### 4.2.7.4 Wildlife Habitat

Wildlife habitat is defined as an area where plants, animals and other organisms live, including areas where species concentrate at a vulnerable point in their life cycle, and areas that are important to migratory and non-migratory species (MNR 2000). To assist planning authorities, the NDMNRF developed the Significant Wildlife Habitat (SWH) Technical Guide (MNR 2000) that provides information on the identification, description, and prioritization of SWH in Ontario. To account for the ecological diversity across the province, NDMNRF developed the SWH Ecoregional Criteria Schedules to support the SWH Technical Guide. These schedules are specific to each geographic area of each ecoregion. The Study Area is located in Ecoregion 6E (Lake Simcoe-Rideau); under the Criteria Schedule for Ecoregion 6E (MNR 2015), SWH has been divided into four broad categories consisting of:

- Seasonal concentration areas;
- Rare vegetation communities or specialized habitats for wildlife;
- Animal movement corridors; and,
- Habitats of species of conservation concern excluding the habitats of endangered and threatened species.



Wildlife habitat has been initially identified within the Study Area through the preliminary field investigations and ELC mapping. Areas identified as having the potential to support SWH have been identified as candidate SWH. Candidate SWH identified within the Study Area is predominantly associated with natural or naturalized features (i.e., woodlands, meadows, wetlands and watercourses) that overlap with the Study Area, as shown on Figure 9. Vegetation community types described in the following four broad categories, below, are outlined above in Table 4.

### **1. Seasonal Concentration Areas**

Seasonal concentration areas are sites that support large numbers of a species to gather together at one time of the year, or where several species congregate. Based on the initial site assessment conducted on May 19, 2022, five types of candidate seasonal concentration areas have the potential to occur in the Study Area: candidate raptor wintering areas, candidate bat maternity colonies, candidate turtle wintering areas, and candidate reptile hibernacula.

- **Raptor wintering areas:** this habitat provides a combination of fields and woodlands that provide roosting, foraging and resting habitat for wintering raptors. These sites must be greater than 20 ha with a combination of forest and upland (e.g., meadow and thicket) habitat. Areas that have the potential to support raptor wintering areas within the Study Area, based on the above criteria, include a combination of the following communities: FOD, FOM, THM, MEG, OAGM2 and OAGM4.
- **Bat maternity colonies:** supported by mixed and deciduous forests and swamps with large diameter dead or dying trees with cavities. Areas that have the potential to support bat maternity habitat include treed communities in the Study Area (all ELC communities that start with the classification FOD, FOM, WOD, WOM, SWD and SWM).
- **Turtle wintering areas:** occur in permanent waterbodies and large wetlands with sufficient dissolved oxygen. Areas that have the potential to support turtle wintering in the Study Area include shallow marsh (MAS), large watercourses (Watercourse 2 – Marysville Creek) and open aquatic (OAO) areas where the depth of water during the overwintering period is such that it will not freeze.
- **Reptile hibernacula:** may be found in/under rock piles, slopes, stone fences or crumbling foundations. Areas in the Study Area that have the potential to support reptile hibernacula generally include box culverts or concrete bridges or areas of surficial fractured bedrock. One concrete bridge located at Watercourse 2 (Marysville Creek), one box culvert at Watercourse 8, and one area of surficial fractured bedrock south of Lower Slash Road by Watercourse 6 were identified.
- **Migratory butterfly stopover areas:** these areas typically have a combination of field/thicket and forest reaching areas of at least 10 ha that provide butterflies with a location to rest prior to long migration south. Areas that have the potential to support stopover areas within the Study Area include a combination of the following communities: FOD, THC, THD and MEG.

### **2. Rare Vegetation Communities or Specialized Habitats**

This category consists of two separate components. Rare habitats are those with vegetation communities that are considered rare in the province. S-Ranks are rarity rankings applied to species at the provincial level. Generally, S-Ranks of S1 to S3 (i.e., extremely rare to rare-uncommon in Ontario), as



defined by the NHIC, could qualify. Specialized habitats are microhabitats that are critical to some wildlife species. Based on the initial site assessment conducted in May 2022, two specialized habitats have the potential to occur in the Study Area: candidate amphibian breeding habitat (woodland and wetland) and woodland area-sensitive bird breeding habitat.

- Amphibian breeding habitat (woodland and wetland): suitable specialized habitat type includes wetlands, ponds or areas that are likely to support vernal (seasonal) pooling that are within or adjacent to a woodland or solely exist as a wetland feature. Areas in the Study Area that have the potential to support amphibian breeding habitat based on adjacency to wetlands or community structure include: FOD, FODM7, FOCM2-1, FOM, SWM, SWD, SWDM2, SWDM2-1 SWDM3 and SWM.
- **Woodland area-sensitive bird breeding habitat:** provides habitats where interior forest birds breed, typically in larger mature forest stands with interior forest habitat that is at least 200 m from forest edge. These habitats are usually at least 60 years in age or are at least 30 ha in size. Two areas within the Study Area were considered for this habitat type based on community structure (forest interior habitat) observed within and adjacent to the Study Area. Both occur at the intersection of York Road and Norways Road and include the following communities: SWM, SWDM2 and SWDM3.

### 3. Animal Movement Corridors

Animal movement corridors are elongated, naturally-vegetated parts of the landscape used by animals to move from one habitat to another, and are typically identified by NDMNRF and/or planning authorities. Based on the initial site assessment conducted in May 2022, including the records reviewed in Table 2, no animal movement corridors were identified.

### 4. Habitat for Species of Conservation Concern

The SWH Technical Guide (MNR 2000) defines SCC as globally, nationally, provincially, regionally, or locally rare (S-Rank of S1, S2 or S3) but does not include provincial SAR (species listed as Threatened or Endangered under the *ESA*); species identified as provincially and/or federally-listed SAR are further defined and discussed in Section 4.2.8. SCC include the following:

- Species that are assigned a conservation rank of S1-S3 by the NHIC;
- Species that are listed as Special Concern on the SARO list;
- Species that are listed as Special Concern, Threatened, or Endangered on Schedule 1 of SARA; and/or,
- Species that are classified as Special Concern, Threatened, or Endangered by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) but have not yet been added to Schedule 1 of SARA.

Based on the results of the records review, a total of 25 SCC were identified as having the potential to occur in the general vicinity of the Study Area (Appendix M). However, when taking into account the preliminary ELC results for the Study Area and the habitat requirements associated with each species, the Study Area was ultimately assessed as having the potential to support 19 of the 25 SCC identified in the records review. Consideration of SCC habitat potentially present in the Study Area was determined



based on existing land uses, the general habitat requirements of the species, and the ELC communities identified during the preliminary field investigations conducted on May 19, 2022. SCC species names, status, and general habitat descriptions are provided in Table 5.



**Table 5: Species of Conservation Concern with Potential to Occur in the Study Area**

| Scientific Name              | Common Name         | Federal Status <sup>1</sup> | Provincial Status <sup>2</sup> | S-Rank <sup>3</sup> | Info Source <sup>4</sup> | General Habitat Requirements   |
|------------------------------|---------------------|-----------------------------|--------------------------------|---------------------|--------------------------|--|
| <i>BIRDS</i>                 |                     |                             |                                |                     |                          |  |
| <i>Ammodramus savannarum</i> | Grasshopper Sparrow | SC                          | SC                             | S4B                 | OBBA                     | Well-drained grassland or prairie with low cover of grasses, taller weeds on sandy soil; hayfields or weedy fallow fields; uplands with ground vegetation of various densities; perches for singing; requires tracts of grassland > 10 ha. Potential habitat for this species may occur in the meadow or open pasture and perennial cover crops (hayfield) communities (ME, MEG, MEM, OAGM2 and OAGM4) within the Study Area where suitable habitat size requirements are met considering the potential for suitable adjacent habitat to the Study Area. |
| <i>Euphagus carolinus</i>    | Rusty Blackbird     | SC                          | SC                             | S4B                 | IBA                      | Openings in coniferous woodlands bordering bodies of water; tree-bordered marshes, beaver ponds, muskegs, bogs, fens or wooded swamps; stream borders with alder, willow; wooded island on lakes. Potential habitat for this species may occur in marsh (MAS and MAM) communities bordered by woodland communities, any of the coniferous forest communities nearby wetlands (FOC, FOCM2-1, WOC, WOCM1-1) and wooded swamp communities within the Study Area (e.g. SWD, SWM, SWDM2. etc.).   |



| Scientific Name                   | Common Name           | Federal Status <sup>1</sup> | Provincial Status <sup>2</sup> | S-Rank <sup>3</sup> | Info Source <sup>4</sup> | General Habitat Requirements   |
|-----------------------------------|-----------------------|-----------------------------|--------------------------------|---------------------|--------------------------|--|
| <i>Melanerpes erythrocephalus</i> | Red-headed Woodpecker | THR                         | SC                             | S4B                 | CBC, OBBA                | Open, deciduous forest with little understory; fields or pasture lands with scattered large trees; wooded swamps; orchards, small woodlots or forest edges; groves of dead or dying trees; feeds on insects and stores nuts or acorns for winter; loss of habitat is limiting factor; requires cavity trees with at least 40 cm diameter-at-breast-height (dbh); requires about 4 ha for a territory. Potential habitat for this species may occur in select treed communities such as deciduous woodland, swamp or forest communities (WOD, FOD, FODM4-9, SWD, SWDM2, SWDM3 and TAGM4). |
| <i>Hylocichla mustelina</i>       | Wood Thrush           | THR                         | SC                             | S4B                 | OBBA                     | Carolinian and Great Lakes-St. Lawrence forest zones; undisturbed moist mature deciduous or mixed forest with deciduous sapling growth; near pond or swamp; hardwood forest edges; must have some trees higher than 12 m. Potential habitat for this species may occur in the deciduous or mixed forest communities (FOD or FOM) that are adjacent to deciduous swamp communities (SWD, SWDM2 and SWDM3).  |
| <i>Contopus virens</i>            | Eastern Wood-pewee    | SC                          | SC                             | S4B                 | OBBA                     | Lives in the mid-canopy layer of forest clearings and edges of deciduous and mixed forests. It is most abundant in intermediate-age mature forest stands with little understory vegetation. Eastern Wood-pewee was heard calling east of the intersection of York Road and Norways Road. Potential habitat for this species may occur in the deciduous or mixed forest communities within the Study Area that contain edge habitat such as the following: FOD, FODM7, FODM4-9, and FOM.  |



| Scientific Name                      | Common Name   | Federal Status <sup>1</sup> | Provincial Status <sup>2</sup> | S-Rank <sup>3</sup> | Info Source <sup>4</sup> | General Habitat Requirements  |
|--------------------------------------|---|-----------------------------|--------------------------------|---------------------|--------------------------|---|
| <i>FISH</i>                          |   |                             |                                |                     |                          |   |
| <i>Esox americanus vermiculatus</i>  | Grass Pickerel  | SC                          | SC                             | S3                  | MBQTK                    | Found in wetlands, ponds, slow-moving streams and shallow bays of larger lakes with warm, shallow, clear water and an abundance of aquatic plants. Potential habitat may occur in the open aquatic (OAO) and meadow marsh (MAM) communities associated with Watercourse 2 (Marysville Creek) and Watercourse 8.   |
| <i>Ichthyomyzon unicuspis pop. 1</i> | Silver Lamprey (Great Lakes - Upper St. Lawrence populations) | SC                          | SC                             | S3                  | DFO, NHIC                | Require clear water so they can find fish hosts, relatively clean stream beds of sand and organic debris for larvae to live in, and unrestricted migration routes for spawning. Potential habitat may occur in the open aquatic (OAO) communities associated with the Salmon River in the Study Area.   |
| <i>Moxostoma carinatum</i>           | River Redhorse  | SC                          | SC                             | S2                  | DFO                      | The River redhorse inhabits medium to large-size rivers that have substantial flows. In May and June, adults migrate from deeper, slower moving pools and run habitats to shallow riffle-run habitats having coarse substrate and moderate to swift flow. Potential habitat may occur in the open aquatic (OAO) communities associated with the Salmon River in the Study Area. |
| <i>Percina copelandi</i>             | Channel Darter  | END                         | SC                             | S2                  | DFO, NHIC, MBQTK         | Clean streams and lakes with sandy or gravel bottoms. During the breeding season in late spring, it prefers riffle areas with fairly fast moving water but spends the winter in deeper, calmer water. Potential habitat may occur in the open aquatic (OAO) communities associated with the Salmon River.   |



| Scientific Name            | Common Name                                  | Federal Status <sup>1</sup> | Provincial Status <sup>2</sup> | S-Rank <sup>3</sup> | Info Source <sup>4</sup> | General Habitat Requirements  |
|----------------------------|--|-----------------------------|--------------------------------|---------------------|--------------------------|---|
| <b>HERPTILES</b>           |  |                             |                                |                     |                          |   |
| <i>Chelydra serpentina</i> | Snapping Turtle                              | SC                          | SC                             | S3                  | MBQTK, NHIC, ON          | Permanent, semi-permanent fresh water; marshes, swamps or bogs; rivers and streams with soft muddy banks or bottoms; often uses soft soil or clean dry sand on south-facing slopes for nest sites; may nest at some distance from water; often hibernate together in groups in mud under water; home range size ~28 ha. Potential habitat may occur in shallow and deep water habitat within the Study Area such as the open aquatic (OAO) communities associated with the Salmon River, Watercourse 2 (Marysville Creek), Watercourse 8 and marsh communities (MAM and MAS). |
| <i>Thamnophis sauritus</i> | Eastern Ribbonsnake (Great Lakes population) | SC                          | SC                             | S3                  | ON                       | Sunny grassy areas with low dense vegetation near bodies of shallow permanent quiet water; wet meadows, grassy marshes or sphagnum bogs; borders of ponds, lakes or streams; hibernates in groups. This species is semi-aquatic and most frequently found along wetland edges. Potential habitat includes a variety of habitats such as meadows nearby wetlands and bodies of water (MEG, MEF, MEM), marshes (MAM, MAS), and swamps (SWD, SWDM2, SWDM1-2, SWDM2-1, SWDM3 and SWM).  |



| Scientific Name              | Common Name         | Federal Status <sup>1</sup> | Provincial Status <sup>2</sup> | S-Rank <sup>3</sup> | Info Source <sup>4</sup> | General Habitat Requirements   |
|------------------------------|---------------------|-----------------------------|--------------------------------|---------------------|--------------------------|--|
| <i>Graptemys geographica</i> | Northern Map Turtle | SC                          | SC                             | S3                  | MBQTK, ON                | This species is found in rivers and lakeshores, with a preference for slow moving currents, muddy bottoms, and abundant aquatic vegetation. Through spring and summer, it needs suitable basking sites on emergent rocks and fallen trees, with an unobstructed view from which it can drop immediately into the water if startled. Northern Map Turtle require high-quality water that supports the female's mollusc prey. In winter, individuals hibernate on the bottom of deep, slow-moving sections of river. Potential habitat may occur in the open aquatic (OAO) communities associated with the Salmon River. |
| <i>Sternotherus odoratus</i> | Eastern Musk Turtle | SC                          | SC                             | S3                  | ON                       | Aquatic, except when laying eggs; shallow slow moving water of lakes, streams, marshes and ponds; hibernate in underwater mud, in banks or in muskrat lodges; eggs are laid in debris or under stumps or fallen logs at water's edge; often share nest sites; sometimes congregate at hibernation sites; not readily observed. Potential habitat may occur in the open aquatic (OAO) communities associated with the Salmon River, Watercourse 2 (Marysville Creek), Watercourse 8 and marsh communities (MAM and MAS).  |



| Scientific Name                     | Common Name   | Federal Status <sup>1</sup> | Provincial Status <sup>2</sup> | S-Rank <sup>3</sup> | Info Source <sup>4</sup> | General Habitat Requirements  |
|-------------------------------------|---|-----------------------------|--------------------------------|---------------------|--------------------------|---|
| <i>Plestiodon fasciatus pop. 2</i>  | Common Five-lined Skink (Southern Shield population)                          | SC                          | SC                             | S3                  | ON                       | Habitat includes rocky outcrops, sand dunes, riparian forests, open deciduous forests, and cut-over woodlots. The species is found in a variety of habitat conditions with different climates and plant associations, although the species is limited to climates of relatively higher humidity and generally occurs in early successional habitats. Within forest habitats, the species is most abundant in well-drained, open, rocky areas. In Ontario the species is considered a habitat specialist, showing strong associations with particular microhabitats. The species basks on sunny rocks and logs to maintain a preferred body temperature (28 - 36 degrees C). The Southern Shield population is generally found underneath rocks on open bedrock in forests. Dependent on the potential existence of open sunny areas with sand and/or exposed bedrock, potential habitat may occur in the upland deciduous forest habitats (FOD, FODM4-9 and FOM). |
| <i>Pseudacris triseriata pop. 1</i> | Western Chorus Frog (Great Lakes / St. Lawrence - Canadian Shield Population) | THR                         | --                             | S3                  | NHIC, ON                 | Requires both terrestrial and aquatic habitats in close proximity. Terrestrial habitat consists mostly of humid prairie, moist woods, or meadows. For reproduction and tadpole development, this species typically requires seasonally dry, temporary ponds that are devoid of predators such as fish. Potential habitat may occur in the marsh, swamp communities (MAM, MAS, SWM, SWD, SWDM2 and SWDM3) or within meadow (MEG and MEM) communities where temporary seasonal flooding may occur due to topography or due to proximity to surface water features identified within the Study Area (Watercourses 1 to 8).   |



| Scientific Name            | Common Name         | Federal Status <sup>1</sup> | Provincial Status <sup>2</sup> | S-Rank <sup>3</sup> | Info Source <sup>4</sup> | General Habitat Requirements  |
|----------------------------|---------------------|-----------------------------|--------------------------------|---------------------|--------------------------|---|
| <b>LEPIDOPTERA</b>         |                     |                             |                                |                     |                          |   |
| <i>Danaus plexippus</i>    | Monarch             | SC                          | SC                             | S2N,S4B             | OBA, MBQTK               | Monarch are commonly found in meadow habitats, abandoned farmland and roadsides where milkweed and wildflowers (such as goldenrods, asters and purple loosestrife) are abundant. Potential habitat may occur in meadow communities (ME, MEG, MEM and MEF).  |
| <i>Pieris virginiensis</i> | West Virginia White | --                          | SC                             | S3                  | OBA                      | The West Virginia White lives in moist, deciduous woodlots. This butterfly requires a supply of toothwort, a small, spring-blooming plant that is a member of the mustard family, since it is the only food source for larvae. This butterfly is rare in Ontario, where it has been seen at about 50 sites, the majority of which are in central and southern Ontario, but also extends north to Manitoulin and St. Joseph islands. The largest populations are in the western Lake Ontario region. Potential habitat may occur in association with the deciduous woodland communities (FOD, FODM4-9, FODM7 and WOD). |
| <b>MOLLUSC</b>             |                     |                             |                                |                     |                          |   |
| <i>Ligumia nasuta</i>      | Eastern Pondmussel  | SC                          | SC                             | S1                  | NHIC, MBQTK              | Typically found in sheltered areas of lakes and in slow-moving areas of rivers and canals with sand or mud bottoms. Potential habitat may occur in the open aquatic (OAO) communities associated with the Salmon River, Watercourse 2 (Marysville Creek) and Watercourse 8.   |



| Scientific Name     | Common Name    | Federal Status <sup>1</sup> | Provincial Status <sup>2</sup> | S-Rank <sup>3</sup> | Info Source <sup>4</sup> | General Habitat Requirements  |
|---------------------|----------------|-----------------------------|--------------------------------|---------------------|--------------------------|---|
| <i>Villosa iris</i> | Rainbow mussel | SC                          | SC                             | S2S3                | DFO, NHIC                | Prefers small to medium-sized rivers with a moderate to strong current and sand, rocky, or gravel bottoms. It is found in or near riffle areas and along the edges of vegetation in water less than one metre deep. Potential habitat may occur in the open aquatic (OAO) communities associated with the Salmon River, Watercourse 2 (Marysville Creek) and Watercourse 8. |

## Notes:

- 1 Federal SARA (END = Endangered; THR = Threatened; SC = Special Concern)
- 2 Provincial ESA (SC = Special Concern)
- 3 Ontario S-Rank (S4 = apparently secure; S3 = vulnerable; S2 = imperilled; S1 = extremely rare in Ontario; ? = inexact or uncertain; B = breeding status; N = non-breeding status)
- 4 Information sources include: DFO = Department of Fisheries and Oceans; IBA = Important Bird and Biodiversity Area; MBQTK = Mohawks of the Bay of Quinte Traditional Knowledge; MWH = Mammals of the Western Hemisphere; NHIC = Natural Heritage Information Centre; OBA = Ontario Butterfly Atlas; OBBA = Ontario Breeding Bird Atlas; ON = Ontario Nature: Ontario Reptile and Amphibian Atlas



#### 4.2.8 Species at Risk

##### 4.2.8.1 Regulatory Context

###### Federal

The federal *SARA* applies to species listed under Schedule 1 of the Act on federal lands and/or aquatic species, as well as migratory birds listed under both Schedule 1 and the *Migratory Birds Convention Act, 1994*. Under *SARA*, species listed on Schedule 1 receive species protection (Section 32) and residence protection (Section 33). Critical Habitat is defined under Section 2 of the *SARA* as “the habitat that is necessary for the survival or recovery of a listed wildlife species and that is identified as the species’ critical habitat in the recovery strategy or in an action plan for the species”.

Nearly the entirety of the Study Area occurs on Tyendinaga Mohawk Territory lands which are considered federal lands; therefore, only SAR listed under the *SARA* were considered on those lands.

###### Provincial

The provincial *ESA* applies to species listed as Extirpated, Endangered, or Threatened under O. Reg. 230/08 on private and public lands under provincial jurisdiction, and provides both species protection (Section 9) and habitat protection (Section 10). Under the Act, habitat is defined as either General Habitat or Regulated Habitat. General Habitat is defined as the area a species currently depends on, either directly or indirectly, to carry out its life processes (under clause 2(1)(b) of the Act), including: dens, nests, hibernacula, or other residences. General Habitat does not include areas where a species once lived and/or where it may be re-introduced. General Habitat protection is in place until a regulation is made prescribing an area as Regulated Habitat.

Regulated Habitat is the area prescribed for a species in a habitat regulation (under clause 2(1)(a) of the Act), and may include: specific features/boundaries and areas where the species lives, used to live, or is believed to be capable of living.

The community of Shannonville and the road right-of-way for Highway 2 and Highway 49 which accounts for a minor portion of the Study Area occurs outside of Tyendinaga Mohawk Territory lands; therefore, only provincial SAR under the *ESA* were considered for these specific lands.

##### 4.2.8.2 Potential for Species at Risk in the Study Area

Based on the results of the records review, a total of 29 provincial/federal SAR were identified as having the potential to occur in the general vicinity of the Study Area (Appendix M). However, when taking into account the preliminary ELC results for the Study Area, the habitat requirements associated with each of the 29 SAR identified during the background review, and the relatively old age of several of the SAR occurrence records, the Study Area was ultimately assessed as having the potential to support 20 of the

29 SAR identified in the records review (Table 2). Consideration of potential SAR/SAR habitat that may be present in the Study Area (Table 6) was determined based on the general habitat requirements of the species and the ELC communities identified during the preliminary field investigations conducted in May 2022.

The MECP and the ECCC will be consulted during the design phase to determine whether species-specific surveys may be required to support potential permitting and/or approvals under the *ESA* and the *SARA*, respectively.



**Table 6: Provincially and Federally Listed Species at Risk with Potential to Occur in the Study Area**

| Scientific Name              | Common Name       | Federal Status <sup>1</sup> | Provincial Status <sup>2</sup> | S-Rank <sup>3</sup> | Info Source <sup>4</sup> | General Habitat Requirements   |
|------------------------------|-------------------|-----------------------------|--------------------------------|---------------------|--------------------------|--|
| <b>BIRDS</b>                 |                   |                             |                                |                     |                          |  |
| <i>Ammodramus henslowii</i>  | Henslow's Sparrow | END                         | END                            | SHB                 | IBA                      | Large, fallow, grassy area with ground mat of dead vegetation, dense herbaceous vegetation, ground litter and some song perches; neglected weedy fields; wet meadows; cultivated uplands; a moderate amount of moisture needed; requires a minimum tract of grassland of 40 ha, but usually in areas > 100 ha. Potential habitat for this species may occur in the meadow or open pasture and perennial cover crops (hayfield) communities (ME, MEG, MEM, OAGM2 and OAGM4) within the Study Area where suitable habitat size requirements are met considering the potential for suitable adjacent habitat to the Study Area. |
| <i>Dolichonyx oryzivorus</i> | Bobolink          | THR                         | THR                            | S4B                 | MBQTK, NHIC, OBBA        | Large, open expansive grasslands with dense ground cover; hayfields, meadows or fallow fields; marshes; requires tracts of grassland > 50 ha. Potential habitat for this species may occur in the meadow or open pasture and perennial cover crops (hayfield) communities (ME, MEG, MEM, OAGM2 and OAGM4) within the Study Area where suitable habitat size requirements are met considering the potential for suitable adjacent habitat to the Study Area.  |
| <i>Hirundo rustica</i>       | Barn Swallow      | THR                         | THR                            | S4B                 | MBQTK, OBBA              | Farmlands or rural areas; cliffs, caves, rock niches; buildings or other man-made structures for nesting; open country near body of water. Potential habitat for this species may occur in the meadow or open pasture and perennial cover crops (hayfield) communities (ME, MEG, MEM, OAGM2 and OAGM4) where suitable contiguous habitat occurs adjacent to the Study Area and where suitable nesting structures occur (i.e., old barns, culverts or bridge structures).   |

| Scientific Name                    | Common Name       | Federal Status <sup>1</sup> | Provincial Status <sup>2</sup> | S-Rank <sup>3</sup> | Info Source <sup>4</sup> | General Habitat Requirements   |
|------------------------------------|-------------------|-----------------------------|--------------------------------|---------------------|--------------------------|--|
| <i>Hylocichla mustelina</i>        | Wood Thrush       | THR                         | SC                             | S4B                 | OBBA                     | Carolinian and Great Lakes-St. Lawrence forest zones; undisturbed moist mature deciduous or mixed forest with deciduous sapling growth; near pond or swamp; hardwood forest edges; must have some trees higher than 12m. Potential habitat for this species may occur in the deciduous or mixed forest communities (FOD or FOM) that are adjacent to deciduous swamp communities (SWD, SWDM2 and SWDM3).   |
| <i>Ixobrychus exilis</i>           | Least Bittern     | THR                         | THR                            | S4B                 | MBQTK, OBBA              | Deep marshes, swamps, bogs; marshy borders of lakes, ponds, streams, ditches; dense emergent vegetation of cattail, bulrush, sedge; nests in cattails; intolerant of loss of habitat and human disturbance. Potential habitat for this species may occur in the marsh (MAM and MAS) or thicket swamp communities (SWT) that have interior habitat away from human disturbance (e.g., the communities associated with Big Marsh-Wetland PSW, Sucker Creek Tributaries PSW where interior habitat is present).         |
| <i>Lanius ludovicianus migrans</i> | Loggerhead Shrike | END                         | END                            | S2B                 | IBA, NHIC, OBBA          | Grazed pasture, marginal farmland with scattered hawthorn shrubs, hedgerows; fence posts, wires and associated low-lying wetland; located on core areas of limestone plain adjacent to Canadian Shield; greatest threat is fragmentation of suitable habitat due to natural succession; needs at least 25 ha of suitable habitat. Potential habitat for this species may occur in the thicket communities (THD, THM and THC) where suitable habitat size requirements are met within and adjacent to the Study Area. |



| Scientific Name                   | Common Name           | Federal Status <sup>1</sup> | Provincial Status <sup>2</sup> | S-Rank <sup>3</sup> | Info Source <sup>4</sup> | General Habitat Requirements  |
|-----------------------------------|-----------------------|-----------------------------|--------------------------------|---------------------|--------------------------|---|
| <i>Melanerpes erythrocephalus</i> | Red-headed Woodpecker | THR                         | SC                             | S4B                 | CBC, OBBA                | Open, deciduous forest with little understory; fields or pasture lands with scattered large trees; wooded swamps; orchards, small woodlots or forest edges; groves of dead or dying trees; feeds on insects and stores nuts or acorns for winter; loss of habitat is limiting factor; requires cavity trees with at least 40 cm dbh; require about 4 ha for a territory. Potential habitat for this species may occur in select treed communities such as deciduous woodland, swamp or forest communities (WOD, FOD, FODM4-9, SWD, SWDM2, SWDM3 and TAGM4). |
| <i>Rallus elegans</i>             | King Rail             | END                         | END                            | S2B                 | IBA, OBBA                | Large, shallow, fresh water marshes, marshy borders of lakes and ponds with abundant vegetation; an 'edge' species; territories are 0.3 to 0.5 ha; loss of large marshes in the south is limiting to this species. Potential habitat for this species may occur in the marsh (MAM and MAS) communities in the Study Area, particularly the communities associated with Big Marsh-Wetland PSW and Sucker Creek Tributaries PSW.  |
| <i>Sturnella magna</i>            | Eastern Meadowlark    | THR                         | THR                            | S4B                 | MBQTK, NHIC OBBA         | Open, grassy meadows, farmland, pastures, hayfields or grasslands with elevated singing perches; cultivated land and weedy areas with trees; old orchards with adjacent, open grassy areas > 10 ha in size. Potential habitat for this species may occur in the meadow or open pasture and perennial cover crops (hayfield) communities (ME, MEG, MEM, OAGM2 and OAGM4) within the Study Area where suitable habitat size requirements are met considering the potential for suitable adjacent habitat to the Study Area.                                   |

| Scientific Name                       | Common Name  | Federal Status <sup>1</sup> | Provincial Status <sup>2</sup> | S-Rank <sup>3</sup> | Info Source <sup>4</sup> | General Habitat Requirements   |
|---------------------------------------|--|-----------------------------|--------------------------------|---------------------|--------------------------|--|
| <i>FISH</i>                           |  |                             |                                |                     |                          |  |
| <i>Acipenser fulvescens</i><br>pop. 3 | Lake Sturgeon<br>(Great Lakes - Upper St. Lawrence River population) | --                          | END                            | S2                  | MBQTK, NHIC              | Inhabits larger rivers and lakes with soft bottoms of mud, sand, or gravel. They are usually found at depths of 5 m to 20 m. They spawn in relatively shallow, fast-flowing water (usually below waterfalls, rapids, or dams) with gravel and boulders at the bottom. However, they will spawn in deeper water where habitat is available. They also are known to spawn on open shoals in large rivers with strong currents. Potential habitat may occur in the open aquatic (OAO) communities associated with the Salmon River in the Study Area. |
| <i>Ammocrypta pellucida</i>           | Eastern Sand Darter (Ontario population)                             | THR                         | END                            | S2                  | MECP                     | Prefers shallow habitats in lakes, streams, and rivers with clean, sandy bottoms. Potential habitat may occur in the open aquatic (OAO) communities associated with the Salmon River in the Study Area.  |
| <i>Anguilla rostrata</i>              | American Eel   | --                          | END                            | S1?                 | MBQTK, NHIC              | Inhabits both salt and freshwater environments in areas of open water. Potential habitat may occur in the open aquatic (OAO) communities associated with the Salmon River, Marysville Creek or Watercourse 8 within the Study Area.  |
| <i>Percina copelandi</i>              | Channel Darter   | END                         | SC                             | S2                  | MBQTK, NHIC, DFO         | Clean streams and lakes with sandy or gravel bottoms. During the breeding season in late spring, it prefers riffle areas with fairly fast moving water but spends the winter in deeper, calmer water. Potential habitat may occur in the open aquatic (OAO) communities associated with the Salmon River in the Study Area.  |



| Scientific Name                     | Common Name   | Federal Status <sup>1</sup> | Provincial Status <sup>2</sup> | S-Rank <sup>3</sup> | Info Source <sup>4</sup> | General Habitat Requirements   |
|-------------------------------------|---|-----------------------------|--------------------------------|---------------------|--------------------------|--|
| <b>HERPTILES</b>                    |   |                             |                                |                     |                          |  |
| <i>Emydoidea blandingii</i>         | Blanding's Turtle   | THR                         | THR                            | S3                  | MBQTK, ON                | Shallow water marshes, bogs, ponds or swamps, or coves in larger lakes with soft muddy bottoms and aquatic vegetation; basks on logs, stumps, or banks; surrounding natural habitat is important in summer as they frequently move from aquatic habitat to terrestrial habitats; hibernates in bogs; not readily observed. Potential habitat may occur in the marsh, swamp communities (MAM, MAS, SWM, SWD, SWDM2 and SWDM3) as well as surface water features such as the Salmon River, Watercourse 2 (Marysville Creek) and Watercourse 8 in the Study Area. This species is known to cover long distances between mating and nesting sites and may incidentally occur in other terrestrial habitat such as meadows and forests. |
| <i>Pseudacris triseriata pop. 1</i> | Western Chorus Frog (Great Lakes / St. Lawrence - Canadian Shield Population) | THR                         | --                             | S3                  | NHIC, ON                 | Requires both terrestrial and aquatic habitats in close proximity. Terrestrial habitat consists mostly of humid prairie, moist woods, or meadows. For reproduction and tadpole development, this species typically requires seasonally dry, temporary ponds that are devoid of predators such as fish. Potential habitat may occur in the marsh, swamp communities (MAM, MAS, SWM, SWD, SWDM2 and SWDM3) or within meadow (MEG and MEM) communities where temporary seasonal flooding may occur due to topography or due to proximity to surface water features identified within the Study Area (Watercourses 1 to 8).  |

| Scientific Name               | Common Name                 | Federal Status <sup>1</sup> | Provincial Status <sup>2</sup> | S-Rank <sup>3</sup> | Info Source <sup>4</sup> | General Habitat Requirements  |
|-------------------------------|-----------------------------|-----------------------------|--------------------------------|---------------------|--------------------------|---|
| <b>MAMMALS</b>                |                             |                             |                                |                     |                          |   |
| <i>Myotis leibii</i>          | Eastern Small-footed Myotis | --                          | END                            | S2S3                | MWH                      | This bat species roosts in caves, mine shafts, crevices, or buildings that are in or near woodland areas. Hibernation occurs in cold dry caves or mines. Maternity colonies are commonly noted in rocky outcrops, or less commonly, buildings. Hunting for insects typically occurs in forest and/or open vegetated communities. Potential habitat for this species may occur in the treed communities (FOD, FODM7, SWD and SWDM2) in the Study Area.   |
| <i>Myotis lucifugus</i>       | Little Brown Myotis         | END                         | END                            | S4                  | MWH                      | This species uses caves, quarries, tunnels, hollow trees, or buildings for roosting. Hibernation occurs in humid caves, whereas maternity sites are selected in dark warm areas such as attics and barns. Individuals typically hunt for insect prey primarily in wetlands, forest edges, or any other open area such as meadow or riparian areas. Potential habitat for this species may occur in the treed/woodland communities (FOD, FODM4-9, FODM7, FOM, WOD, WOM, SWD and SWDM2, SWDM2-1, SWDM3, SWM) in the Study Area.                     |
| <i>Myotis septentrionalis</i> | Northern Myotis             | END                         | END                            | S3                  | MWH                      | This species hibernates in mines or caves during the winter; during the summer season, males roost alone and females form maternity colonies of up to 60 adults. Roosting habitat occurs in houses, or other man-made structures, but more commonly prefers hollow trees or under loose bark. Individuals typically hunt for insects within forests, below canopy. Potential habitat for this species may occur in the treed/woodland communities (FOD, FODM4-9, FODM7, FOM, WOD, WOM, SWD and SWDM2, SWDM2-1, SWDM3, SWM) within the Study Area. |



| Scientific Name               | Common Name     | Federal Status <sup>1</sup> | Provincial Status <sup>2</sup> | S-Rank <sup>3</sup> | Info Source <sup>4</sup> | General Habitat Requirements  |
|-------------------------------|-----------------|-----------------------------|--------------------------------|---------------------|--------------------------|---|
| <i>Pipistrellus subflavus</i> | Tri-colored Bat | END                         | END                            | S3?                 | MWH                      | This species can be found in a variety of forested habitats where day roosts and maternity colonies occur in older forests, and less commonly in barns or other structures. Hibernation occurs in caves. Individuals forage over water and along streams in the forest. Potential habitat for this species may occur in the treed/woodland communities (FOD, FODM4-9, FODM7, FOM, WOD, WOM, SWD and SWDM2, SWDM2-1, SWDM3, SWM) within the Study Area.  |
| <b>VASCULAR PLANTS</b>        |                 |                             |                                |                     |                          |   |
| <i>Juglans cinerea</i>        | Butternut       | END                         | END                            | S3?                 | MBQTK, TOC               | This species usually grows alone or in small groups in deciduous forests. It prefers moist, well-drained soil and is often found along streams. It is also found on well-drained gravel sites and rarely on dry rocky soil. This species does not do well in the shade, and often grows in sunny openings and near forest edges. Potential habitat for this species may occur in the treed/woodland communities (FOD, FODM4-9, FODM7, FOM, WOD, WOM, SWD and SWDM2, SWDM2-1, SWDM3, SWM) within the Study Area. |

**Notes:**

- 1 Federal SARA (THR = Threatened, END = Endangered)
- 2 Provincial ESA (THR = Threatened, END = Endangered, SC = Special Concern)
- 3 Ontario S-Rank (S4 = apparently secure; S3 = vulnerable; S2 = imperilled; S1 = extremely rare in Ontario; ? = inexact or uncertain; B = breeding status; N = non-breeding status)
- 4 Information sources include: DFO = Fisheries and Oceans Canada; IBA = Important Bird and Biodiversity Area; MECP = Ministry of the Environment, Conservation and Parks; MBQTK = Mohawks of the Bay of Quinte Traditional Knowledge; MWH = Mammals of the Western Hemisphere; NHIC = Natural Heritage Information Centre; OBA = Ontario Butterfly Atlas; OBBA = Ontario Breeding Bird Atlas; ON = Ontario Nature: Ontario Reptile and Amphibian Atlas; TOC = Trees of Canada

## 4.3

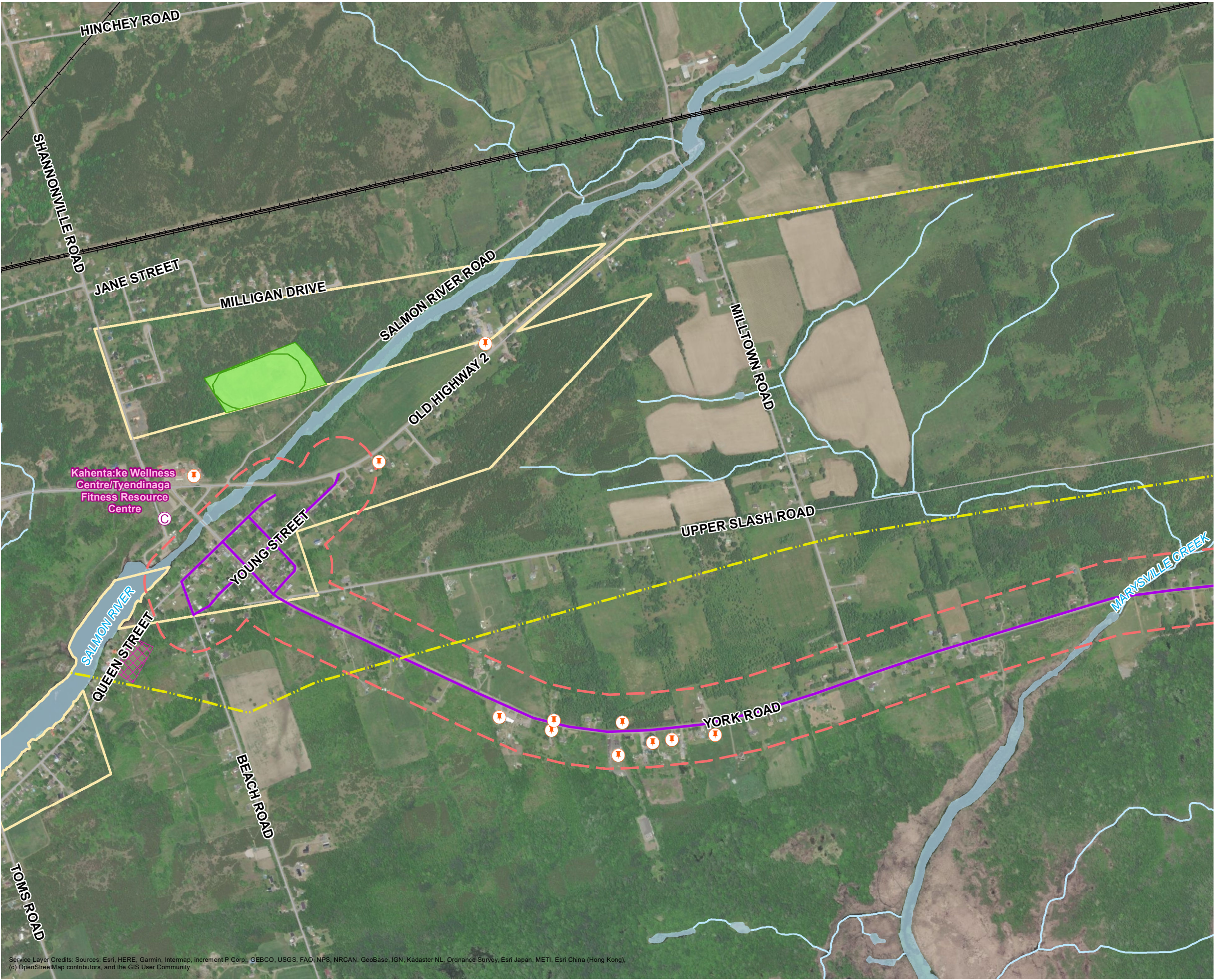
## Socio-Economic Environment

This subsection provides baseline information on the following components:

- Planning Policies;
- Existing and Planned Land Use;
- Population, Employment, and Economic Activities;
- Human Occupancy and Resource Use;
- Infrastructure and Services;
- Indigenous Community Land and Resource Use; and,
- Archaeological and Cultural Heritage Resources.

Socio-economic features are shown on Figure 10.





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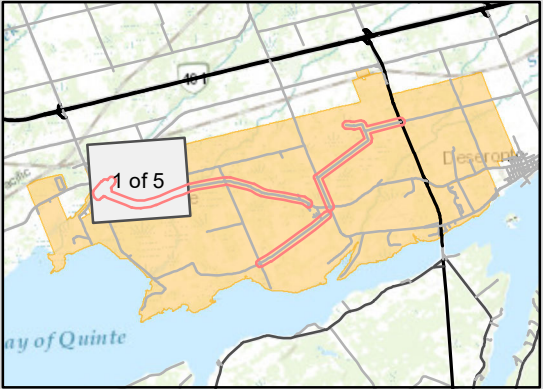
ENBRIDGE GAS INC.

MOHAWKS OF THE BAY OF QUINTE  
AND SHANNONVILLE  
COMMUNITY EXPANSION PROJECT

SOCIO-ECONOMIC FEATURES

FIGURE 10 MAP 1 of 5

- Preliminary Preferred Route
- Study Area (125 m)
- Commercial
- Community Service
- Local Road
- Rail Line
- Watercourse
- Existing Transmission Line
- Building Footprint
- Cultural Facilities (Cemetery)
- Park / Greenspace
- Waterbody
- Tyendinga Mohawk Territory Boundary



SCALE 1:12,500

0 50 100 200 Metres



MAP DRAWING INFORMATION:  
DATA PROVIDED BY MNR, OSM

MAP CREATED BY: MEC/ZJB  
MAP CHECKED BY: AL  
MAP PROJECTION: NAD 1983 CSRS UTM Zone 18N



PROJECT: 22-3566  
STATUS: DRAFT  
DATE: 2022-06-29





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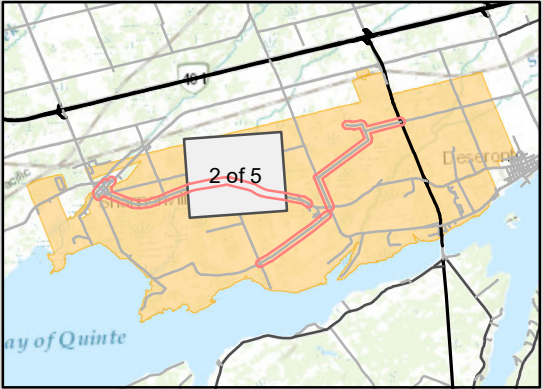
ENBRIDGE GAS INC.

MOHAWKS OF THE BAY OF QUINTE  
AND SHANNONVILLE  
COMMUNITY EXPANSION PROJECT

SOCIO-ECONOMIC FEATURES

FIGURE 10 MAP 2 of 5

- Preliminary Preferred Route
- Study Area (125 m)
- Local Road
- Rail Line
- Watercourse
- Existing Transmission Line
- Quarry
- Waterbody
- Tyendinaga Mohawk Territory Boundary



SCALE 1:12,500

0 50 100 200 Metres



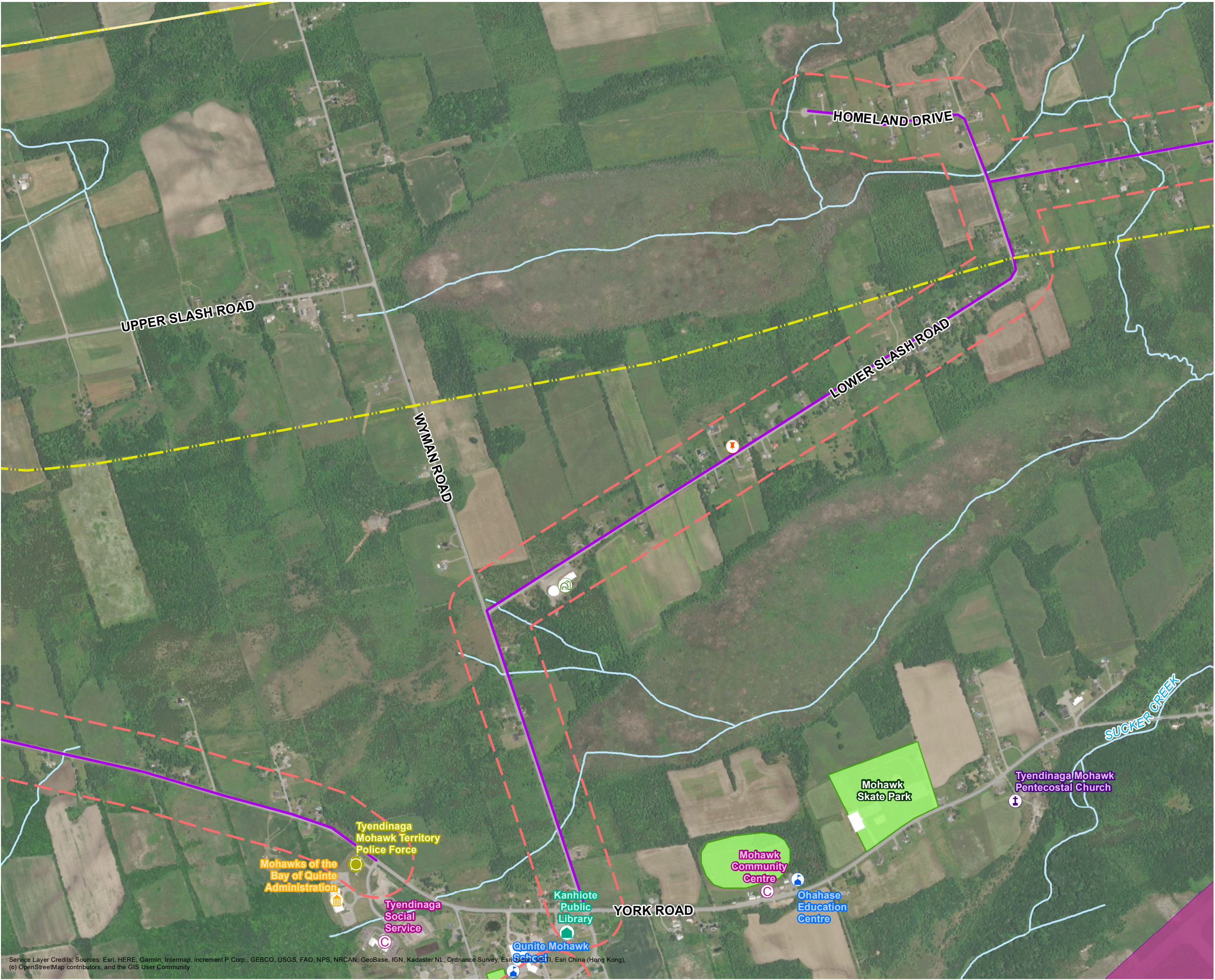
MAP DRAWING INFORMATION:  
DATA PROVIDED BY MNR, OSM

MAP CREATED BY: MEC/ZJB  
MAP CHECKED BY: AL  
MAP PROJECTION: NAD 1983 CSRS UTM Zone 18N



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FILE LOCATION: K:\2022\223566 EGI MBQ\Product\Client\Project Overview\F10\_Socio\_Economic.mxd



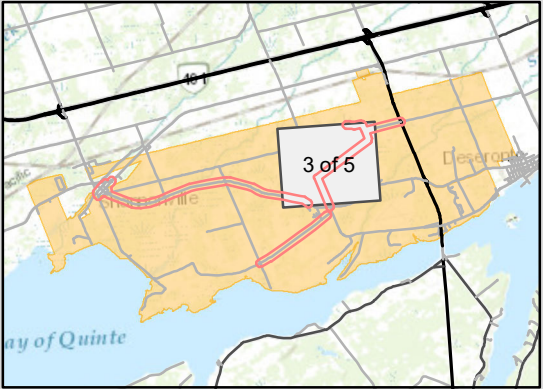
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MOHAWKS OF THE BAY OF QUINTE  
AND SHANNONVILLE  
COMMUNITY EXPANSION PROJECT

**SOCIO-ECONOMIC FEATURES**

FIGURE 10 MAP 3 of 5

- Preliminary Preferred Route
- Study Area (125 m)
- Church
- Agricultural
- Commercial
- Community Service
- Library
- Police Station
- School
- Town Hall
- Local Road
- Watercourse
- Existing Transmission Line
- Building Footprint
- Park / Greenspace
- Airfield
- Tyendinaga Mohawk Territory Boundary



SCALE 1:12,500

0 50 100 200 Metres



MAP DRAWING INFORMATION:  
DATA PROVIDED BY MNR, OSM

MAP CREATED BY: MEC/ZJB  
MAP CHECKED BY: AL  
MAP PROJECTION: NAD 1983 CSRS UTM Zone 18N

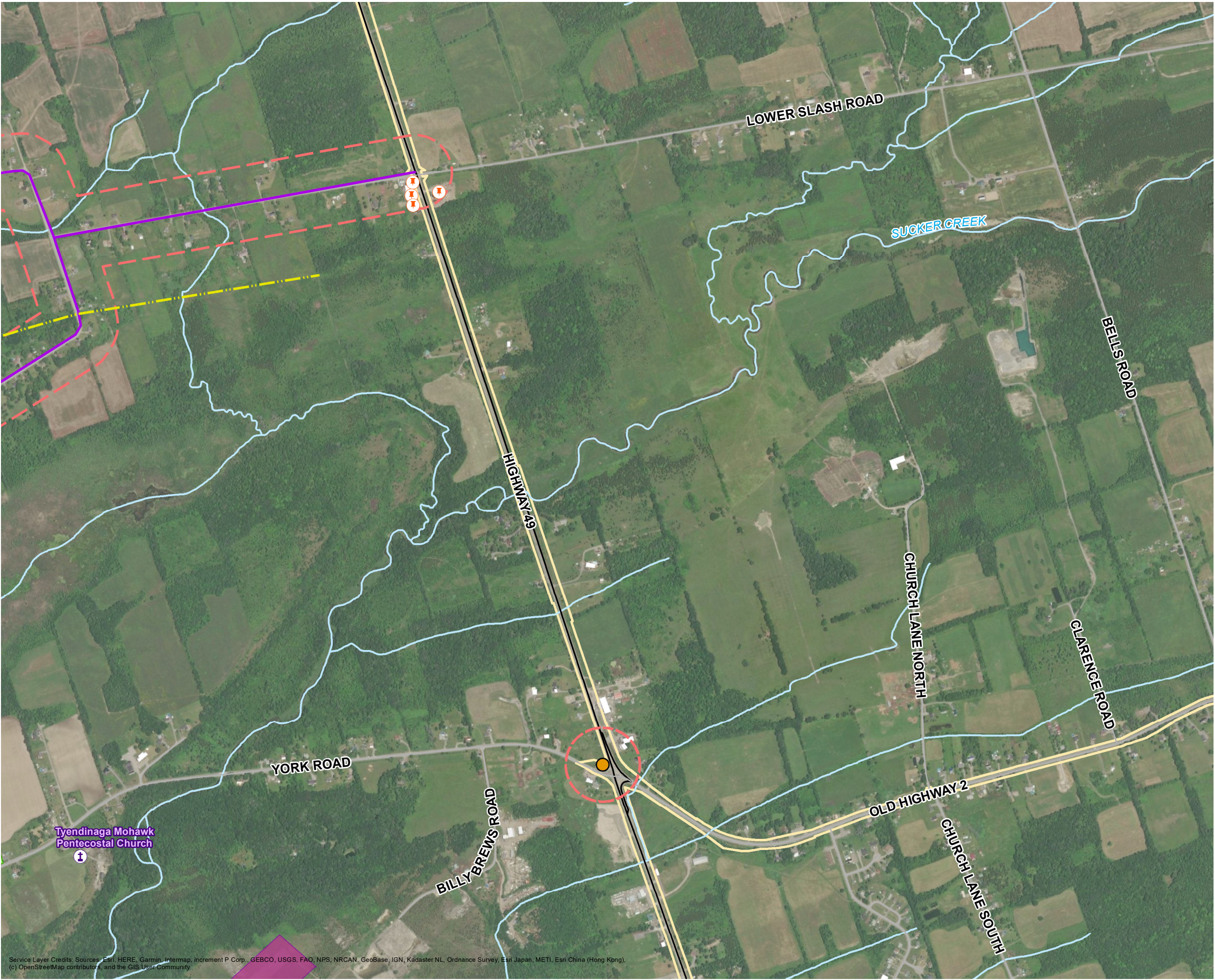


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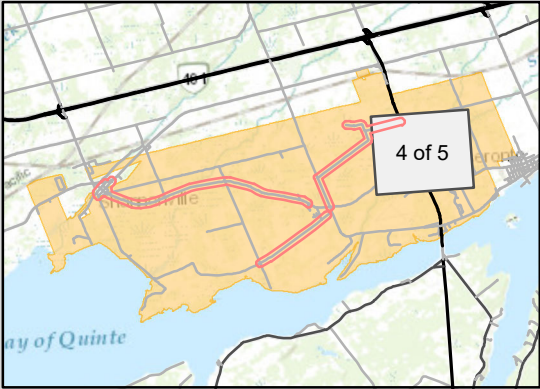
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MOHAWKS OF THE BAY OF QUINTE  
AND SHANNONVILLE  
COMMUNITY EXPANSION PROJECT

**SOCIO-ECONOMIC FEATURES**

FIGURE 10 MAP 4 of 5

- Existing Enbridge Station (Deseronto PRS)
- Preliminary Preferred Route
- Study Area (125 m)
- Church
- Commercial
- Highway
- Local Road
- Watercourse
- Existing Transmission Line
- Building Footprint
- Park / Greenspace
- Airfield
- Tyendinaga Mohawk Territory Boundary



SCALE 1:12,500

0 50 100 200 Metres



MAP DRAWING INFORMATION:  
DATA PROVIDED BY MNR, OS

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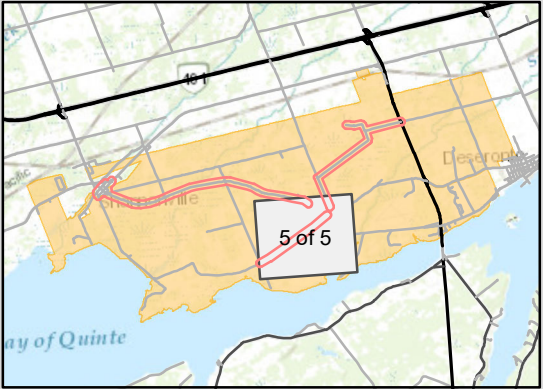
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MOHAWKS OF THE BAY OF QUINTE  
AND SHANNONVILLE  
COMMUNITY EXPANSION PROJECT

SOCIO-ECONOMIC FEATURES

FIGURE 10 MAP 5 of 5

- Preliminary Preferred Route
- Study Area (125 m)
- Church
- Commercial
- Community Service
- Library
- Police Station
- School
- Town Hall
- Local Road
- Watercourse
- Building Footprint
- Cultural Facilities (Cemetery)
- Park / Greenspace
- Quarry
- Waterbody
- Tyendinaga Mohawk Territory Boundary



SCALE 1:12,500

0 50 100 200 Metres



MAP DRAWING INFORMATION:  
DATA PROVIDED BY MNRF, OSM

MAP CREATED BY: MEC/ZJB  
MAP CHECKED BY: AL  
MAP PROJECTION: NAD 1983 CSRS UTM Zone 18N



PROJECT: 22-3566

STATUS: DRAFT

DATE: 2022-06-29



### 4.3.1 Planning Policies

Municipalities are the primary decision-makers for their communities and are required to implement provincial policies through municipal official plans and planning-related decisions.

Plans and policies reviewed as part of the Project include:

- Provincial Policy Statement, 2020 (MMAH 2020); and,
- County of Hastings Official Plan (Hastings County 2018a).

It is noted that approximately 15.4 km of pipeline for the Project is within the Tyendinaga Mohawk Territory, which is subject to federal regulations under the *Indian Act* (R.S.C., 1985, c. I-5).

#### 4.3.1.1 Indian Act

The *Indian Act* was enacted in 1867 and shapes and governs the management of lands and rights to resources. The Mohawks of the Bay of Quinte are currently in the process of entering into the Reserve Land Environmental Management Program (RLEMP), a comprehensive land management program that funds First Nations to manage all aspects of land, the environment and natural resources on reserve. The RLEMP enables First Nations to exercise greater control and decision-making with respect to land and environmental management. Under the *Indian Act*, the Minister delegates his/her authority to implement a RLEMP to individual First Nations who have gone through the eligibility and preparatory processes. The RLEMP does not change or remove First Nations' existing authorities under the *Indian Act*. The RLEMP recognizes the roles that communities play in granting land tenure on reserve under the *Indian Act* and entrenches that role within the program (Mohawks of the Bay of Quinte n.d.[1]).

#### 4.3.1.2 Provincial Policy Statement

The Provincial Policy Statement, 2020 is issued under Section 3 of the *Planning Act* (RSO 1990, c. P.13) and came into effect on May 1, 2020. As with the previous Provincial Policy Statement, 2014, the new policy provides direction on matters of provincial interest related to land use planning and development. According to MMAH (2020), the goals of the proposed changes to the policy were to:

- Encourage an increase in the mix and supply of housing;
- Protect the environment and public safety;
- Reduce barriers and costs for development and provide greater certainty;
- Support rural, northern and Indigenous communities; and,
- Support the economy and job creation.

Natural gas pipelines are defined as "infrastructure" under the Provincial Policy Statement, 2020. The Project is in line with the policy's direction, which states that "healthy, liveable and safe communities are sustained by ensuring that necessary *infrastructure* and public service facilities are or will be available to meet current and projected needs" (MMAH 2020).



## 4.3.1.3

**County of Hastings Official Plan**

The County of Hastings Official Plan was approved by the MMAH in 2018 and guides the growth and physical change in the County. The Official Plan is to exist for a period of 20 years and must accommodate and direct anticipated population and employment growth over this period (Hastings County 2018a).

The County forms the upper-tier level of planning responsibility and the local or “member” municipalities form the lower-tier. The Township of Tyendinaga is a lower-tier municipality within the County and is governed by the policies of the County’s Official Plan in advancing a common planning program.

As stated under Section 1.2.6 of the Official Plan, lands determined to be within the Tyendinaga Mohawk Territory are generally not subject to the policies and mapping of the Official Plan, save and except the policies related to roads still owned and maintained by the County within the Reserve (Hastings County 2018a).

The Project does not conflict with the Strategic Directions of the Official Plan which include: Infrastructure & Public Service Facilities, and Communities with Opportunities (Hastings County 2018a).

## 4.3.2

**Existing and Planned Land Use**

“Schedule A – South” of the County of Hastings Official Plan (2018a) outlines the land use designations for the southern portion of the County. The Project, as a natural gas pipeline per Section 3.7.1 of the Official Plan, is permitted in all land use designations without an amendment to the Official Plan. It is noted that a new utility corridor should “avoid and/or minimize its impact on any lands designated Environmental Protection” (Hastings County 2018a). Based on “Schedule A – South”, a section of the Salmon River northwest of the Study Area is considered an Environmental Protection – Provincially Significant Wetland; however the proposed pipeline route does not cross this land use designation.

For reference, the Study Area overlaps the following land use designation outlined in “Schedule A – South” of the Official Plan (Hastings County 2018a).

- **Hamlet** – According to Section 2.5.1.1, the intent of the Official Plan is to protect and promote Hamlets as traditional rural settlement areas, as well as service and commercial centres. Hamlets are permitted to uses that predominantly consist of low density residential uses, community facilities, commercial uses that serve the needs of local residents and tourists, and “dry” industrial uses. The Study Area overlaps this Hamlet (Shannonville) in the vicinity of Young Street and Queen Street.

The majority of the Project falls within Tyendinaga Mohawk Territory, which is not under Official Plan jurisdiction. The Mohawks of the Bay of Quinte do not currently have a Land Use Plan. Based on satellite

imagery, land uses in Tyendinaga Mohawk Territory include residential, commercial, institutional, industrial and open/agricultural. A quarry is adjacent to York Road (east of Norways Road).

#### 4.3.3 Population, Employment, and Economic Activities

##### 4.3.3.1 Population and Demographics

The County of Hastings is the second largest geographic County in Ontario (Hastings County 2018) and is comprised of 14 member municipalities, including the Township of Tyendinaga (Hastings County 2022a). According to the 2021 Census, the County experienced a 6.8% increase in population between 2016 (136,445) and 2021 (145,746) (Statistics Canada 2022a).

The Township of Tyendinaga experienced a 7.4% increase in population between 2016 (4,226) and 2021 (4,538) (Statistics Canada, 2022b). According to CensusMapper, the population (2021) for the Township within the Study Area was approximately 250 (CensusMapper 2022).

According to the 2021 Census, the Tyendinaga Mohawk Territory experienced a decline of 2.3% in population between 2016 (2,595) and 2021 (2,535) (Statistics Canada 2022c). As of December 2018, band membership was 9,876, with only 22% of members living on-Territory while the remainder live off-Territory (Greer Galloway n.d.).

##### 4.3.3.2 Employment and Economy

Based on the 2016 Census<sup>1</sup>, the County's major sectors include Retail Trade (8,165), Health Care and Social Assistance (7,985), and Manufacturing (7,380). At the lower-tier, the Township of Tyendinaga's major sectors include Health Care and Social Assistance (335), Manufacturing (295), and Retail Trade (290). Tyendinaga Mohawk Territory's major sectors include Retail Trade (175), Health Care and Social Assistance (150), and Construction (135).

The labour participation rate and unemployment rate for the County, Township, and Tyendinaga Mohawk Territory are summarized in Table 7.

**Table 7: Labour Participation Rate & Unemployment Rate (2016 Census)**

| County of Hastings            |                       | Township of Tyendinaga        |                       | Tyendinaga Mohawk Territory   |                       |
|-------------------------------|-----------------------|-------------------------------|-----------------------|-------------------------------|-----------------------|
| Labour Participation Rate (%) | Unemployment Rate (%) | Labour Participation Rate (%) | Unemployment Rate (%) | Labour Participation Rate (%) | Unemployment Rate (%) |
| 57.8                          | 7.1                   | 69.1                          | 6.4                   | 53.3                          | 8.8                   |

<sup>1</sup>Note: 2021 Census data for Labour unavailable as of June 2022.



## 4.3.3.3

**Commercial Activity**

The County's economy is highly oriented towards service-producing sectors, including retail trade, accommodation and food services, utilities and construction, health and social services, and education (Section 4.4; Hasting County n.d.). The County promotes a mix of tourism and local commercial establishments and activities through their "Wildly Authentic" branding (Wildly Authentic Hastings County 2022). At the lower-tier level, the Township of Tyendinaga is primarily an agricultural township and includes a variety of commercial and industrial activities (e.g., retail, construction, accommodations) (Township of Tyendinaga 2020a).

The Study Area falls within the Tyendinaga Mohawk Territory, which supports commercial activities, mainly along York Road (between Young Street and Milltown Road), and at the intersection of Lower Slash Road and Highway 49. The commercial activities in the Study Area include various small local businesses, such as cannabis stores, food outlets (i.e., butcher shop), convenience stores, gas stations, truck rental services, and auto parts stores.

The Tyendinaga Mohawk Airfield is located south of the proposed route (on Airport Road) and supports smaller aircrafts. Based on satellite imagery, an agricultural facility and land are located near the intersection of Lower Slash Road and Wyman Road.

The area immediately adjacent to the Study Area (Shannon Road north of Salmon River Road) has a mix of commercial (gas station, safety equipment supplier, cabinet maker) and community facilities (labour union and wellness centre).

## 4.3.4

**Human Occupancy and Resource Use**

## 4.3.4.1

**Culture, Tourism, and Recreation**Tyendinaga Mohawk Territory

There are limited cultural and recreational services located in the Study Area.

An open space is located within the Study Area and is immediately adjacent to Quinte Mohawk School. There are a variety of parks and open spaces adjacent to the Study Area, including the open space at the Mohawk Community Centre and the Mohawk Skate Park, both on York Road.

A cemetery is located in the Study Area at All Saints' Anglican Church. The cemetery is on both the north and south sides of Ridge Road. Another church (Tyendinaga Mohawk Pentecostal Church) is located outside of the Study Area on York Road.

There are no trails or museums within the Study Area.



### Township of Tyendinaga

Adjacent to Tyendinaga Mohawk Territory, the Township of Tyendinaga has several recreational facilities and tourist attractions, including the Shannonville Motorsport Park (on Old Highway 2 approaching Marysville); the Tyendinaga Township Recreation Complex (north of Highway 401 on McFarlane Road); Briar Fox Golf Club (on Old Highway 2 approaching Marysville); and the Tyendinaga Cavern and Caves (north of Highway 401 on Harmony Road).

The Shannonville World's Fair is held in the Township. The fair began in 1856 and has been run annually by the Shannonville Agricultural Society. The World's Fair is held at the Recreation Complex to celebrate the harvest season (Township of Tyendinaga 2022a).

The South Hastings Connector Trail runs from the Municipality of Tweed, through the Township of Tyendinaga and ends at the Recreation Complex. The trail is 40-50 km in length and can be used by walkers, cyclists, and off-road vehicles (Township of Tyendinaga 2022b). Both the Township of Tyendinaga and the Tyendinaga Mohawk Territory are adjacent to several walking trails and hiking trails, including Massassauga Point Conservation Area (CA), H.R. Frink CA, Vanderwater CA, and Potter's Creek CA (Quinte Conservation 2020a).

There are two cemeteries located adjacent to Tyendinaga Mohawk Territory in the Township: Holy Name of Mary Roman Catholic Cemetery (on Old Highway 2 approaching Marysville), and Christ Church Cemetery (east of Tyendinaga Mohawk Territory on South Church Street).

There are a variety of recreational programs through the Township of Tyendinaga, including the Tyendinaga Township Minor Baseball Association; Youth Baseball League; Youth Soccer League; Adult Softball League; and Adult Beach Volleyball League (Township of Tyendinaga 2020b).

#### **4.3.4.2** Neighbourhoods and Residences

The majority of the proposed pipeline route is adjacent to residential housing. Larger clusters of housing are located primarily in Shannonville along Queen Street, Young Street, Gore Street, and within Tyendinaga Mohawk Territory on Wellness Drive (outside of Study Area). Based on satellite imagery, most residential buildings in the Study Area appear to be low density and predominantly single family homes. Some local businesses are located adjacent and/or within residential housing.

Elders Lodge, an apartment-style accommodation for independent living seniors is located outside of the Study Area at 301 Bayshore Road (Mohawks of the Bay of Quinte n.d.[2]).



### 4.3.5 Infrastructure and Services

#### 4.3.5.1 Existing Linear Infrastructure

The Project footprint encounters various existing linear infrastructure including transportation infrastructure (i.e., local streets, provincial highway), telecommunication utilities (e.g., cables), utility corridors (i.e., transmission line), and water and wastewater infrastructure (i.e., sewer and water lines).

The roads in the Study Area are classified as follows:

- Collector Road/Major Road – includes Old Highway 2, Highway 49, York Road, Beach Road, Ridge Road and Airport Road.
- Secondary Road/Local Road – includes Lower Slash Road and Wyman Road in Tyendinaga Mohawk Territory, and Queen Street/Atsia Court, Colborne Street, Young Street, Gore Street, and Howard Street in Shannonville (Hastings County 2018b).

The majority of roads within the Study Area do not include designated pedestrian walkways or identifiable cycling lanes. It is noted that the Mohawks of the Bay of Quinte Roads Department is responsible for maintaining all road networks on Tyendinaga Mohawk Territory. The total road network under the jurisdiction of the Mohawks of the Bay of Quinte Roads Department equates to approximately 80 km and includes gravel, paved, and surface treated roads (Mohawks of the Bay of Quinte 2022b).

Highway 401 is approximately 2.5 km from the northernmost portion of the Study Area near Shannonville. A Canadian National Railway corridor is approximately 1 km from the northernmost portion of the Study Area near Shannonville.

The proposed pipeline route crosses electrical transmission line corridors twice at the following approximate locations:

- In the vicinity of York Road near the Upper Slash Road intersection; and,
- In the vicinity of Lower Slash Road approaching Highway 49.

Hydro poles are present along Shannonville roadways, and along York Road, Wyman Road, Lower Slash Road, Homeland Drive, and Ridge Road on Tyendinaga Mohawks Territory.

The Mohawks of the Bay of Quinte have also identified corridors of existing and planned watermain development within their territory. This includes the following:

- York Road and Ridge Road (east of Norways Road) – existing watermain distribution piping along these roadways.
- Wymans Road, Lower Slash Road, and Homeland Drive – currently designed and planned for construction in 2022/2023. This construction is also anticipated at Upper Slash Road, Norways Road, Ridge Road (west of Norways Road), and Beach Road (Mohawks of the Bay of Quinte 2022c).



A future phase of watermain development is anticipated for 2023/2024 and includes part of Lower Slash Road and Highway 49.

#### 4.3.5.2 Community Services and Institutions

The County of Hastings is responsible for providing municipal services such as paramedic services, long-term care, children's services, and housing services. The Township of Tyendinaga is responsible for providing municipal services such as fire services, roads, recreation and facilities, and planning services. The Mohawks of the Bay of Quinte are responsible for providing on-Reserve services including health care, water delivery, roads, fire, police, child care, social services, housing, and education.

There are very few community services located directly within the Study Area.<sup>2</sup> The majority of community services are located near the York Road, Wyman Road, and Ridge Road intersection. This includes the following:

- Tyendinaga Mohawk Territory Police Force;
- Tyendinaga Mohawk Council Administration;
- Quinte Mohawk School; and,
- Kanhiote Public Library.

There are other community services in close proximity to the Study Area; however, none are located within the Project footprint of the proposed pipeline route. These services include:

- Tyendinaga Mohawk Council Administration (adjacent to the Police Force);
- Tyendinaga Social Service (adjacent to the administration building);
- Mohawk Community Centre (on York Road, east of Wyman Road);
- Kahenta:ke Wellness Centre (on Shannonville Road, north of Salmon River); and,
- Tyendinaga Fitness Resource Centre (on Shannonville Road, north of Salmon River).

The nearest hospitals with emergency services are the Belleville General Hospital and the Lennox and Addington County General Hospital, located well outside the Study Area in the City of Belleville and Town of Napanee, respectively.

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<sup>2</sup>Note: Community services on Tyendinaga Mohawk Territory were identified through Google mapping and information available through the Mohawks of the Bay of Quinte website.



#### 4.3.6 Indigenous Community Land and Resource Use

A review of applicable mapping and correspondence with the MOE indicated that the Project may have the potential to affect Indigenous communities who hold or claim Aboriginal or Treaty Rights protected under Section 35 of Canada's *Constitution Act, 1982*. These communities include:

- Mohawks of the Bay of Quinte First Nation;
- Williams Treaties First Nations:
  - Alderville First Nation
  - Beausoleil First Nation
  - Chippewas of Georgina Island First Nation
  - Chippewas of Rama First Nation
  - Curve Lake First Nation
  - Hiawatha First Nation
  - Mississaugas of Scugog Island First Nation
- Kawartha Nishnawbe; and,
- Huron-Wendat Nation.

To date, consultation with Indigenous communities has not resulted in the identification of potential impacts of the Project on Aboriginal or Treaty Rights or on Indigenous use of land and resources in the Study Area. Additional information pertaining to consultation with Indigenous communities is provided in Section 3.3.

#### 4.3.7 Archaeological and Cultural Heritage Resources

A Stage 1 Archaeological Assessment was undertaken by TMHC that consisted of a review of current land use, historic and modern maps, registered archaeological sites and previous archaeological studies, past settlement history for the area and a consideration of topographic and physiographic features, soils, and drainage. A copy of the Stage 1 Archaeological Assessment report prepared for the Project is provided in Appendix A. The report will be submitted to the MHSTCI following the 42-day OPCC review period.

The Stage 1 Archaeological Assessment determined that most of the Project area is considered extensively disturbed (29.35 ha; 84.73%), or low-lying and permanently wet (0.04 ha; 0.12%) and does not retain archaeological potential. However, portions of the Project area (5.18 ha; 14.94%) that are not obviously disturbed consisting of grasslands, woodlands, agricultural land, and manicured lawns retain archaeological potential. These areas are recommended for Stage 2 Archaeological Assessment. In addition, a portion of the Project area bisects the All Saints' Anglican Church and Cemetery properties. As the background research and property inspection could not precisely establish the limits of the Cemetery on the north side of the road, there remains potential for burials to be identified within the northern portion of the Ridge Road right-of-way (0.07 ha; 0.20%). Following any required Stage 2 Archaeological Assessment and site excavation, a Cemetery Investigation is required.

A Cultural Heritage Screening Report (CHSR) and MHSTCI Cultural Heritage Checklist were completed for the Project (Appendix B) to determine if protected heritage properties are present within the Study Area.

The cultural heritage screening confirmed that there are no federally-designated heritage properties within 50 m of the proposed pipeline route, nor are there any properties designated or listed on a municipal heritage register. However, there are various properties within 50 m of the proposed pipeline route that are considered to have cultural heritage value or interest including properties with buildings or structures that are 40 or more years old; known burial site/cemetery; and properties identified through local Indigenous knowledge as being important in defining the character of the area and as having a special association with a historical event. Therefore, TMHC recommends the completion of a Cultural Heritage Assessment Report (CHAR) prior to construction.

A CHAR and Stage 2 Archaeological Assessment will be completed for the Project in summer/fall of 2022. If the CHAR or Stage 2 recommend further studies, these will be completed prior to construction in accordance with MHSTCI requirements.



## 5.0

## Route Selection

As described in Section 2.1.2, Enbridge Gas identified the PPR for the Project and no alternative routes were identified due to the nature of the Project objective being to supply the community with natural gas to specific areas.

Community expansion projects are based on information submitted by the communities requesting the service as well as Enbridge Gas best practices, such as utilizing existing road rights-of-way and information procured through the Environmental Assessment and Consultation process. Based on the information currently available, there are no alternative routes for the Project that would accomplish this goal.

## 5.1

### Preferred Route

The Preferred Route for the Project is the same as the PPR as shown on Figure 1 and described in Section 1.1.

The Preferred Route in Shannonville, within the Township of Tyendinaga, includes a total of approximately 1.9 km of pipeline that runs along the following streets: York Road (from Queen Street to just past the intersection with Brock Street/Upper Slash Road), Queen Street, Beach Road, Young Street, Atsia Court, Gore Street, and Howard Street.

The Preferred Route in Tyendinaga Mohawk Territory includes a total of approximately 15.4 km of pipeline including, approximately 7 km of pipeline along York Road, 2.8 km of pipeline along Ridge Road, 1.1 km of pipeline along Wyman Road, 3.7 km of pipeline along Lower Slash Road, and 0.8 km along Homeland Drive.

## 5.2

### Temporary Workspace and Laydown Areas

Temporary facilities for the purpose of the Project may include equipment staging areas and soil stockpile areas. Temporary facilities will be required prior to and during the construction period. The location of the temporary facilities will be determined by Enbridge Gas and their contractor during construction planning.

Field work completed for the Project included lands located approximately 30 m on each side of the road right-of-way (i.e., Project footprint) and can be used to site temporary facilities. When siting temporary facilities, the following criteria should be used to minimize adverse environmental and socio economic effects:

- Identify locations within previously disturbed areas;
- Select locations close to the area of construction to minimize ground disturbance;

- Avoid areas with native vegetation and other natural features such as woodlands;
- Avoid, where possible, known locations of SAR;
- Avoid sloped and poorly drained areas; and,
- Avoid areas with known cultural heritage/archaeological resources.

Mitigation measures provided in Section 6.0 of this ER should be considered when siting temporary facilities. Applicable agency approvals will be required.



## Effects Assessment and Proposed Mitigation

This section provides the assessment of the potential effects associated with the Preferred Route on the physical, natural, and socio-economic environment (Table 8). Recommended mitigation measures are also described in this section and select mitigation measures are shown on Figure 11.

The majority of potential Project-related effects can be avoided by locating the pipeline within existing, previously disturbed road rights-of-way.

Table 8: Potential Effects, Mitigation Measures, and Potential Residual Effects of Project Construction and Operations

| Component                   | Context/Interaction  | Potential Effect(s)  | Mitigation Measures  | Potential Residual Effect(s)   |
|-----------------------------|--|--|--|--|
| PHYSICAL ENVIRONMENT        |  |  |  |  |
| Physiography and Topography | <ul style="list-style-type: none"><li>The pipeline will mainly be installed within, or immediately adjacent to, existing road rights-of-way. The topography in these areas is generally level or gradually inclined and is heavily influenced by grading conducted for past utility and road works.</li><li>Roads, sidewalks, and adjacent vegetated areas will be returned to their pre-construction grade following construction.</li></ul>  | <ul style="list-style-type: none"><li>No effects to physiography and topography are expected to occur as a result of Project activities.</li></ul> | <ul style="list-style-type: none"><li>N/A</li></ul>  | <ul style="list-style-type: none"><li>N/A</li></ul>  |
| Surficial Geology and Soils | <ul style="list-style-type: none"><li>The pipeline will be installed within, or immediately adjacent to, municipal road rights-of-way. The soils and subsoils in the Project footprint have been heavily disturbed by past utility and road works and related infilling.</li><li>A search of publicly available data revealed several records of historical contamination in the Study Area.</li><li>The potential for leaks or spills from Project activities to affect soils, including inadvertent drilling fluid returns during HDD activities, is considered in Accidents and Malfunctions (Section 8.0).</li></ul> | <ul style="list-style-type: none"><li>Discovery of historical contamination during construction.</li></ul>   | <ul style="list-style-type: none"><li>The contractor should proceed with construction cautiously and be aware of the potential for contaminated soils. If contaminated soils are suspected, Section 8.13: Suspect Soil Excavation and Disposal Requirements of the LUG C&amp;M Manual 2022 should be followed as suspect soils must be safely handled and disposed of in a manner consistent with regulatory requirements.</li><li>Additional subsurface investigations (confirmatory and waste classification samples) should take place in areas suspected of having soil contamination. Enbridge Gas' Suspect Soil Procedure provides direction for managing contaminated sites that are encountered during construction. Should suspect soils be encountered, third party consultants are on-call 24/7 to provide support. Suspect soils are typically identified based on the following:<ul style="list-style-type: none"><li>An odour emanating from the excavation;</li><li>A significant change in colour, oil sheen, texture or stunted vegetation condition;</li><li>The presence of coloured, odorous or non-water like liquid seeping into the excavation; and,</li><li>The presence of solid wastes including drums, containers or tanks.</li></ul></li><li>If suspect soils are identified, implement the Suspect Soils Procedure (see Section 8.13 of the LUG C&amp;M Manual 2022 for further details).</li></ul> | <ul style="list-style-type: none"><li>No residual effect is anticipated following implementation of the recommended mitigation measures.</li></ul> |



| Component                            | Context/Interaction                                       | Potential Effect(s)                                       | Mitigation Measures   | Potential Residual Effect(s)                              |
|--------------------------------------|---|---|---|---|
| Surficial Geology and Soils (cont'd) | <ul style="list-style-type: none"><li>See above</li></ul> | <ul style="list-style-type: none"><li>See above</li></ul> | <ul style="list-style-type: none"><li>O. Reg. 406/19: On-Site And Excess Soil Management must be followed during construction.</li><li>Definitions from O. Reg. 406/19:<ul style="list-style-type: none"><li>Excess soil is defined as soil, or soil mixed with rock, that has been excavated as part of a project and removed from the project area for the project.</li><li>Liquid soil is defined as soil that has a slump of more than 150 mm using the Test Method for the Determination of "Liquid Waste" (slump test) set out in Schedule 9 to Regulation 347.</li><li>Class 1 soil management site (Class 1 SMS) means a soil bank storage site or a soil processing site. These sites operate under an Environmental Compliance Approval (ECA).</li><li>Class 2 soil management site (Class 2 SMS) means a waste disposal site, other than a Class 1 soil management site, at which excess soil is managed on a temporary basis and that is:<ul style="list-style-type: none"><li>a) located on a property owned by a public body or by the project leader (Enbridge Gas) for the project from which the excess soil was excavated, or</li><li>b) operated by the project leader (Enbridge Gas) for the project from which the excess soil was excavated.</li></ul></li><li>Local waste transfer facility (LWTF) means a site:<ul style="list-style-type: none"><li>a) at which waste from field operations is received, bulked, temporarily stored and transferred,</li><li>b) that is owned or controlled by the person who undertakes the field operations referred to in clause (a) or by a person on whose behalf those field operations are undertaken,</li><li>c) at which no waste is received other than waste from field operations, and</li><li>d) that is used primarily for functions other than waste management</li></ul></li></ul></li></ul> | <ul style="list-style-type: none"><li>See above</li></ul> |

| Component                            | Context/Interaction                                       | Potential Effect(s)                                       | Mitigation Measures   | Potential Residual Effect(s)                              |
|--------------------------------------|---|---|---|---|
| Surficial Geology and Soils (cont'd) | <ul style="list-style-type: none"><li>See above</li></ul> | <ul style="list-style-type: none"><li>See above</li></ul> | <ul style="list-style-type: none"><li>As of January 1, 2021:<ul style="list-style-type: none"><li>Any sites where excess soils (dry or liquid) are to be transported to (on a temporary basis or for final placement) are to be identified ahead of excavation. The reuse site's applicable Excess Soil Quality Standards (ESQS) for soils received, sampling requirements, volume needed (for the beneficial reuse), any instruments related to the receipt of soils for the reuse site, and written consent by the owner or operator of the reuse site for depositing the excess soil at the reuse site must be provided to Enbridge. If soils are brought to a Class 1 SMS, their ECA must be provided to Enbridge Gas. When excavating dry or liquid soil that is to be removed from the project area, it must first be sampled in situ (if feasible) or taken to a temporary site (Class 2 SMS or LWTF) to be bulked and sampled on arrival).</li><li>Excess soil may be transported to a Class 1 SMS without prior sampling only if that Class 1 SMS' ECA allows for this.</li><li>A qualified person (QP) as defined in O.Reg. 406/19 or supervisee of the QP is to prepare the soil sampling plan, implement the plan, and review the results.<ul style="list-style-type: none"><li>Excess soil can only be taken to the identified final receiving sites if it meets the applicable ESQS of the specific site, volume requirements of the site (as dictated by the site instrument or beneficial reuse purpose), and written consent by the owner or operator of the site authorizing deposit of the excess soil is provided.</li><li>Soils that do not meet the above ESQS for placement at a final reuse site or Class 1 SMS are to be disposed of at a licensed waste disposal facility.</li><li>All soil quality results shall be retained for at least seven years. Excess soil quality results are to be provided to Enbridge Gas.</li></ul></li><li>Where possible and space permits, soils can be processed at the project area or temporary site (Class 2 SMS or LWTF) in accordance with O. Reg. 406/19.</li><li>Drivers transporting excess soil must have the following information available at all times of transportation:<ul style="list-style-type: none"><li>the location at which the excess soil was loaded for transportation</li><li>the date and time the excess soil was loaded for transportation</li><li>the quantity of excess soil in the load</li></ul></li></ul></li></ul> | <ul style="list-style-type: none"><li>See above</li></ul> |



| Component                            | Context/Interaction                                       | Potential Effect(s)                                       | Mitigation Measures   | Potential Residual Effect(s)                              |
|--------------------------------------|---|---|---|---|
| Surficial Geology and Soils (cont'd) | <ul style="list-style-type: none"><li>See above</li></ul> | <ul style="list-style-type: none"><li>See above</li></ul> | <ul style="list-style-type: none"><li><ul style="list-style-type: none"><li>the name of the individual who may be contacted to respond to inquiries regarding the load</li><li>the name of the corporation, partnership or firm transporting the excess soil, name of the driver of the vehicle, and the number plates</li><li>the location at which the excess soil is to be deposited</li></ul></li><li>Soil quality results for any excess soil being imported to the project area that were not directly sourced from an aggregate pit or quarry are to be provided to Enbridge for review prior to depositing the soils at the project area.</li><li>The Soil Storage Rules as defined in Section C of the Rules for Soil Management, and any associated subsequent guidance released by the MECP, must be followed for any soil stored at a project area, Class 2 SMS, LWTF or reuse site.</li><li>Notwithstanding the above, the requirements of O. Reg. 406/19 and the associated documents are to be followed.</li></ul> | <ul style="list-style-type: none"><li>See above</li></ul> |

| Component   | Context/Interaction   | Potential Effect(s)   | Mitigation Measures   | Potential Residual Effect(s)  |
|-------------|---|---|---|---|
| Groundwater | <ul style="list-style-type: none"><li>• The pipeline will be installed at a typical depth (top of pipe) of approximately 0.9 m to 1.2 m and may be installed using a combination of open-cut trenching and trenchless techniques. Should sections of the pipeline trench encounter the groundwater table, groundwater may exfiltrate into the trench and may require dewatering to facilitate construction. Similarly, groundwater may be encountered at trench depth where integrity digs are conducted during operations.</li><li>• There is the potential to encounter contaminated groundwater in conjunction with the discovery of historically contaminated soils.</li><li>• Bentonite slurry will be generated during construction if trenchless construction methods are used. There is potential for bentonite slurry to seep into porous subsurface formations, reduce groundwater quality, and leave the tunnel along a preferential flow pathway and inadvertently seep into a nearby watercourse, or interfere with nearby structures (i.e., roadways). Bentonite slurry, when not managed appropriately, is considered an industrial waste and so requires specific handling.</li><li>• The potential for leaks or spills from Project activities to affect groundwater, including inadvertent drilling fluid returns during HDD activities, is considered in Accidents and Malfunctions (Section 8.0).</li></ul> | <ul style="list-style-type: none"><li>• Reduction in groundwater quality.</li></ul> | <p><i>General</i></p> <ul style="list-style-type: none"><li>• Review and adhere to Section 4.1: Hazardous Waste Management and Disposal of the LUG C&amp;M Manual 2022 to avoid contaminant introduction during construction.</li><li>• Maintain equipment in good working condition such that equipment and vehicles are free of leaks.</li><li>• Store all fuels, chemicals, and other lubricants away from drainage features and on relatively flat areas in contained storage areas. Re-fuelling activities should be undertaken a minimum of 100 m away from drainage features and other sensitive environmental features, unless otherwise approved by the Environmental Inspector or Enbridge Gas' Environment Department. Should a spill occur, the MECP Spills Action Centre (1-800-268-6060) should be contacted immediately and containment should occur as soon as practical; Enbridge Gas' Environment Department should also be notified and the GDS Spill Response Procedure must be followed.</li></ul> <p><i>Dewatering</i></p> <ul style="list-style-type: none"><li>• Register under the EASR where dewatering in excess of 50,000 L/day and up to 400,000 L/day is required. Excess water should be directed away from sensitive natural features.</li><li>• Obtain a PTTW from the MECP where dewatering in excess of 400,000 L/day is required. Excess water should be directed away from sensitive natural features.</li><li>• Potentially contaminated groundwater should be managed and disposed of in accordance with applicable regulatory requirements.</li><li>• Additional measures are provided in the GDS Spill Response Procedure and Section 8.6.3.1: Dewatering of the LUG C&amp;M Manual 2022.</li></ul> <p><i>Bentonite Slurry</i></p> <ul style="list-style-type: none"><li>• Bentonite slurry generation can be reduced by using a centrifuge to screen out solids and fines, allowing the bentonite to be reused on-site to a certain extent. Prior to disposal, bentonite slurry can be treated by solidification methods and removed from the site under the appropriate waste classification. Bentonite slurry can also be treated as excess soils.</li><li>• The composition of the bentonite slurry should be determined based on the geotechnical conditions of the site.</li><li>• The application of bentonite slurry should be monitored frequently by the Contractor.</li><li>• Extra caution should be exercised near drainage features, natural features, and nearby structures that could be impacted.</li></ul> | <ul style="list-style-type: none"><li>• Following the implementation of mitigation measures, the residual effect is anticipated to be low magnitude, short to medium-term in duration, and not significant.</li></ul> |



| Component               | Context/Interaction  | Potential Effect(s)   | Mitigation Measures  | Potential Residual Effect(s)  |
|-------------------------|--|---|--|---|
| Groundwater (cont'd)    | <ul style="list-style-type: none"><li>See above</li></ul>  | <ul style="list-style-type: none"><li>See above</li></ul>   | <ul style="list-style-type: none"><li>Additional measures are provided in Section 12: Trenchless Installations of the LUG C&amp;M Manual 2022.</li></ul>   | <ul style="list-style-type: none"><li>See above</li></ul>   |
| Bedrock                 | <ul style="list-style-type: none"><li>The overburden thickness (i.e., depth to bedrock) in the Study Area varies between approximately 1 m to 20 m. There are areas of shallow bedrock in the Study Area.</li><li>The majority of the pipeline will likely be buried between 0.9 m to 1.2 m deep; however, the pipeline will be installed mainly in previously disturbed and infilled road rights-of-way, and it is unlikely that intact bedrock will be encountered during pipeline construction.</li></ul>   | <ul style="list-style-type: none"><li>No effects to bedrock are expected to occur as a result of Project activities.</li></ul>  | <ul style="list-style-type: none"><li>N/A</li></ul>  | <ul style="list-style-type: none"><li>N/A</li></ul>   |
| NATURAL ENVIRONMENT     |  |   |  |   |
| Atmospheric Environment | <ul style="list-style-type: none"><li>Air emissions (including greenhouse gases) from vehicle and equipment use (i.e., exhaust and dust) will occur during construction and site-specific maintenance activities (e.g., integrity digs) during operations.</li><li>Air contaminants from vehicle and equipment use include sulphur dioxide, nitrogen oxide, volatile organic compounds, carbon monoxide, and particulate matter. In addition, carbon dioxide, a greenhouse gas, is emitted from internal combustion engines.</li><li>Emissions produced through welding cannot be mitigated; however, these emissions will be short-term and localized. It is not anticipated that this will be a significant contributor to air and greenhouse gas emissions.</li></ul> | <ul style="list-style-type: none"><li>Temporary and localized increase in air emissions during construction and operations (where preventative maintenance is performed).</li></ul> | <ul style="list-style-type: none"><li>Limit the area of open trenches (where possible) to reduce dust.</li><li>Implement dust control measures during dry and windy conditions. Dust control measures should be monitored regularly to increase efficiency.</li><li>Equip vehicles with emission controls, as applicable, and operate within regulatory requirements.</li><li>Limit long-term idling, where possible.</li><li>Limit construction activities during high wind events.</li></ul> | <ul style="list-style-type: none"><li>Following the implementation of mitigation measures, the residual effect is anticipated to be low magnitude, short-term in duration, and not significant.</li></ul> |

| Component           | Context/Interaction  | Potential Effect(s)  | Mitigation Measures  | Potential Residual Effect(s)  |
|---------------------|--|--|--|---|
| Aquatic Environment | <ul style="list-style-type: none"><li>• Surface water features that intersect the Study Area consist of eight watercourses. The Salmon River occurs outside of the Project footprint but within the Study Area.</li><li>• Two of the watercourses that transect the Study Area have thermal regimes characterized as warm (Salmon River and Marysville Creek), however no addition thermal regime information was available for the other watercourses and general fish community data was unavailable for watercourses within the Study Area.</li><li>• Based on the results of the background review and aquatic habitat assessments the Salmon River, Watercourse 2 (Marysville Creek) and Watercourse 8 have the potential to provide habitat for aquatic SAR and SCC.</li><li>• Construction activities may result in temporary disruption of flow, reduction in surface water quality (e.g., localized sedimentation), alteration of fish habitat, or death/injury of fish in watercourses directly crossed by the pipeline route, depending on the crossing technique (i.e., open cut crossings are more likely to impact the aquatic environment than trenchless crossings).</li><li>• The potential for leaks or spills from Project activities to affect the aquatic environment, including inadvertent drilling fluid returns during HDD activities, is considered in Accidents and Malfunctions (Section 8.0).</li></ul> | <ul style="list-style-type: none"><li>• Temporary reduction in surface water quality and alteration of water flow during construction if trenched crossing techniques are implemented.</li></ul> | <ul style="list-style-type: none"><li>• At all watercourse crossings, Enbridge Gas will implement mitigation measures as approved in the DFO Agreement.</li><li>• Re-contour the streambed to approximate the pre-construction profile and channel configuration to ensure that flow patterns are unaltered. Watercourses are not to be realigned or straightened in any way nor have their hydraulic characteristics changed.</li><li>• Complete all instream activity within a reasonable period of time, having regard for the site-specific conditions, to limit the duration and severity of disturbance.</li><li>• Schedule crossing construction, to the extent practical, to complete trenching, lowering-in and backfill with continuous effort or to the satisfaction of the Environmental Inspector or Enbridge Gas designate.</li><li>• Maintain the quantity and quality of stream flow, if present, throughout crossing construction. Trench through the watercourse after isolation is installed and operational, and maintain stream flow at all times.</li><li>• Install and maintain erosion and sediment control measures prior to commencing grading within the vicinity of a watercourse.</li><li>• Any stockpiled materials shall be stored and stabilized at a minimum distance of 30 m from the watercourse.</li><li>• Avoid or reduce grading within the 10 m riparian buffer of watercourses, unless otherwise approved by the Environmental Inspector. Grading within 10 m of watercourses, if approved, may be appropriate if completion of this activity results in reduced erosion and sedimentation risk.</li><li>• Delay grading on the approach slopes to watercourses until immediately prior to the commencement of construction of the crossing, if practical. If grading occurs, ensure that interim erosion control is installed, as appropriate.</li><li>• Refueling and maintenance of equipment must be set back from any water body a minimum of 100 m to minimize the potential for water pollution, unless otherwise approved by the Environmental Inspector or Enbridge Gas' Environment Department.</li><li>• Machinery should arrive on site in a clean condition and be maintained free of fluid leaks. Wash, refuel and service machinery and store fuel and other materials for the machinery away from the water to prevent any deleterious substance from entering the water.</li><li>• Banks and riparian areas are to be restored to their original condition if any disturbance occurs.</li></ul> | <ul style="list-style-type: none"><li>• Following the implementation of mitigation measures, the residual effect is anticipated to be low magnitude, short-term in duration, and not significant.</li></ul> |





| Component                    | Context/Interaction                                       | Potential Effect(s)  | Mitigation Measures  | Potential Residual Effect(s)  |
|------------------------------|---|--|--|---|
| Aquatic Environment (cont'd) | <ul style="list-style-type: none"><li>See above</li></ul> | <ul style="list-style-type: none"><li>See above</li></ul>  | <ul style="list-style-type: none"><li>Undertake site restoration works immediately following construction and in accordance with the Site Restoration section of the LUG C&amp;M Manual 2022.</li><li>Stabilize any waste materials removed from the work site to prevent them from entering the watercourse. This could include covering spoil piles with biodegradable mats or tarps or planting them with grass or shrubs.</li></ul>  | <ul style="list-style-type: none"><li>See above</li></ul>   |
|                              |   | <ul style="list-style-type: none"><li>Alteration of fish habitat or death/injury of fish during construction if trenched crossings techniques are implemented.</li></ul> | <ul style="list-style-type: none"><li>Develop site-specific water crossing plans in consultation with Enbridge Gas prior to conducting any in-water work.</li><li>Time isolated crossings to protect sensitive fish life stages by adhering to fisheries timing windows. Consult with Quinte Conservation and other relevant agencies (e.g., MECP, DFO, ECCC) to determine appropriate timing windows.</li><li>Stabilize the streambed and restore the original channel shape, bottom gradient and substrate to pre-construction condition.</li><li>Ensure banks are stabilized, restored to original shape, adequately protected from erosion and revegetated, preferably with native species.</li><li>Temporary isolation should be pursued to allow work "in-the-dry" while maintaining the natural downstream flow by installing dams upstream and downstream of the site and conveying all of the natural upstream flow into a flume, or pumping it around the isolated area.</li><li>Use dams made of non-earthen material, such as water-inflated portable dams, pea gravel bags, concrete blocks, steel or wood wall, clean rock, sheet pile or other appropriate designs, to separate the dewatered work site from flowing water.</li><li>A qualified Fish Biologist or technician must complete a fish salvage from the isolated area prior to and during dewatering where isolated crossing techniques are used. Fish salvage activities will need to be conducted in accordance with applicable permit approvals and minimize harm and stress to fish.</li><li>Release captured fish to pre-determined areas of similar or better habitat, where possible, preferably downstream of the work site.</li><li>Pump sediment laden (trench) water into a vegetated area or settling basin, and prevent sediment and other deleterious substances from entering any water body.</li><li>Remove accumulated sediment and excess spoil from the isolated area before removing dams.</li></ul> | <ul style="list-style-type: none"><li>Following the implementation of mitigation measures, the residual effect is anticipated to be low magnitude, short-term in duration, and not significant.</li></ul> |

| Component                    | Context/Interaction   | Potential Effect(s)  | Mitigation Measures   | Potential Residual Effect(s)  |
|------------------------------|---|--|---|---|
| Aquatic Environment (cont'd) | <ul style="list-style-type: none"><li>See above</li></ul>   | <ul style="list-style-type: none"><li>See above</li></ul>  | <ul style="list-style-type: none"><li>If rock is used to stabilize banks, it should be clean, free of fine materials, and of sufficient size to resist displacement during peak flood events. The rock should be placed at the original stream bank grade to ensure there is no infilling or narrowing of the watercourse.</li><li>Gradually remove the downstream dam first to equalize water levels inside and outside of the isolated area and to allow suspended sediments to settle.</li><li>During the final removal of dams, restore the original channel shape, bottom gradient and substrate at these locations as required and manually if possible.</li></ul>  | <ul style="list-style-type: none"><li>See above</li></ul>   |
| Wetlands                     | <ul style="list-style-type: none"><li>There are two PSWs (Big Marsh-Wetland and Sucker Creek Tributaries [comprising three separate PSW complexes]) and several unevaluated wetlands in the Study Area most of which form part of the PSWs.</li><li>Construction will be confined to existing disturbed rights-of-way and interactions with wetland communities are anticipated to be minimal.</li><li>Where possible, wetlands will be crossed using trenchless construction methods (i.e., HDD).</li><li>The potential for leaks or spills from Project activities to affect the wetlands, including inadvertent drilling fluid returns during HDD activities, is considered in Accidents and Malfunctions (Section 8.0).</li></ul> | <ul style="list-style-type: none"><li>Temporary alteration of wetland habitat, hydrological, and/or biogeochemical function.</li></ul> | <ul style="list-style-type: none"><li>At all watercourse crossings, Enbridge Gas will implement mitigation measures as approved in the DFO Agreement.</li><li>Use existing roads as access routes, where possible, to avoid disturbance to riparian vegetation.</li><li>Operate machinery on land above the ordinary high water mark and in a manner that minimizes disturbance to wetlands.</li><li>Machinery should arrive on site in a clean condition and be maintained free of fluid leaks. Wash, refuel and service machinery and store fuel and other materials for the machinery away from wetlands to prevent any deleterious substance from entering wetlands.</li><li>Clearly identify the limits of the work area prior to beginning construction.</li><li>Narrow the construction area in the vicinity of wetlands and limit vegetation removal to the extent practical.</li><li>Sediment or drilling mud shall not be allowed to enter into watercourses, drainage ditches/storm sewer infrastructure, wetlands, bodies of water or leave the work site.</li><li>Sediment and erosion control measures appropriate to site conditions and the nature of development are to be properly installed, inspected regularly, and maintained in good repair until all disturbed soil surfaces have become stabilized and/or revegetated.</li><li>Sediment laden water shall not be pumped directly into any waterbody or wetland. Sediment laden or turbid water generated during construction should be treated through a minimum of 30 m of vegetated cover before discharging to a watercourse, or if this is not possible, be discharged into a proper sediment containment system (e.g., sediment bag) for settling and filtration.</li><li>Undertake site restoration works immediately following construction and in accordance with Section 15.8: Site Restoration of the LUG C&amp;M Manual 2022.</li></ul> | <ul style="list-style-type: none"><li>Following the implementation of mitigation measures, the residual effect is anticipated to be low magnitude, short-term in duration, and not significant.</li></ul> |





| Component  | Context/Interaction  | Potential Effect(s)   | Mitigation Measures   | Potential Residual Effect(s)                                |
|--|--|---|---|---|
| Wetlands (cont'd)  | <ul style="list-style-type: none"><li>• See above</li></ul>  | <ul style="list-style-type: none"><li>• See above</li></ul>   | <ul style="list-style-type: none"><li>• A nest search (migratory birds) should be undertaken by a qualified biologist prior to construction if construction occurs between March 15 and August 31 (ECCC 2018, MNR 2000).</li><li>• Sweep wetland areas prior to and during construction for the presence of wildlife. Contact the Environmental Inspector or on-call biologist for any nest or wildlife observations.</li><li>• Do not seed marsh wetlands. Allow for natural revegetation, unless otherwise requested by a landowner.</li><li>• Do not dewater any wetland. Although temporary dewatering may be necessary during trenched wetland crossings, trench water should not be permanently removed from a wetland.</li></ul> | <ul style="list-style-type: none"><li>• See above</li></ul> |
| Areas of Natural and Scientific Interest and Other Environmentally Significant Areas | <ul style="list-style-type: none"><li>• The Study Area occurs within the Napanee Limestone Plain IBA which is considered a nationally significant area for birds as it contains species and species habitat for threatened species and species recognized as being congregatory.</li><li>• There are no designated Areas of Natural and Scientific Interest in the Study Area.</li></ul> | <ul style="list-style-type: none"><li>• No effects to Areas of Natural and Scientific Interest or other environmentally significant areas are expected to occur as a result of Project activities.</li><li>• Due to the increased sensitivity of some areas for birds associated with the Napanee Limestone Plain IBA, mitigation measures outlined for birds under the Wildlife and Wildlife Habitat element in this table should be followed.</li></ul> | <ul style="list-style-type: none"><li>• N/A</li></ul>   | <ul style="list-style-type: none"><li>• N/A</li></ul>       |

| Component                          | Context/Interaction  | Potential Effect(s)  | Mitigation Measures   | Potential Residual Effect(s)  |
|------------------------------------|--|--|---|---|
| Terrestrial Habitat and Vegetation | <ul style="list-style-type: none"><li>• The majority of the Study Area is classified as residential (CVR); however, several natural vegetation communities were identified throughout the Study Area with the largest area being occupied by graminoid meadow (MEG) and deciduous thicket (THD). Further high quality habitat exists associated with the PSWs that have been identified within the Study Area.</li><li>• The proposed pipeline will be installed within, or immediately adjacent to, existing road rights-of-way most of which occurs as frontage to residential properties (CVR) that are dominated by manicured lawn and landscaped trees. Vegetation encountered will likely consist of common roadside vegetation of minor ecological value (vegetation capable of colonizing new roadside edges). However, if construction activities (e.g., temporary laydown areas, equipment encroachment) extend into vegetated areas, activities could result in the temporary loss or alteration of vegetation.</li><li>• Construction activities could result in the introduction or spread of invasive species and/or weeds.</li><li>• The potential for leaks or spills from Project activities to affect vegetation, including inadvertent drilling fluid returns during HDD activities, is considered in Accidents and Malfunctions (Section 8.0).</li></ul> | <ul style="list-style-type: none"><li>• Temporary loss or alteration of vegetation during construction.</li></ul>              | <ul style="list-style-type: none"><li>• Minimize the width of the construction area to reduce the amount of vegetation affected.</li><li>• Limits of the workspace should be clearly marked to avoid encroachment into adjacent vegetated areas and to avoid unnecessary tree removals.</li><li>• Where feasible, construction traffic should be limited to the existing road allowance to avoid potential compression of tree root zones.</li><li>• Protect vegetation adjacent to the working area from construction traffic and/or materials storage.</li><li>• If tree removals are planned, a tree inventory should be conducted to inform permitting requirements.</li><li>• If required, obtain permits for tree removal. Depending on the location of potential tree removal(s), consult with applicable federal, provincial, and municipal agencies to ascertain appropriate measures for tree removals or injuries that should be undertaken and any requirements for compensation.</li><li>• Upon completion of construction, all vegetation removed or damaged should be replaced with appropriate native species. Ontario native seed mixes should be appropriate for the habitat type and existing land use.</li><li>• Undertake construction in a manner consistent with Section 8.2: Clearing of the LUG C&amp;M Manual 2022.</li><li>• Implement tree protection zones once vegetation removal is complete. The tree drip line plus an additional 1 m demarcated by fencing should be established around remaining edge vegetation to avoid soil compaction.</li></ul> | <ul style="list-style-type: none"><li>• Following the implementation of mitigation measures, the residual effect is anticipated to be low magnitude, short to medium-term in duration, and not significant.</li></ul> |
|                                    |  | <ul style="list-style-type: none"><li>• Introduction or spread of invasive species and/or weeds during construction.</li></ul> | <ul style="list-style-type: none"><li>• All equipment should arrive to the site clean and free of soil and/or vegetation to prevent the introduction and spread of invasive species and weeds.</li><li>• Ontario native seed mixes that are free of weed species should be used for revegetation.</li></ul>   | <ul style="list-style-type: none"><li>• No residual effect is anticipated following implementation of the recommended mitigation measures.</li></ul>  |



| Component                     | Context/Interaction  | Potential Effect(s)   | Mitigation Measures   | Potential Residual Effect(s)  |
|-------------------------------|--|---|---|---|
| Wildlife and Wildlife Habitat | <ul style="list-style-type: none"><li>• The Project will be installed within, or immediately adjacent to, existing road rights-of-way most of which occurs as frontage to residential properties (CVR) that are dominated by manicured lawn and landscaped trees.</li><li>• Moderate wildlife habitat is anticipated to be present within the Study Area due to the presence of diverse natural communities and high quality habitat (PSWs) throughout the Study Area. Cultural features like outbuildings, barns, hedgerows, and houses may provide habitat for bats and nesting birds; as well, the box culverts and graveled shoulders of the roads could provide habitat to nesting birds, turtles, and reptiles.</li><li>• The Mohawks of the Bay of Quinte have noted that Snapping Turtle and Blanding's Turtle are known to inhabit the area around the Big Marsh-Wetland PSW and Marysville Creek and often nest in the graveled shoulder along York Road.</li><li>• Noise from construction activities can cause some temporary disturbance to local wildlife, if present in the Study Area.</li><li>• Vegetation removal during construction may potentially limit or alter wildlife habitat. The removal of vegetation can impact nesting birds if conducted during known breeding bird timing windows (generally between March 15 and August 31).</li><li>• Construction activities have the potential to attract turtles including SAR and SCC (i.e., Blanding's Turtle and Snapping Turtle) looking for suitable nesting substrate between late May and early July. This can potentially impact turtles and turtle nests.</li><li>• Snakes may use open areas such as road shoulders to bask, potentially putting them at risk from construction activities.</li><li>• Construction activities have the potential to cause physical harm to slower moving animals like amphibians, snakes, and turtles.</li><li>• Trenching activities have the potential to cause physical harm to wildlife that may fall into open trenches, particularly if the trenches are left exposed overnight.</li><li>• The potential for leaks or spills from Project activities to affect wildlife and wildlife habitat, including inadvertent drilling fluid returns during HDD activities, is considered in Accidents and Malfunctions (Section 8.0).</li></ul> | <ul style="list-style-type: none"><li>• Temporary alteration of wildlife habitat, disruption of wildlife movement, and/or increase in wildlife mortality during construction.</li></ul> | <p><i>General Measures</i></p> <ul style="list-style-type: none"><li>• Flag or fence off environmentally sensitive areas prior to construction (e.g., PSWs, watercourses, known nesting locations for SAR/SCC turtles identified by the Mohawks of the Bay of Quinte).</li><li>• Undertake environmental awareness training for all workers on-site to highlight issues specific to the Project. Training should focus on protocols for injured wildlife and the identification of SAR that may be encountered.</li><li>• All wildlife encountered should be handled by a qualified professional using approved NDMNRF/MECP handling protocols and relocated away from the construction area to prevent incidental harm.</li><li>• Nuisance and large wildlife encounters or incidents involving wildlife should be reported to the NDMNRF/MECP/ECCC.</li><li>• Food waste and debris should be removed from the site daily and disposed of at an approved waste facility.</li><li>• Minimize the width of the construction area to reduce the amount of vegetation affected.</li><li>• Suspend construction if active habitat is discovered and an adequate setback distance cannot be maintained.</li><li>• Maintain habitat connections, where possible, during construction.</li><li>• Implement measures to restore lost habitat/habitat connections.</li></ul> <p><i>Birds</i></p> <ul style="list-style-type: none"><li>• Abide by regulatory timing windows (generally March 15 to August 31 [ECCC 2018, MNR 2000]) and setback distances when vegetation removal (including individual trees) is required or when working in or directly adjacent to natural features.</li><li>• Conduct pre-construction nest sweeps if construction will occur in the migratory bird restricted activity period (March 15 to August 31). Nest sweeps are valid for 7 days.</li><li>• Protect active nests by flagging or fencing off an appropriate setback distance as determined by a qualified professional.</li><li>• If a nest is found during construction activities, stop work and notify the Environmental Inspector or Enbridge Gas designate.</li></ul> | <ul style="list-style-type: none"><li>• Following the implementation of mitigation measures, the residual effect is anticipated to be low magnitude, short-term in duration, and not significant.</li></ul> |

| Component                              | Context/Interaction                                       | Potential Effect(s)                                       | Mitigation Measures   | Potential Residual Effect(s)                              |
|--|---|---|---|---|
| Wildlife and Wildlife Habitat (cont'd) | <ul style="list-style-type: none"><li>See above</li></ul> | <ul style="list-style-type: none"><li>See above</li></ul> | <p><i>Bats</i></p> <ul style="list-style-type: none"><li>Narrow construction footprint, where possible, to limit tree removals.</li><li>Complete assessments prior to clearing to determine if candidate maternity trees (those with loose bark, crevices, hollows or cavities) are present. Surveys to identify maternity trees must be completed during the 'leaf-off' period (generally from October/November to April).</li><li>Clearing of potential bat roosting trees is to be avoided between May 1 and August 31. If potential bat roosting trees require removal during this window, additional surveys may be required. Contact a qualified individual (e.g., biologist, ecologist, or arborist with experience identifying bat habitat) prior to clearing.</li></ul> <p><i>Herptiles</i></p> <ul style="list-style-type: none"><li>Abide by regulatory timing windows and setback distances. General timing windows for reptiles are:<ul style="list-style-type: none"><li>Turtle/snake active season (when exclusion fencing is required in designated turtle/snake habitat areas) – April 1 to October 31</li><li>Turtle nesting period – May 1 to July 15</li><li>Turtle hatchling period – August 15 to October 31</li><li>Amphibian breeding period – April 15 to June 30</li></ul></li><li>If a turtle or snake is encountered on site, stop work and allow the individual to leave the area.</li><li>Prior to the timing windows for the nesting and breeding seasons, flag or fence off identified habitat features, if possible. The recommended depth of the fence and height of the fence differs depending on the reptile group:<ul style="list-style-type: none"><li>Turtles: bury fencing a minimum of 10-20 cm below ground with a vertical height of at least 60 cm.</li><li>Snakes: varies by species – consult the MNR (2013) document Species at Risk Best Practices Technical Note, Reptile and Amphibian Exclusion Fencing (Version 1.1). Note, stakes should be installed on the activity side to prevent snakes using stakes to climb fencing.</li></ul></li></ul> | <ul style="list-style-type: none"><li>See above</li></ul> |



| Component                              | Context/Interaction   | Potential Effect(s)  | Mitigation Measures  | Potential Residual Effect(s)  |
|--|---|--|--|---|
| Wildlife and Wildlife Habitat (cont'd) | <ul style="list-style-type: none"><li>See above</li></ul>   | <ul style="list-style-type: none"><li>See above</li></ul>  | <ul style="list-style-type: none"><li>Wildlife exclusion fencing should be erected prior to the turtle active season at select locations along York Road in the vicinity of the Big Marsh-Wetland PSW and Marysville Creek, as well as select locations along Wyman Road and Homeland Drive in association with Sucker Creek Tributaries PSW where suitable turtle nesting sites have been confirmed, as these areas are known locations for nesting Blanding's Turtle and Snapping Turtle that inhabit the nearby wetlands and watercourses.</li><li>Complete a wildlife sweep within the exclusion area following fence installation to ensure there is no trapped wildlife.</li><li>Visually inspect machinery and/or engine compartments each day during construction for basking reptiles such as snakes.</li></ul>   | <ul style="list-style-type: none"><li>See above</li></ul>   |
| Species at Risk                        | <ul style="list-style-type: none"><li>Desktop review and preliminary field investigations determined that there are 20 SAR with the potential to occur within the Study Area, including 9 bird, 4 fish, 4 bat, 2 herptile, and 1 botanical species.</li><li>Only Eastern Meadowlark was observed during the May 2022 site assessment.</li></ul> | <ul style="list-style-type: none"><li>Temporary alteration of SAR habitat, disruption of SAR movement, and/or increase in SAR mortality during construction.</li></ul> | <ul style="list-style-type: none"><li>Implement recommended mitigation measures for the protection of Vegetation and Wildlife and Wildlife Habitat elements of this table, above.</li><li>Abide by the conditions of regulatory permits or approvals when working in areas where there is potential to interact with SAR or SCC.</li><li>MECP and ECCC should be consulted during detailed design to determine whether species-specific surveys may be required to support potential permitting and/or approvals under the ESA and the SARA, respectively.</li><li>Provide SAR identification sheets to workers that outline habitat, identifying characteristics and mitigation measures.</li><li>Document SAR encounters and notify appropriate regulatory authorities.</li><li>Additional field investigations are recommended to identify where wildlife exclusion fencing should be erected specifically for select locations along York Road in the vicinity of the Big Marsh-Wetland PSW and Marysville Creek, as well as select locations along Wyman Road and Homeland Drive in association with Sucker Creek Tributaries PSW, where suitable turtle nesting sites have been confirmed, as these areas are known locations for nesting Blanding's Turtle and Snapping Turtle that inhabit the nearby wetlands and watercourses.</li><li>Once detailed Project design has progressed, it is recommended that a targeted search for Butternut and Black Ash be undertaken to confirm presence along the pipeline route. Where Butternut and/or Black Ash is observed, work areas may be amended to protect the species from harm (i.e., buffers and tree protective fencing and zones).</li></ul> | <ul style="list-style-type: none"><li>Following the implementation of mitigation measures, the residual effect is anticipated to be low magnitude, short-term in duration, and not significant.</li></ul> |

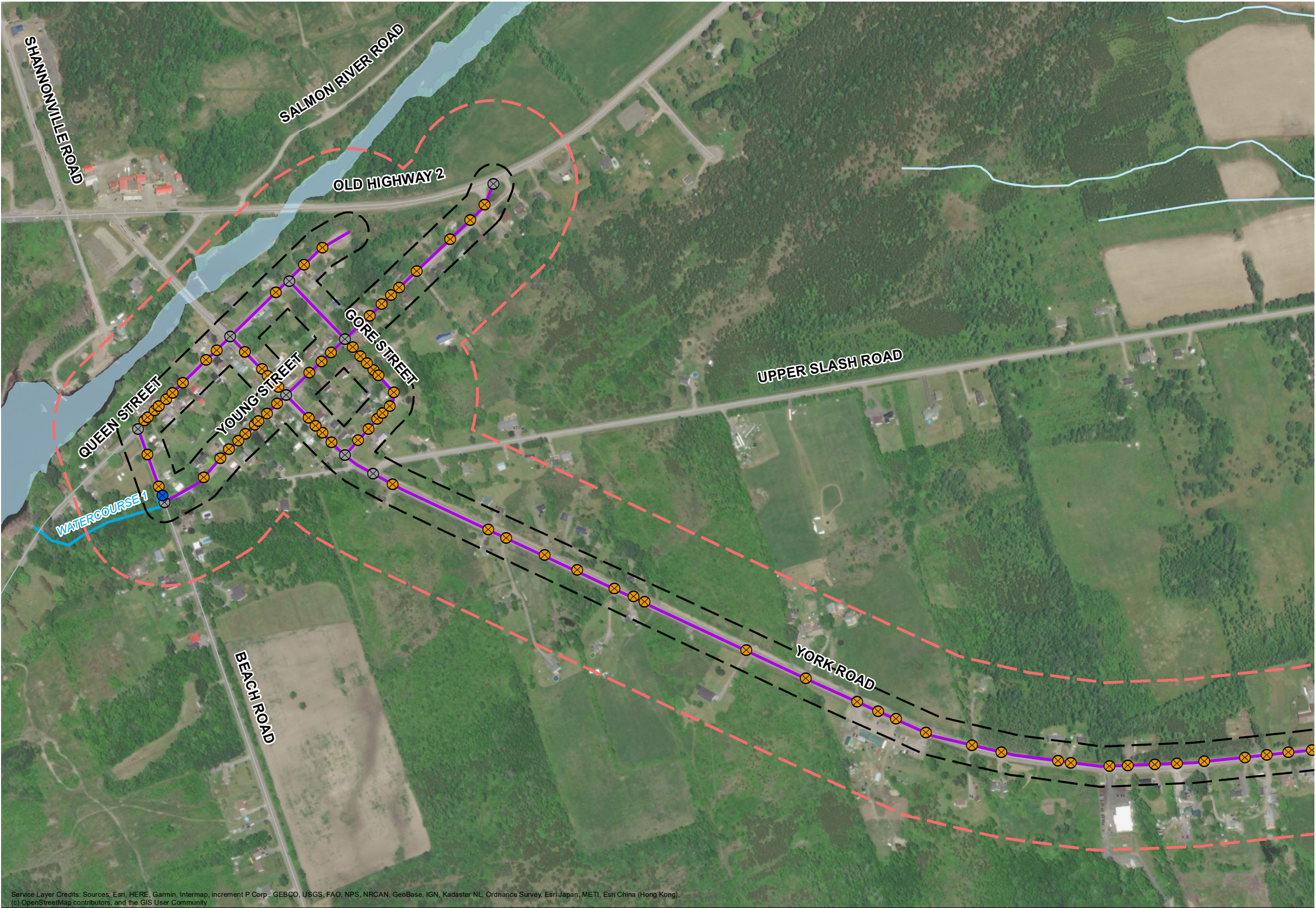
| Component                                       | Context/Interaction   | Potential Effect(s)  | Mitigation Measures   | Potential Residual Effect(s)  |
|---|---|--|---|---|
| SOCIO-ECONOMIC ENVIRONMENT                      |   |  |   |   |
| Planning Policies                               | <ul style="list-style-type: none"><li>Under the relevant plans and policies reviewed for this report, the Project is in line with the municipal and provincial policy directions for maintaining healthy, safe, livable communities, and ensuring that necessary infrastructure and public service facilities are or will be available to meet current and projected needs.</li></ul>   | <ul style="list-style-type: none"><li>No effects to planning policies are expected to occur as a result of Project activities.</li></ul>                               | <ul style="list-style-type: none"><li>N/A</li></ul>   | <ul style="list-style-type: none"><li>N/A</li></ul>   |
| Existing and Planned Land Use                   | <ul style="list-style-type: none"><li>It is not anticipated that Project activities will have any impact on existing or planned land use as the proposed pipeline will be installed within, or immediately adjacent to, existing, previously disturbed road rights-of-way. The Project does not require re-zoning of lands and will not restrict future development within existing linear infrastructure corridors (beyond their currently existing and planned allowable uses).</li><li>The Project is a permissible use of the existing road rights-of-way and Enbridge Gas will obtain all required permits and approvals prior to construction and operations.</li></ul> | <ul style="list-style-type: none"><li>No effects to existing and planned land use are expected to occur as a result of Project activities.</li></ul>                   | <ul style="list-style-type: none"><li>N/A</li></ul>   | <ul style="list-style-type: none"><li>N/A</li></ul>   |
| Population, Employment, and Economic Activities | <ul style="list-style-type: none"><li>The Project is located in a mainly rural area where there are various small commercial businesses and agriculture. Construction activities may affect traffic and/or access to businesses for a short period of time. The Project is not anticipated to have a noticeable impact on business levels due to the short-term duration of construction activities and the implementation of appropriate traffic control and access measures.</li><li>The Project will employ a small workforce for a short period of time and no permanent jobs will be created or lost as a result of the Project.</li></ul>                               | <ul style="list-style-type: none"><li>No effects to population, employment, and economic activities are expected to occur as a result of Project activities.</li></ul> | <ul style="list-style-type: none"><li>N/A</li></ul>   | <ul style="list-style-type: none"><li>N/A</li></ul>   |
| Human Occupancy and Resource Use                | <ul style="list-style-type: none"><li>The Project is located in a mainly rural areas adjacent to farms, residences, and small commercial businesses that are generally set further back from the road than in urban areas. Construction activities may temporarily cause nuisance noise for local residents and businesses.</li><li>Visual effects of construction cannot be mitigated, however, they will be short-term and localized. During operations, visual effects will be limited to the presence of above-ground safety signage.</li></ul>   | <ul style="list-style-type: none"><li>Temporary increase in nuisance noise during construction.</li></ul>  | <ul style="list-style-type: none"><li>Construction activities will be carried out in compliance with municipal noise by-laws with respect to noise and construction equipment usage. Applicable noise by-law exemptions will be sought if construction activities cannot be avoided on Statutory Holidays, Sundays or at night.</li><li>General noise control measures will be implemented during construction (i.e., proper maintenance of equipment, muffling systems, minimum idling of equipment and vehicles).</li></ul> | <ul style="list-style-type: none"><li>Following the implementation of mitigation measures, the residual effect is anticipated to be low magnitude, short-term in duration, and not significant.</li></ul> |



| Component                   | Context/Interaction  | Potential Effect(s)  | Mitigation Measures  | Potential Residual Effect(s)  |
|-----------------------------|--|--|--|---|
| Infrastructure and Services | <ul style="list-style-type: none"><li>The Project is located in a mainly rural area along many local roads and some major/collector roads that are only two lanes wide. Construction may cause traffic disruptions (e.g., congestion, lane closures, or detours) impacting traffic flow and access to driveways.</li><li>The Project will result in the creation of hazardous wastes (e.g., pneumatic oils from hydraulic systems, gasoline, and other lubricants and oils) and non-hazardous wastes (e.g., packaging, spent lubricating cartridges, coffee cups) requiring proper storage and disposal.</li></ul> | <ul style="list-style-type: none"><li>Temporary traffic disruptions during construction.</li></ul> | <ul style="list-style-type: none"><li>Traffic access will be maintained, where possible, during construction. However, lane closures and traffic detours may be required to allow construction equipment and materials passage, or where open-cut construction is planned. Good management and best practices will be implemented during construction to minimize traffic disruption. If required, temporary detour routes will be provided to reduce potential impacts to commuters.</li><li>Appropriate signage and flag personnel will be used should detours be necessary.</li><li>Enbridge Gas is encouraged to consult with municipal staff to develop an appropriate traffic management plan to assist with maintaining traffic flow. Consultation with local Emergency Medical Services may also be required if temporary detours are deemed necessary.</li><li>A common parking area should be established for construction crews to reduce traffic and better manage parking congestion. The Contractor should be encouraged to transport construction staff to the site from a central collection point via bus or other method to reduce the potential for parking issues and traffic congestion.</li><li>Enbridge Gas will respond to any construction complaints promptly.</li><li>Vehicle traffic will be managed in accordance with Section 3.9: Traffic Control and Protection Plan, Section 18: Road and Railway Crossings, Section 31.4: Pipeline Depth of Cover Survey, Section 8.5: Trenching/Excavating, Section 8.6: Trenching, and Section 8.7: Paving Excavation and Repairs of the LUG C&amp;M Manual 2022.</li><li>An appropriate Traffic Control Plan will be developed and implemented in accordance with Ontario Traffic Manual (OTM) Book 7 – Temporary Conditions.</li></ul> | <ul style="list-style-type: none"><li>Following the implementation of mitigation measures, the residual effect is anticipated to be low magnitude, short-term in duration, and not significant.</li></ul> |
|                             |  | <ul style="list-style-type: none"><li>Temporary increase in wastes during construction.</li></ul>  | <ul style="list-style-type: none"><li>Solid waste will be collected and disposed of appropriately in accordance with applicable regulations at a licensed waste facility.</li><li>Hazardous wastes will be transported by MECP licensed waste haulers to a MECP registered disposal site.</li><li>Temporary storage of wastes onsite will include the use of secured containers in designated sites away from sensitive areas.</li><li>All construction waste will be disposed of in accordance with Section 4.1: Hazardous Waste Management and Disposal of the LUG C&amp;M Manual 2022.</li></ul>  | <ul style="list-style-type: none"><li>No residual effect is anticipated following implementation of the recommended mitigation measures.</li></ul>  |

| Component                                      | Context/Interaction  | Potential Effect(s)   | Mitigation Measures  | Potential Residual Effect(s)   |
|--|--|---|--|--|
| Indigenous Community Land and Resource Use     | <ul style="list-style-type: none"><li>To date, Indigenous communities consulted on the Project have not identified any specific issues or concerns regarding the impact of the Project on Aboriginal or Treaty Rights or on their use of land and resources in the Study Area.</li><li>Enbridge will continue to engage with Indigenous communities throughout the Project and will work with Indigenous communities to address issues or concerns, should they arise.</li></ul>   | <ul style="list-style-type: none"><li>No effects to Aboriginal or Treaty rights or Indigenous communities' use of land and resources are expected to occur as a result of Project activities.</li></ul> | <ul style="list-style-type: none"><li>N/A</li></ul>  | <ul style="list-style-type: none"><li>N/A</li></ul>  |
| Archaeological and Cultural Heritage Resources | <ul style="list-style-type: none"><li>The results of the Stage 1 Archaeological Assessment for the Project indicate that there is the potential to encounter previously undiscovered archaeological resources during construction, including potential human remains associated with the All Saints' Anglican Church and Cemetery.</li><li>A CHAR and Stage 2 Archaeological Assessment will be completed in the summer of 2022 to document cultural heritage resources in the Project footprint and identify archaeological resources requiring mitigation.</li></ul> | <ul style="list-style-type: none"><li>Disturbance of previously undiscovered archaeological resources during construction.</li></ul>  | <ul style="list-style-type: none"><li>Should previously undocumented (i.e., unknown or deeply buried) archaeological resources be discovered, the person discovering the archaeological resources will notify the Environmental Inspector and Enbridge Gas Environmental Advisor. A stop-work procedure will be implemented to immediately cease alteration of the site and a licensed consultant archaeologist will be engaged to carry out archaeological fieldwork in compliance with Section 48(1) of the <i>Ontario Heritage Act</i>.</li><li>Work undertaken in and around areas with known archaeological potential will be completed in accordance with Section 8.15: Archaeological Areas of the LUG C&amp;M Manual 2022.</li><li>Follow recommendations from the Stage 1 and Stage 2 archaeological assessments.</li><li>If human remains are discovered during construction, a stop work procedure will be implemented and the appropriate agencies (e.g., police, coroner) will be contacted as well as Indigenous communities, if applicable.</li></ul> | <ul style="list-style-type: none"><li>No residual effect is anticipated following implementation of the recommended mitigation measures.</li></ul> |
|  |  | <ul style="list-style-type: none"><li>Disturbance of cultural heritage resources during construction.</li></ul>   | <ul style="list-style-type: none"><li>Implement recommendations in the CHAR and/or Heritage Impact Assessment to be completed prior to construction.</li></ul>   | <ul style="list-style-type: none"><li>No residual effect is anticipated following implementation of the recommended mitigation measures.</li></ul> |





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**Road Crossing.** For road crossings, trenchless construction is the preferred crossing technique. Contact Mohawks of the Bay of Quinte Director of Community Infrastructure and Hastings County and/or Township of Tyendinaga for road crossing permitting requirements. Enbridge Gas will develop a Traffic Management Plan to ensure that traffic is maintained while crossings are conducted. Flag persons will be provided as required. Refer to the appropriate sections of the LUG C&M Manual 2022.

**Potential Crossing of Watercourse.** Crossing technique (open cut or trenchless) to be determined during construction detailed design process having regard for the engineering technical feasibility of construction and natural features. All watercourses to be crossed shall be prepared and constructed according to permit conditions established by the appropriate regulatory authorities (e.g., Quinte Conservation, MECP, DFO). Refer to the appropriate sections of the LUG C&M Manual 2022. No vehicle or equipment refuelling within 30 metres of a watercourse or drainages, unless otherwise approved by Enbridge Gas Environment. Clean up of all watercourse and drainage crossings shall be completed to the satisfaction of the conservation authority and Environmental Inspector.

**Driveway Crossing.** Access will be maintained to private and commercial properties at all times. Signage will be used to indicate detours or alternative entrances, if required, in consultation with the landowner.

**Candidate Reptile Hibernaculum.** Wildlife exclusion fencing to be installed in select areas where increased probability of snakes may occur. Refer to Table 8 of Section 6.0 of the Environmental Report for details on sensitive timing windows, setback distances and exclusion fencing specifications. Complete a wildlife sweep within the exclusion area following fence installation to ensure there is no trapped wildlife. Visually inspect machinery and/or engine compartments each day during construction for basking reptiles.

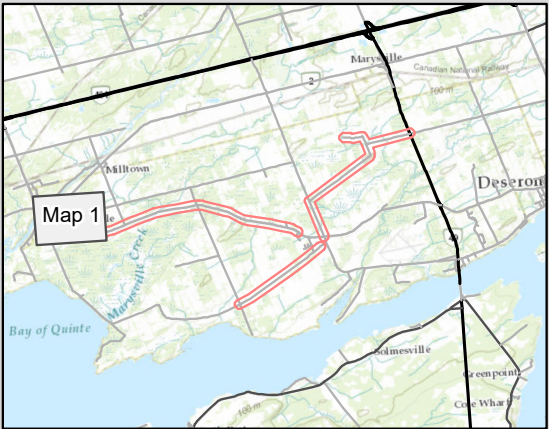
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**ENBRIDGE GAS INC.**  
MOHAWKS OF THE BAY OF QUINTE  
AND SHANNONVILLE  
COMMUNITY EXPANSION PROJECT

**MITIGATION MAP**  
FIGURE 11 MAP 1 OF 10

- Preliminary Preferred Route
- Project Footprint (30 m)
- Study Area (125 m)
- Local Road
- Unmapped Watercourse (Dillon, 2022)
- Watercourse
- Waterbody



SCALE 1:6,000

0 50 100 200 Metres



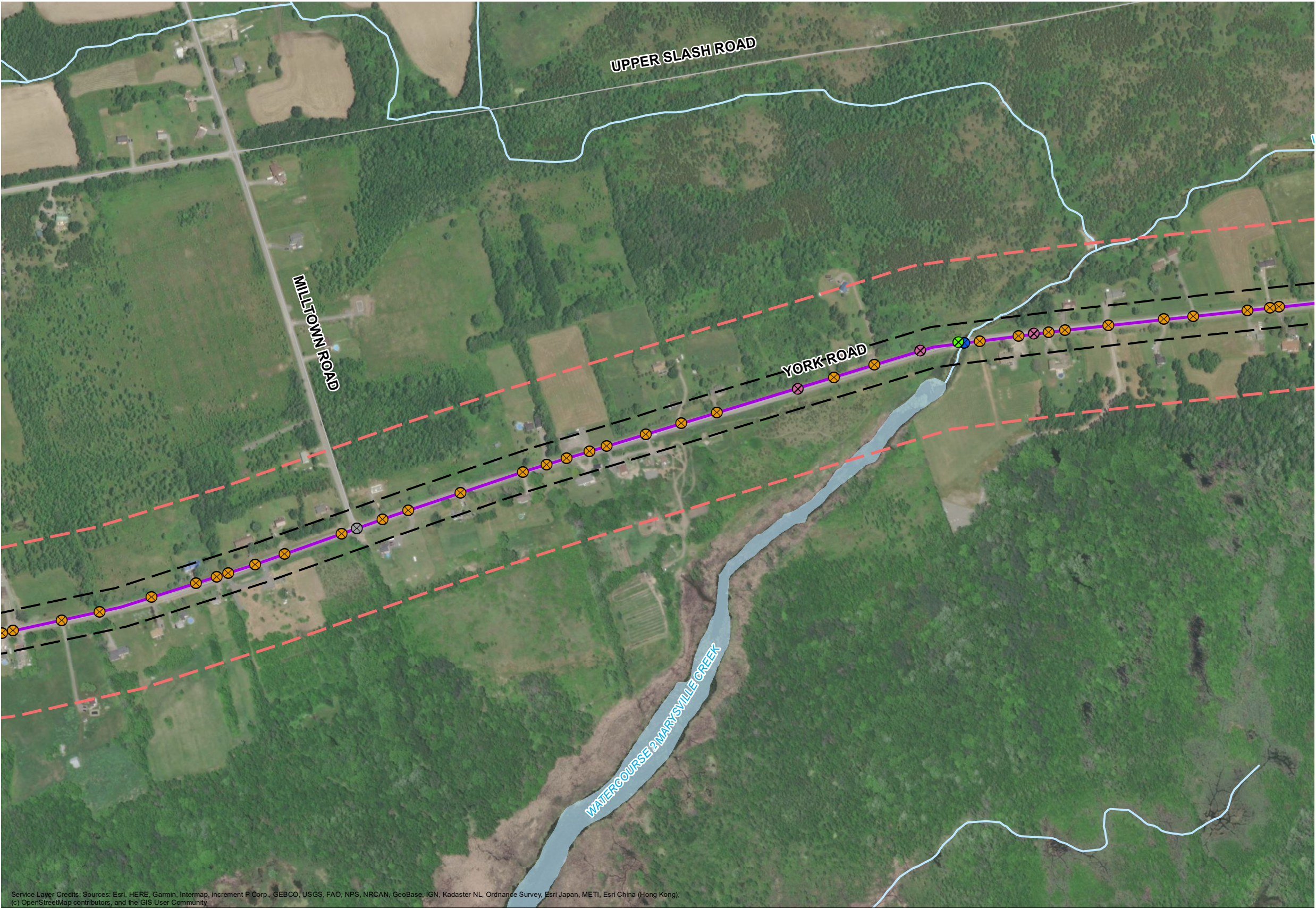
MAP DRAWING INFORMATION:  
DATA PROVIDED BY MNR, OSM

MAP CREATED BY: MEC  
MAP CHECKED BY: AL  
MAP PROJECTION: NAD 1983 CSRS UTM Zone 18N



PROJECT: 22-3566  
STATUS: DRAFT  
DATE: 2022-07-20





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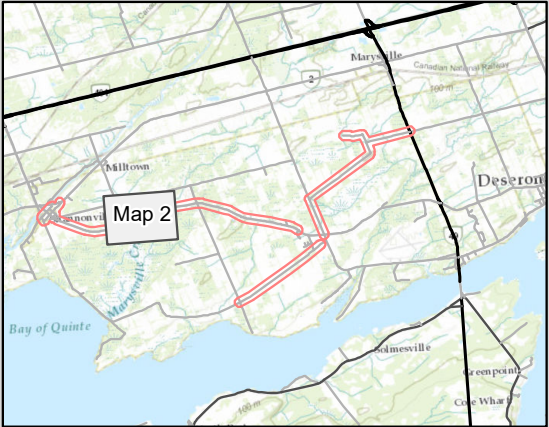
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**ENBRIDGE GAS INC.**  
MOHAWKS OF THE BAY OF QUINTE  
AND SHANNONVILLE  
COMMUNITY EXPANSION PROJECT

**MITIGATION MAP**  
FIGURE 11 MAP 2 OF 10

- Preliminary Preferred Route
- Project Footprint (30 m)
- Study Area (125 m)
- Local Road
- Watercourse
- Waterbody



SCALE 1:6,000

0 50 100 200 Metres



MAP DRAWING INFORMATION:  
DATA PROVIDED BY MNR, OSM

MAP CREATED BY: MEC  
MAP CHECKED BY: AL  
MAP PROJECTION: NAD 1983 CSRS UTM Zone 18N



PROJECT: 22-3566  
STATUS: DRAFT  
DATE: 2022-07-20





Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

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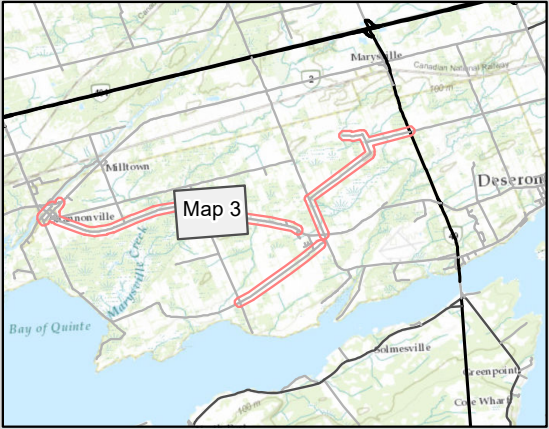
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**ENBRIDGE GAS INC.**  
MOHAWKS OF THE BAY OF QUINTE  
AND SHANNONVILLE  
COMMUNITY EXPANSION PROJECT

**MITIGATION MAP**  
FIGURE 11 MAP 3 OF 10

- Preliminary Preferred Route
- Project Footprint (30 m)
- Study Area (125 m)
- Local Road
- Watercourse
- Waterbody



SCALE 1:6,000

0 50 100 200 Metres



MAP DRAWING INFORMATION:  
DATA PROVIDED BY MNR, OSM

MAP CREATED BY: MEC  
MAP CHECKED BY: AL  
MAP PROJECTION: NAD 1983 CSRS UTM Zone 18N



PROJECT: 22-3566  
STATUS: DRAFT  
DATE: 2022-07-20





Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

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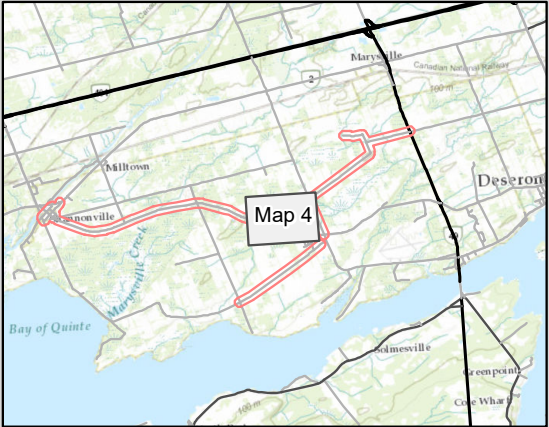
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**ENBRIDGE GAS INC.**  
MOHAWKS OF THE BAY OF QUINTE  
AND SHANNONVILLE  
COMMUNITY EXPANSION PROJECT

**MITIGATION MAP**  
FIGURE 11 MAP 4 OF 10

- Preliminary Preferred Route
- Project Footprint (30 m)
- Study Area (125 m)
- Local Road
- Watercourse



SCALE 1:6,000

0 50 100 200 Metres



MAP DRAWING INFORMATION:  
DATA PROVIDED BY MNR, OSM

MAP CREATED BY: MEC  
MAP CHECKED BY: AL  
MAP PROJECTION: NAD 1983 CSRS UTM Zone 18N



PROJECT: 22-3566  
STATUS: DRAFT  
DATE: 2022-07-20





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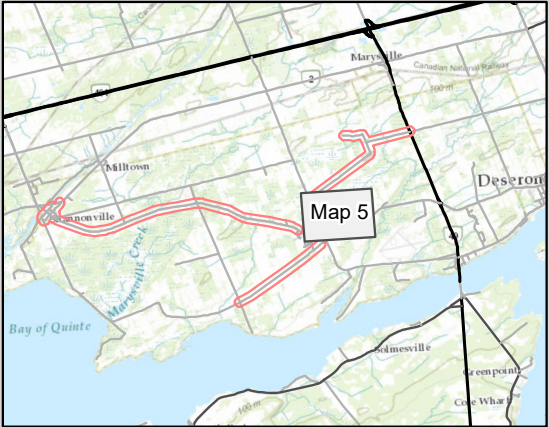
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**ENBRIDGE GAS INC.**  
MOHAWKS OF THE BAY OF QUINTE  
AND SHANNONVILLE  
COMMUNITY EXPANSION PROJECT

**MITIGATION MAP**  
FIGURE 11 MAP 5 OF 10

- Preliminary Preferred Route
- Project Footprint (30 m)
- Study Area (125 m)
- Local Road
- Watercourse



SCALE 1:6,000

0 50 100 200 Metres



MAP DRAWING INFORMATION:  
DATA PROVIDED BY MNR, OSM

MAP CREATED BY: MEC  
MAP CHECKED BY: AL  
MAP PROJECTION: NAD 1983 CSRS UTM Zone 18N



PROJECT: 22-3566  
STATUS: DRAFT  
DATE: 2022-07-20





Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

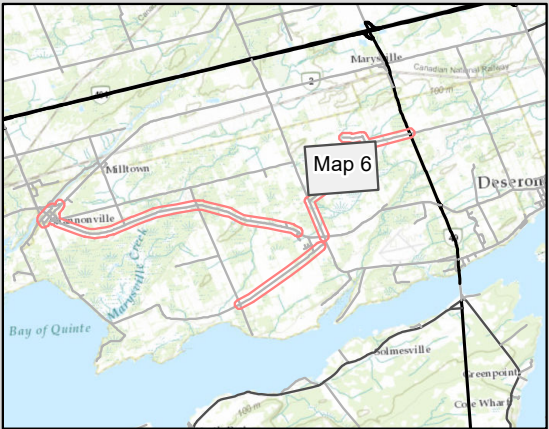
|  |   |  |   |  |
|--|---|--|---|--|
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|--|---|--|---|--|



**ENBRIDGE GAS INC.**  
MOHAWKS OF THE BAY OF QUINTE  
AND SHANNONVILLE  
COMMUNITY EXPANSION PROJECT

**MITIGATION MAP**  
FIGURE 11 MAP 6 OF 10

- Preliminary Preferred Route
- Project Footprint (30 m)
- Study Area (125 m)
- Local Road
- Watercourse



SCALE 1:6,000

0 50 100 200 Metres



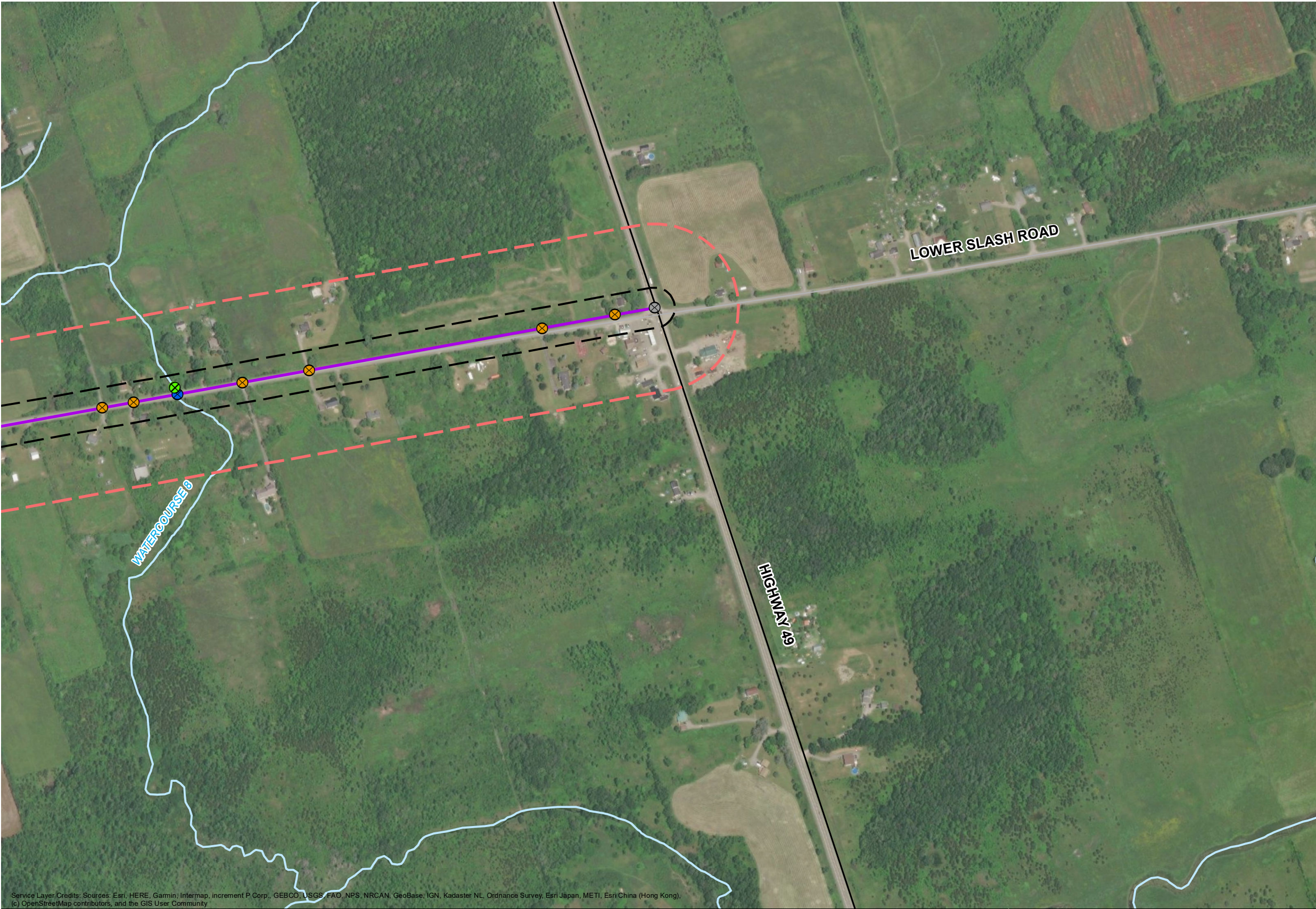
MAP DRAWING INFORMATION:  
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MAP CREATED BY: MEC  
MAP CHECKED BY: AL  
MAP PROJECTION: NAD 1983 CSRS UTM Zone 18N



PROJECT: 22-3566  
STATUS: DRAFT  
DATE: 2022-07-20





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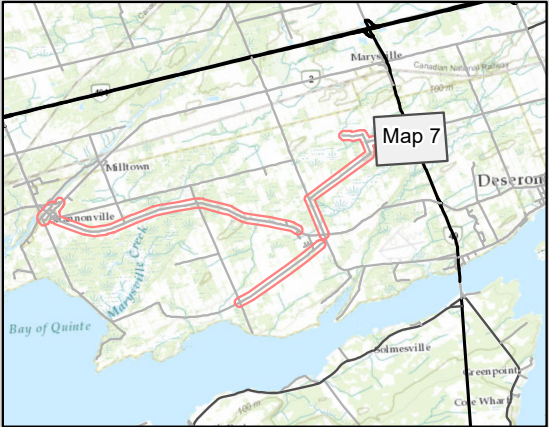
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|---|--|---|--|---|
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**ENBRIDGE GAS INC.**  
MOHAWKS OF THE BAY OF QUINTE  
AND SHANNONVILLE  
COMMUNITY EXPANSION PROJECT

**MITIGATION MAP**  
FIGURE 11 MAP 7 OF 10

- Preliminary Preferred Route
- Project Footprint (30 m)
- Study Area (125 m)
- Highway
- Local Road
- Watercourse



SCALE 1:6,000

0 50 100 200 Metres



MAP DRAWING INFORMATION:  
DATA PROVIDED BY MNR, OSM

MAP CREATED BY: MEC  
MAP CHECKED BY: AL  
MAP PROJECTION: NAD 1983 CSRS UTM Zone 18N








PROJECT: 22-3566  
STATUS: DRAFT  
DATE: 2022-07-20











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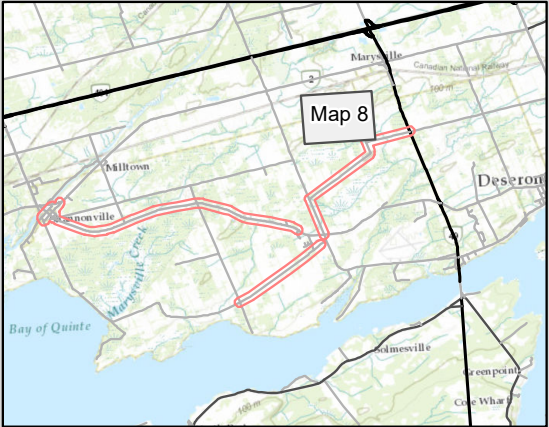
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**ENBRIDGE GAS INC.**  
MOHAWKS OF THE BAY OF QUINTE  
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COMMUNITY EXPANSION PROJECT

**MITIGATION MAP**  
FIGURE 11 MAP 8 OF 10

-  Preliminary Preferred Route
-  Project Footprint (30 m)
-  Study Area (125 m)
-  Local Road
-  Watercourse
-  Waterbody



SCALE 1:6,000



MAP DRAWING INFORMATION:  
DATA PROVIDED BY MNR, OSM

MAP CREATED BY: MEC  
MAP CHECKED BY: AL  
MAP PROJECTION: NAD 1983 CSRS UTM Zone 18N



PROJECT: 22-3566

STATUS: DRAFT

DATE: 2022-07-20





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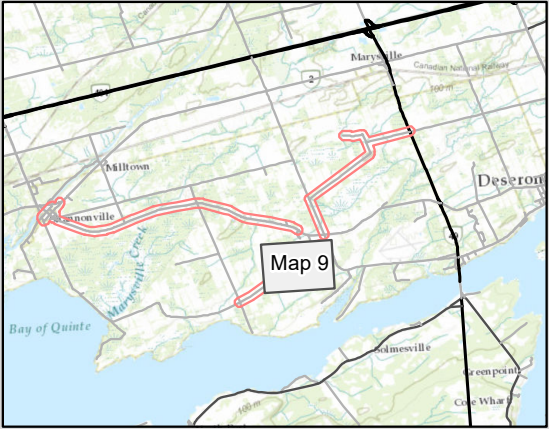
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**ENBRIDGE GAS INC.**  
MOHAWKS OF THE BAY OF QUINTE  
AND SHANNONVILLE  
COMMUNITY EXPANSION PROJECT

**MITIGATION MAP**  
FIGURE 11 MAP 9 OF 10

- Preliminary Preferred Route
- Project Footprint (30 m)
- Study Area (125 m)
- Local Road
- Watercourse
- Waterbody



SCALE 1:6,000

0 50 100 200 Metres



MAP DRAWING INFORMATION:  
DATA PROVIDED BY MNR, OS

MAP CREATED BY: MEC  
MAP CHECKED BY: AL  
MAP PROJECTION: NAD 1983 CSRS UTM Zone 18N



PROJECT: 22-3566  
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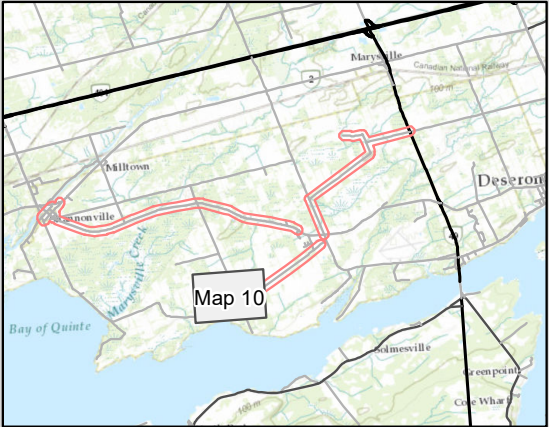
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MOHAWKS OF THE BAY OF QUINTE  
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COMMUNITY EXPANSION PROJECT

**MITIGATION MAP**  
FIGURE 11 MAP 10 OF 10

- Preliminary Preferred Route
- Project Footprint (30 m)
- Study Area (125 m)
- Local Road
- Watercourse
- Waterbody



SCALE 1:6,000

0 50 100 200 Metres



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## 7.0

## Cumulative Effects Assessment

The cumulative effects assessment evaluates the significance of residual effects of the Project (i.e., effects remaining after the application of mitigation) in combination with the effects of other existing or proposed projects or developments. The cumulative effects assessment recognizes that while individual actions may not have a significant effect on the physical, natural, or socio-economic environment, multiple actions of a similar nature that occur over an extended period of time may have a significant effect.

## 7.1

### Methods

The cumulative effects assessment was conducted in accordance with the OEB Guidelines and included developing a cumulative effects Study Area with appropriate boundaries.

For the purposes of this assessment, cumulative effects are defined as follows:

- The combination and interaction of effects of the same project;
- The combination and interaction of the effects of the proposed Project with other projects; and,
- The combined effects over time in the same space.

## 7.1.1

#### Spatial and Temporal Boundaries

Based on Dillon's professional experience, it was determined that the spatial boundaries for the cumulative effects assessment be established as a 1 km radius from the Preferred Route (i.e., 500 m buffer on each side of the route).

Temporal boundaries identified for the assessment include recently constructed projects, projects currently under review, under construction, or planned within three years before or three years following Project construction (i.e., reasonably foreseeable).

## 7.1.1.2

#### Criteria for Significance

The same criteria that were used to assess the significance of residual effects were used for the cumulative effects assessment. For the purposes of this assessment, a "significant cumulative effect" is defined as a permanent or long-term cumulative effect of high magnitude that has a high probability of occurrence and cannot be technically or economically mitigated.

## 7.1.1.3

#### Identified Projects

A desktop review of various sources was conducted to identify projects within the spatial and temporal boundaries of the cumulative effects assessment. Sources reviewed included the Canadian Impact Assessment Registry (Impact Assessment Agency of Canada 2022), Natural Resources Canada Major

Projects Inventory (Government of Canada 2022b), Interactive map: Investing in Indigenous community infrastructure (Indigenous Services Canada 2022), Investing in Canada Plan Project Map (Infrastructure Canada 2022), Infrastructure Ontario Projects Map (Infrastructure Ontario 2022), Environmental Registry of Ontario (Government of Ontario 2022b), Ontario's Highways Programs Interactive Map (MTO 2022), Hydro One Major Projects (Hydro One Networks Inc. 2022), Mohawks of the Bay of Quinte Current Projects – Community Infrastructure (Mohawks of the Bay of Quinte 2022c), Township of Tyendinaga (2022c), and Hastings County (2022b).

Specific projects identified within the spatial and temporal boundaries for the cumulative effects assessment are summarized in Table 9; however, the list is not exhaustive. It is anticipated that future and ongoing consultation with the communities and other key stakeholders may result in the identification of other planned development activities in the cumulative effects assessment boundaries. Enbridge Gas will work to identify efficiencies in regard to timing and coordination of Project construction with other planned developments, where feasible, in order to reduce the cumulative impact.

**Table 9: Projects Identified for the Cumulative Effects Assessment**

| Source  | Project Name                             | Description   |
|---|--|---|
| Canadian Impact Assessment Registry (Impact Assessment Agency of Canada 2022)                       | Reconstruction of a Section of York Road | <ul style="list-style-type: none"> <li>Project Status: Complete</li> <li>Construction Date(s): Summer - Fall 2021</li> <li>Project Scope: reconstruction of 5 km of road by removing the existing surface, upgrading the sub-base and curbs, replacing deficient culverts, improving ditching, and paving the road surface and shoulders</li> <li>Location: 5 km of York Road from Shannonville to the York Road/Norways Road intersection</li> </ul> |
| Natural Resources Canada Major Projects Inventory (Government of Canada 2022b)                      | N/A                                      | No projects identified within the spatial or temporal boundaries.   |
| Interactive map: Investing in Indigenous community infrastructure (Indigenous Services Canada 2022) | Water Treatment Plant – Phase 3          | <ul style="list-style-type: none"> <li>Project Status: Ongoing</li> <li>Construction Date(s): Not available</li> <li>Project Scope: Not available</li> <li>Location: Unknown; assumed to be in Study Area for the purposes of the cumulative effects assessment</li> </ul>  |
| Investing in Canada Plan Project Map (Infrastructure Canada 2022)                                   | N/A                                      | No projects identified within the spatial or temporal boundaries.   |



| Source  | Project Name                               | Description  |
|---|--|--|
| Infrastructure Ontario Projects Map (Infrastructure Ontario 2022)   | N/A  | No projects identified within the spatial or temporal boundaries.  |
| Environmental Registry of Ontario (Government of Ontario 2022b)   | N/A  | No projects identified within the spatial or temporal boundaries.  |
| Ontario's Highways Programs Interactive Map (MTO 2022)  | Bridge Rehabilitation                      | <ul style="list-style-type: none"> <li>• Project Status: Ongoing</li> <li>• Construction Date(s): 2018-2024</li> <li>• Project Scope: Complete replacement of the steel girders and deck, rehabilitation of the piers, and reconstruction of the abutments; the bridge deck will be widened slightly and will include 1.5 m shoulders on each side</li> <li>• Location: Bay of Quinte Skyway, Deseronto; the proposed station rebuild is located at the intersection of York Road and Highway 49 and may overlap with MTO project works at this location</li> </ul>  |
| Hydro One Major Projects (Hydro One Networks Inc. 2022)   | N/A  | No projects identified within the spatial or temporal boundaries.  |
| Mohawks of the Bay of Quinte Current Projects – Community Infrastructure (Mohawks of the Bay of Quinte 2022c) | Watermain Distribution Project – Phase III | <ul style="list-style-type: none"> <li>• Project Status: Ongoing</li> <li>• Construction Date(s): 2022/2023 (additional phases extend to 2027, pending funding approval)</li> <li>• Project Scope: Phase III includes the following areas to be serviced: <ul style="list-style-type: none"> <li>○ Group 1: Airport Road/Johnson Lane</li> <li>○ Group 2: Highway 2 Shannonville West to Bayview</li> <li>○ Group 3: Mohawk Plaza to Highway 49</li> <li>○ Group 4: Highway 2 Shannonville East to Trailer Park</li> <li>○ Group 5: York Road to First Nations Technical Institute</li> </ul> </li> <li>• Location: the areas outlined above under Project Scope; some are just outside the 1 km spatial boundary or adjacent to it</li> </ul> |
| Township of Tyendinaga (2022c)  | N/A  | No projects identified within the spatial or temporal boundaries.  |

| Source                  | Project Name | Description   |
|-------------------------|--------------|---|
| Hastings County (2022b) | N/A          | No projects identified within the spatial or temporal boundaries. |

## 7.2 Analysis of Cumulative Effects

The residual effects identified for the physical and natural environment components are all anticipated to be low magnitude and short-term in duration, with the exception of residual effects on groundwater and vegetation, where the effects may be medium-term in duration. Based on the planned and existing developments identified, there may be cumulative effects related to:

- Reduction in groundwater quality (associated with potential multiple linear construction projects occurring simultaneously in close proximity);
- Temporary and localized increase in air emissions during construction and operations (where preventative maintenance is performed);
- Temporary loss or alteration of vegetation during construction; and,
- Temporary alteration of wildlife habitat, disruption of wildlife movement, and increase in wildlife mortality.

Through proper coordination with other developers, and the implementation of appropriate mitigation measures and industry best practices, the cumulative effects are anticipated to be low in magnitude, short to medium-term in duration, reversible, and not significant.

Based on the planned and existing developments, there is a possibility of socio-economic cumulative effects related to temporary traffic disruptions and noise. The use of appropriate mitigation techniques, coordination with local governments and other developers, and the segmented approach to Project construction (i.e., construction of sections no more than 500 m in length at any given time) over a short construction timeframe will reduce the magnitude of the cumulative effect. While construction activities and traffic disruptions pose a nuisance, they can be appropriately managed. Therefore, it is anticipated that the cumulative effects of temporary traffic disruptions and noise will be low in magnitude, short-term in duration, reversible, and not significant.



## 8.0

## Accidents and Malfunctions

This section provides an overview of potential adverse effects that may result from accidents and malfunctions associated with the Project.

## 8.1

### Accidents and Malfunctions Considered

Accidents and malfunctions are unplanned events that have the potential to result in adverse effects on the environment, should they occur. While the rigorous standards and practices that are in place make accidents or malfunctions unlikely for the Project, the potential consequences are evaluated so that emergency response and contingency planning can be identified to reduce the risk and the severity of the consequences.

Accidents and malfunctions have the potential to occur during all phases of the Project and may include the following:

- Equipment or machinery leaks or other spills;
- Inadvertent return (release of drilling fluid to the surface) during HDD activities; and,
- Pipeline failure during operations resulting in the release of natural gas.

Accidents and malfunctions can result from various unplanned events including equipment failure, human error, natural perils, third-party damage, or vandalism. The assessment of accidents and malfunctions takes into account the type, scale, and location of the Project, the characteristics of the product to be transported, sensitivities in the Study Area, and Enbridge Gas' internal preventative protocols for reducing the likelihood of such events.

Enbridge Gas implements several strategies aimed at preventing potential accidents and malfunctions including:

- Maintaining the pipeline with special pipeline coatings and cathodic protection;
- Patrolling the right-of-way regularly using aircraft, vehicles, and foot patrols; and,
- Monitoring the pipeline remotely and through in-line inspections, integrity digs, and leak surveys.

## 8.1.1

#### Equipment or Machinery Leaks or Other Spills

Hazardous materials are a component of vehicles, machinery, and construction equipment and some hazardous materials will be stored onsite during the construction period. Potential contaminants associated with the Project may include gasoline, diesel fuel, lubricants, and hydraulic fuels. If equipment is not properly maintained or if hazardous materials are not stored or handled properly, spills may occur.

### 8.1.2 Inadvertent Return during HDD Activities

HDD may be utilized in the vicinity of natural features (e.g., wetlands), to avoid potential SAR habitat, or to cross busy streets and intersections.

HDD activities have the potential to result in an inadvertent return of drilling fluid to the surface. This is most likely to occur at the drill entry and exit locations and would likely only affect the terrestrial environment; however, there is the possibility of drilling fluid migration to aquatic ecosystems or a release within an aquatic environment. Controls will be in place to contain a potential inadvertent return and prevent migration to wetlands or watercourses.

Drilling mud is typically composed of bentonite clay which is inert and, as such, a release to land or water would be relatively benign. The activities involved in cleaning up an inadvertent return are more likely to cause an adverse effect on the environment, as clean-up may require removal of vegetation and wildlife habitat where it may not have previously been required for construction.

### 8.1.3 Pipeline Failure during Operations

Natural gas is lighter (less dense) than air, is non-toxic, and has low solubility in water. Consequently, natural gas escaping from a minor leak would volatilize to the atmosphere with little potential to adversely affect the surrounding environment.

Pipelines can be damaged by natural events or vandalism, however, more often they are damaged by regular work activities conducted by third parties (e.g., road or utility work). It is a requirement that contractors obtain utility locates prior to any ground disturbance by contacting Ontario One-Call in order to decrease the possibility of accidentally damaging adjacent infrastructure.

Enbridge Gas takes steps to ensure the safe and reliable operation of their natural gas pipelines, including continuously monitoring the entire network and performing regular field surveys to detect leaks and confirm corrosion prevention methods are working as intended. If a natural gas release is detected or reported, Enbridge Gas promptly responds by dispatching a trained response team and isolates and repairs the leak or damage. Vandalism to the Project and response measures are considered in Enbridge Gas' internal protocols.

## 8.2 Effects Assessment and Significance

The assessment of potential effects and identification of key mitigation measures for accidents and malfunctions is provided in Table 10. Additional mitigation measures can be found in the LUG C&M Manual 2022.



**Table 10: Potential Effects, Mitigation Measures, and Potential Residual Effects of Accidents and Malfunctions**

| Potential Effect(s)  | Project Activity   | Spatial Boundary  | Mitigation Measures  | Potential Residual Effect(s)   |
|--|--|---|--|--|
| Equipment or machinery leaks or other spills resulting in contamination of the surrounding environment | Construction or site-specific maintenance during operations (e.g., integrity digs) | Project footprint (i.e., 30 m on either side of the right-of-way) | <ul style="list-style-type: none"> <li>• Equipment and machinery should be kept in good working order and maintained on a regular basis.</li> <li>• Follow safe work procedures when working with, or storing, chemicals. Crews should be properly trained in the handling of wastes.</li> <li>• Immediately contain and clean up spills in accordance with regulatory requirements and Enbridge Gas procedures.</li> <li>• Contractor(s) and construction crews should have appropriate spill containment and hazardous material and response training.</li> <li>• Implement applicable sections of Enbridge Gas' internal protocols for safety, pre-emergency preparedness, and emergency response actions.</li> <li>• Depending on the type/extent and or nature of spill, the following should be contacted: <ul style="list-style-type: none"> <li>– MECP Spills Action Centre at 1-800-268-6060 (out of Province 1-416-325-3000)</li> <li>– Local/regional municipality</li> <li>– Report emergencies by calling 911 (Emergency Services)</li> </ul> </li> </ul> | A release of hazardous materials would be immediately contained and recovered. A release of this nature is expected to be avoided, or effectively mitigated, therefore, no residual effects are predicted. |

| Potential Effect(s)   | Project Activity                     | Spatial Boundary  | Mitigation Measures   | Potential Residual Effect(s)  |
|---|--------------------------------------|---|---|---|
| Inadvertent return during HDD activities resulting in release of drilling fluid affecting terrestrial and/or aquatic ecosystems | Construction of trenchless crossings | Project footprint (i.e., 30 m on either side of the right-of-way) | <ul style="list-style-type: none"> <li>• In the event of an inadvertent return, implement the drilling fluid release contingency measures in the Project-specific EPP.</li> <li>• Appropriate spill kits with absorbent spill clean-up materials must be kept on-site at all times. Any significant spills (spills that have an adverse impact on water or wetland features) shall be reported to the appropriate authorities, including the Mohawks of the Bay of Quinte, ECCC, DFO, MECP Spills Action Centre, Quinte Conservation, and the landowner. All spills shall be contained, cleaned up immediately, and removed from site, wherever feasible, to prevent them from entering into any wetlands or watercourses. Any used spill clean-up materials shall be appropriately disposed of off-site at an appropriate facility that can accept the waste.</li> <li>• Maintain the minimum following equipment (or equivalent) on-site in sufficient quantities during drilling operation to contain any inadvertent drilling mud releases: <ul style="list-style-type: none"> <li>– Sandbags;</li> <li>– Silt soxx;</li> <li>– Turbidity curtains;</li> <li>– •Filter cloth (e.g., silt fence);</li> <li>– T-bar posts and post pounders;</li> </ul> </li> </ul> | Depending on the size of the release, the location (terrestrial or aquatic), and the environmental and socio-economic components that are impacted, the duration of the residual effect may be immediate to long-term and the magnitude may be low to high. The potential residual effects of a drilling fluid release are reversible with the implementation of remedial measures and residual effects are not likely to be significant. |



| Potential Effect(s)  | Project Activity | Spatial Boundary | Mitigation Measures  | Potential Residual Effect(s) |
|--|------------------|------------------|--|------------------------------|
| Inadvertent return during HDD activities resulting in release of drilling fluid affecting terrestrial and/or aquatic ecosystems (cont'd) | See above        | See above        | <ul style="list-style-type: none"> <li>- Straw bales;</li> <li>- Numerous 5 gallon pails;</li> <li>- Floating sediment boom;</li> <li>- Squeegees;</li> <li>- Corrugated steel pipes;</li> <li>- Shovels;</li> <li>- Geotextile material (polyethylene sheeting or equivalent); and,</li> <li>- Pumps complete with sufficient lengths of leak-free hose and suction heads, and cages to prevent fish entry into hoses.</li> <li>• Maintain vacuum truck(s) on-site during pullback operations.</li> <li>• Suspend drilling operations immediately if an excessive loss of drilling mud is noted and conduct a detailed examination of the drill path and surrounding area for evidence of a release to the surface.</li> <li>• If no surface or in-water release is noted, it may be necessary to increase monitoring (terrestrial frac detection and water quality sampling) to ensure early detection while the drill continues. Measures should be taken by the Contractor to establish cause and mitigate for the drilling mud loss.</li> </ul> | See above                    |

| Potential Effect(s)  | Project Activity | Spatial Boundary | Mitigation Measures   | Potential Residual Effect(s) |
|--|------------------|------------------|---|------------------------------|
| Inadvertent return during HDD activities resulting in release of drilling fluid affecting terrestrial and/or aquatic ecosystems (cont'd) | See above        | See above        | <ul style="list-style-type: none"> <li>• Immediately notify the Enbridge Gas Construction Supervisor and the Environmental Inspector if a drilling mud release is observed.</li> <li>• Contain and further prevent drilling mud from entering the waterbody from nearshore areas by installing a berm of subsoil, sandbags or other material reviewed by the Environmental Inspector.</li> <li>• Drilling will only be allowed to resume if the potential for significant adverse impacts on the environment is low, as determined by Enbridge Gas and the drilling contractor, and in consultation with applicable regulators (where required).</li> </ul> | See above                    |



| Potential Effect(s)                                    | Project Activity | Spatial Boundary  | Mitigation Measures  | Potential Residual Effect(s)   |
|--|------------------|---|--|--|
| Pipeline failure resulting in a release of natural gas | Operations       | Study Area (i.e., 125 m on either side of the right-of-way) | <ul style="list-style-type: none"> <li>Implement applicable sections of Enbridge Gas' internal protocols for safety, pre-emergency preparedness and emergency response.</li> </ul> | Depending on the size of the leak and the environmental and socio-economic components that are impacted, the duration of the residual effect may be immediate to long-term and the magnitude may be low to high. The potential residual effects of a leak are reversible with the implementation of remedial measures and residual effects are not likely to be significant. |

## 8.3

## Summary of Residual Effects

The likelihood of a significant residual effect is considered low with the implementation of appropriate preventative and mitigation measures. No significant residual effects from accidents and malfunctions are predicted for the Project.



## 9.0

# Effects of the Environment on the Project

This section identifies the potential effects of the environment on the Project.

Potential effects of the environment on the Project are considered unlikely. Enbridge Gas is aware of the range of environmental conditions that may affect the Project and this knowledge has been incorporated into Project planning, design, and proposed mitigation measures to avoid such effects as best as possible. The pipeline will be constructed and operated in accordance with applicable industry standards (e.g., Canadian Standards Association Standard Z662) and regulatory requirements.

## 9.1

## Environmental Conditions Considered

The following environmental conditions were identified as potentially affecting the Project in the Study Area:

- Severe weather events (i.e., heavy or persistent precipitation, extreme temperatures, high winds, or frequent/intense storms [lightning, ice]); and,
- Natural hazards (i.e., seismic activity, flooding).

## 9.1.1

### Severe Weather Events

Severe weather events are increasingly more common as a result of global climate change. Severe weather events may include heavy or persistent precipitation, extreme temperatures, high winds, or frequent/intense storms. These events may, in turn, lead to natural hazards such as flooding or mass wasting events, depending on the location and circumstances.

## 9.1.2

### Natural Hazards

## 9.1.2.1

#### Seismic Activity

Shifting of large sections of the earth's crust (tectonic plates) has the ability to cause severe earthquakes and accounts for over 97% of earthquakes worldwide (Natural Resources Canada [NRCan] 2021a). Central and Eastern Canada have a relatively low rate of earthquake activity due to their location in a stable continental region within the North American Plate. Rather than being caused by the shifting of earth's tectonic plates, seismic activity in this zone appears to be related to regional stress fields with earthquake activity concentrated in areas of crustal weakness (NRCan 2021a).

The Project is located within the Southern Great Lakes Seismic Zone (NRCan 2021a) and is in an area with a low seismic hazard rating (NRCan 2021b). No significant earthquakes have been recorded in the Study Area over the past 50 years (NRCan 2022).

## 9.1.2.2

## Flooding

The effects of climate change and severe weather (e.g., heavy or persistent precipitation) can lead to flood events. The Project is in a mainly rural environment dominated by vegetation and natural soils in an area with abundant wetlands, watercourses, and drainages where storm water is managed to a great extent by natural ground infiltration. Agricultural practices on lands in the Project area can lead to increased runoff depending on the type of farming that is being conducted at the time. Flooding can occur where the natural drainage systems are overwhelmed by inputs either from extreme precipitation, overland flooding from nearby watercourses, accelerated runoff from intensively farmed lands, or some combination thereof, including factors such as snow/ice melt and frozen or saturated ground conditions.

The Quinte watershed has historically experienced flooding, often due to large snow melts, heavy rainfall, ice jams, or a combination of these factors. The proposed pipeline route is not located within a high risk flood area. The nearest area classified as having a high risk of flooding is Unger Island in Mohawk Bay, located just east of Deseronto outside of the Study Area (Quinte Conservation 2020b).

## 9.2

## Effects Assessment and Significance

The assessment of effects of the environment on the Project is provided in Table 11.



**Table 11: Potential Effects, Mitigation Measures, and Potential Residual Effects of Effects of the Environment on the Project**

| Potential Effect(s)   | Project Activity            | Spatial Boundary                 | Mitigation Measures   | Potential Residual Effect(s)   |
|---|-----------------------------|----------------------------------|---|--|
| <p>Severe weather events (i.e., heavy or persistent precipitation, extreme temperatures, high winds, or frequent/intense storms [lightning, ice]) and natural hazards (i.e., seismic activity, flooding) may affect the Project in the following ways:</p> <ul style="list-style-type: none"> <li>• Delay the Project schedule;</li> <li>• Damage construction equipment;</li> <li>• Increase safety concerns for workers during construction; and</li> <li>• Damage the operating pipeline.</li> </ul> | Construction and Operations | Project footprint and Study Area | <ul style="list-style-type: none"> <li>• Notify the Environmental Inspector in the event mitigation measures identified in the Project-specific Environmental Protection Plan (EPP) are ineffective at avoiding or reducing environmental effects or if alternative measures to address environmental issues are warranted due to site or weather conditions.</li> <li>• Postpone work during severe weather events that may pose a hazard to safety and/or result in damage to Project infrastructure and equipment.</li> <li>• Design and construct the pipeline in accordance with all applicable industry standards (e.g., Canadian Standards Association Standard Z662).</li> <li>• Conduct regular monitoring during O&amp;M in accordance with regulatory requirements.</li> </ul> | With the implementation of mitigation measures, no residual effects are predicted for potential effects of the environment on the Project. |

## 9.3

## Summary of Residual Effects

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The likelihood of a significant residual effect on the Project is considered low with the implementation of appropriate preventative and mitigation measures. No significant residual effects due to severe weather events or natural hazards are predicted for the Project.



## 10.0 Inspection and Monitoring Recommendations

It is Dillon's recommendation that Enbridge Gas employ the services of an Environmental Inspector to be present as needed during the construction of the pipeline. The Environmental Inspector will provide inspection of Contractor environmental mitigation measures and respond to other environmental issues that may develop during pipeline construction. The Environmental Inspector should be familiar with pipeline construction techniques, the OEB Guidelines, and the implementation of the mitigation recommendations in this ER.

The primary objective of environmental inspection is to determine the effectiveness of mitigation measures (and modify as needed), inspect the construction site and determine compliance with applicable environmental legislation, regulations, industry standards, and project permit conditions, including any notification requirements or conditions set by the OEB. Standard conditions of approval set by the OEB for Enbridge Gas may include:

- Requirements to notify the OEB of any material changes in construction or restoration procedures;
- Notifying the OEB of the expected in-service date, actual in-service date, and completion of construction;
- Filing post-construction interim and final monitoring reports; and,
- Applying a landowner complaint tracking system.

The primary objective of environmental monitoring during construction is to monitor the physical, natural, and socio-economic environment to determine any adverse effects and to verify that the construction site is returned to pre-construction conditions as soon as possible. The purpose of post-construction monitoring is to ascertain the success of the restoration effort and mitigation measures. The knowledge gained from inspection and monitoring can be used in future projects to avoid or minimize similar problems that may arise. Monitoring reports also allow for the collection of quantitative data for the assessment of effects, and to recommend mitigation measures for future projects.

### 10.1 Pre-Construction

A number of activities should be undertaken prior to construction including:

- Acquisition of all necessary permits and approvals;
- The development of a Project-specific Environmental Protection Plan (EPP), including appropriate management and contingency plans (e.g., Waste Management, Traffic Management, Spill Contingency) and Environmental Alignment Sheets with detailed mitigation measures;
- Environmental training for the Contractor. This usually occurs with the Construction Manager and Project Supervisor. The purpose of the training is to educate the construction crew on the key components of the EPP, including the location of sensitive environmental features and associated

mitigation measures including SAR, wetlands, watercourses, and working within residential areas. Other areas of concern along the rights-of-way are also reviewed in the field at this time; and,

- A pictorial record of conditions is compiled to compare restoration efforts with pre-construction conditions.

## 10.2 Construction

### 10.2.1 Environmental Inspectors and Monitors

The Environmental Inspector's responsibilities will be to monitor construction with respect to the mitigation and monitoring recommendations outlined in this report, and that construction activities are carried out in compliance with permit conditions.

Environmental Monitors (typically Qualified Professionals) should be used as-needed during construction (e.g., handling wildlife).

A licensed archaeologist will be required to monitor work in sensitive heritage resource areas as identified in the archaeology and cultural heritage assessments completed for the Project.

### 10.2.2 Spill Contingency Plan

A contingency plan for accidental spills should be developed. At a minimum, there should be spill kits on site and a telephone number posted for the MECP Spills Action Centre (1-800-268-6060), which will be reported by the delegated Enbridge Gas Environmental Advisor in the event of a spill. The Environmental Inspector will be trained in Enbridge Gas' spill response protocols and should impart this training at the pre-construction meeting.

## 10.3 Post-Construction

In order to assess the effectiveness of restoration programs within the rights-of-way used for pipeline construction and, in keeping with the intent of the OEB Guidelines, environmental monitoring reports will be prepared including an Interim Monitoring Report and a Final Monitoring Report. As per OEB Guidelines, the Interim Monitoring Report is required within 3 months after energization, while the Final Monitoring Report is to be prepared no later than 15 months after the in-service date, or, where the deadline falls between December 1 and May 31, the following June 1.

### 10.3.1 Interim Monitoring Report

The following provides an outline of an Interim Monitoring Report based on the OEB Guidelines.

- Describe the predicted effects (including cumulative effects) and mitigation measures;
- Compare predicted effects with those that actually occurred, explaining the reasons for any deviations;



- Outline any changes in the proposed construction, monitoring, or restoration procedures that took place during the Project, and the reason for the changes;
- Discuss the effectiveness of the measures applied and indicate opportunities for improvement in future pipeline projects;
- Provide a log of complaints during construction and the actions taken in response; and,
- Detail any instances where provisions of a local by-law have not been complied with and the reasons for such non-compliance.

### 10.3.2 Final Monitoring Report

The following provides an outline of a Final Monitoring Report based on the OEB Guidelines.

- Describe the condition of the rehabilitated right-of-way and actions taken subsequent to the submission of the Interim Monitoring Report;
- Compare predicted and actual effects (including cumulative effects, mitigation measures, and explain any deviations which may have occurred);
- Report the results of any monitoring programs and analyses such as soil and water sampling, and make recommendations as appropriate;
- Discuss the effectiveness of the mitigation measures as well as the monitoring programs and indicate opportunities for improvement in future pipeline projects;
- Provide a breakdown of environmental costs incurred for the Project. In particular, items of cost associated with specific measures related to pre-construction, construction, or restoration should be described;
- Provide a log of complaints received during construction and the actions taken in response; and,
- Include instances where the provision of any local by-law has not been complied with and the reasons for such non-compliance.

The Final Monitoring Report should also address any potential cumulative effects which may arise for pipelines such as reduced soil productivity, land use restrictions due to increased easement widths, or additional above ground facilities and/or repeated construction through sensitive areas.

## Summary and Conclusions

The Study involved undertaking an inventory of physical, natural, and socio-economic features within a defined Study Area. This information was used to produce maps identifying features that could be impacted by pipeline construction and operation. Enbridge Gas selected the Preferred Route for the Study based on environmental and socio-economic concerns, as well as technical and economic feasibility requirements. The Preferred Route is sited in existing, previously disturbed road rights-of-way, which greatly reduces potential adverse effects to the surrounding environment.

Mitigation measures were recommended to reduce potential negative effects to the environment. These recommendations, in combination with the LUG C&M Manual 2022, are anticipated to effectively protect the physical, natural, and socio-economic features along the pipeline routes. The mitigation recommendations contained in this report, along with Enbridge Gas' construction policies, should be included in contract specifications. Use of a qualified Environmental Inspector will help reduce disturbance to the environment during pipeline construction activities.

Lastly, preparation of Interim and Final Post-Construction Monitoring Reports and implementation of an Environmental Inspection Program will assist with monitoring the area to determine any changes to the environment from pre-construction conditions following the construction period.

Dillon does not anticipate any significant adverse effects from the construction and operation of the Project with the implementation of the mitigation measures recommended in this report.



## 12.0

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## Appendix A

### *Stage 1 Archaeological Assessment Report*

**Stage I Archaeological Assessment  
Proposed Mohawks of the Bay of Quinte and Shannonville  
Community Expansion Project  
Part of Lots 5-7 and 26-31, Concession 1 South of the Road  
Part of Lots 5-31, Concession 2 South of the Road  
Part of Lots 15-23, Concession A  
Geographic Township of Tyendinaga  
Hastings County  
Tyendinaga Mohawk Territory and Shannonville, Ontario**

**Original Report**

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Draft Dated: July 20, 2022





## EXECUTIVE SUMMARY

In 2022, Enbridge Gas Inc. (Enbridge) began planning the proposed Mohawks of the Bay of Quinte and Shannonville Community Expansion Project located in the Tyendinaga Mohawk Territory and Shannonville, Ontario (the “Project”) in order to supply the community with natural gas. The distribution portion of the proposed Project includes the installation of roughly 20.1 km of polyethylene (MOP 550 kPa) natural gas main pipeline ranging from NPS 2 to NPS 4 primarily in an existing right-of-way (ROW) within part of Lots 5-7 and 26-31, Concession 1 South of the Road, part of Lots 5-31, Concession 2 South of the Road, and part of Lots 15-23, Concession A, in the Tyendinaga Mohawk Territory and Shannonville, Ontario. The proposed Project will tie-in to an existing 4” polyethylene pipeline near the intersection of Wyman Road and York Road in the Tyendinaga Mohawk Territory and proceed north along Wyman Road to Lower Slash Road, east along Lower Slash Road to the intersection with Homeland Drive, then splitting and with one branch following Homeland Drive north and east while the other proceeds east along the continuation of Lower Slash Road to the intersection with Highway 2. A separate segment will proceed southwest along Bridge Road to Norways Road from a tie-in near Wyman Road and York Road. The last segment will proceed from a tie-in near Wyman Road and York Road, northwest along York Road to Young Street within Shannonville where it branches out along Atsia Court, Queen Street, Beach Road, Howard Street, and Gore Street. In addition, one station rebuild will be undertaken near the intersection of Lower Slash Road and Highway 49.

In 2022, TMHC Inc. (TMHC) was contracted to carry out the Stage I archaeological assessment for the Project area by Dillon Consulting Limited (Dillon) who are coordinating the Project on behalf of Enbridge. As the Project is in the planning stages, there are no detailed development plans at this time. As such, it has been determined, in discussions with the proponent, that the Stage I Project area should be considered the entire ROW along the length of the proposed route for planning purposes. The Stage I archaeological assessment was undertaken as part of the internal Enbridge environmental screening process and as part of a Leave-To-Construct (LTC) application to be submitted to the Ontario Energy Board (OEB).

The Stage I background study included a review of current land use, historic and modern maps, registered archaeological sites and previous archaeological studies, past settlement history for the area and a consideration of topographic and physiographic features, soils and drainage. According to the map-based review and background research, potential for the discovery of archaeological sites is indicated by the presence of, or proximity (within 300 m) to:

- An area of 19<sup>th</sup>-century settlement (Shannonville, Tyendinaga);
- 19<sup>th</sup>-Century travel routes (York Road, Ridge Road, Beach Road, Wyman Road, Lower Slash Road, and Highway 49);
- Mapped 19<sup>th</sup>-century structures (numerous homesteads, a church, and two schoolhouses);
- Documented 19<sup>th</sup>-century cemetery; and,
- Historic watercourses (Salmon River, Marysville Creek, unnamed creek, and tributaries of Sucker Creek).

The Stage I property inspection confirmed that portions of the Project area retain archaeological potential. Those areas retaining archaeological potential include areas of grass, woodland, and agricultural land (5.18 ha; 14.94%). The northern portion of the ROW which adjoins the All Saints’ Anglican Church and Cemetery property is of archaeological concern due to the potential for burials within the ROW (0.07 ha; 0.20%). The property inspection also determined that the majority of the Project area held low or no archaeological potential due to previous disturbance associated with the construction of roads and driveways as well as the



installation of buried utilities including water lines (29.35 ha; 84.73%). Further, a small portion of the Project area was determined to be low-lying and wet, specifically where it crosses mapped watercourses (0.04 ha; 0.12%).

All work met provincial standards and the Stage I background research and property inspection identified several areas retaining archaeological potential. The recommendations for the Stage I Project area are presented below.

- Portions of the Project area that are not obviously disturbed consisting of grasslands, woodlands, agricultural land, and manicured lawns retain archaeological potential (5.18 ha; 14.94%). These areas are recommended for Stage 2 assessment. In keeping with provincial standards, agricultural fields should be ploughed for pedestrian survey; however, as the impact area is a linear corridor less than 10 m wide, they can be assessed via standard test pit survey at 5 m intervals (MTC 2011; Section 2.1.2, Standard 1.f). The non-ploughable lands should be assessed via standard test pit survey at 5 m intervals to achieve the provincial standard (MTC 2011; Section 2.1.2, Standard 1);
- A portion of the Project area bisects the All Saints' Anglican Church and Cemetery properties, located north and south of the Ridge Road ROW. As the background research and property inspection could not precisely establish the limits of the Cemetery on the north side of the road, there remains potential for burials to be identified within the northern portion of the Ridge Road ROW (0.07 ha; 0.20%). Following any required Stage 2 assessment and site excavation, a Cemetery Investigation is required. The Cemetery Investigation should focus on the northern portion of the ROW adjoining the cemetery in the area extending from the known cemetery limits to the northern edge of the pavement on Ridge Road, which acts as a physical constraint. The purpose of the Cemetery Investigation is to confirm the presence or absence of graves within the road shoulder;
- The portions of the Project area consisting of paved roads, ditches, and driveways have been identified as extensively disturbed (29.35 ha; 84.73%), do not retain archaeological potential, and no further assessment is recommended;
- The portions of the Project area deemed low-lying and permanently wet (0.04 ha; 0.12%), do not retain archaeological potential, and no further assessment is recommended; and,
- If the overall Project area is changed to incorporate lands not previously assessed, further assessment will be required.

Our recommendations are subject to the conditions laid out in Section 7.0 of this report and to the MHSTCI's review and acceptance of this report into the provincial register of archaeological reports.





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## PROJECT PERSONNEL

|                                |  |
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| Project Manager                | Lara Wood M.A. (PI078)                                   |
| Project Administrator          | Kellie Theaker   |
| Health and Safety Coordinators | Wendi Jakob, C.Tech, CAPM<br>Andrew Turner, B.A. (RI042) |
| Fieldwork Coordination         | Johnathan Freeman, M.A. (P274)                           |
| Field Director                 | Lara Wood M.A. (PI078)                                   |
| GIS Mapping                    | Andrew Turner, B.A. (RI042)                              |
| Report Production              | Christopher Kerns, Ph.D. (PI269)                         |
| Researcher                     | Christopher Kerns, Ph.D. (PI269)                         |
| Senior Review                  | Matthew Beaudoin, Ph.D. (P324)                           |

## ACKNOWLEDGEMENTS

|                |                           |
|----------------|---------------------------|
| Tristan Lefler | Dillon Consulting Limited |
|----------------|---------------------------|





## **TERRITORIAL ACKNOWLEDGEMENT**

The Project area is located on the traditional lands of the Anishinaabek (Ah-nish-in-a-bek), and Haudenosaunee (Ho-den-no-show-nee), and Huron-Wendat peoples on lands connected with the Crawford Purchase and the Simcoe Deed (Treaty 3½). Most recently, the land is home to the Mohawks of the Bay of Quinte within the Tyendinaga Mohawk Territory. This land continues to be home to diverse Indigenous peoples (e.g., First Nations, Métis and Inuit) whom we recognize as contemporary stewards of the land and vital contributors to our society.



## INDIGENOUS PARTICIPANTS

### *Mohawks of the Bay of Quinte First Nation*

|                                |              |
|--------------------------------|--------------|
| Director of Community Services | Lisa Maracle |
| Field Representative           | Sam Jeffries |





## ABOUT TMHC

Established in 2003 with a head office in London, Ontario, TMHC Inc. (TMHC) provides a broad range of archaeological assessment, heritage planning and interpretation, cemetery, and community consultation services throughout the Province of Ontario. We specialize in providing heritage solutions that suit the past and present for a range of clients and intended audiences, while meeting the demands of the regulatory environment. Over the past two decades, TMHC has grown to become one of the largest privately-owned heritage consulting firms in Ontario and is today the largest predominately woman-owned CRM business in Canada.

Since 2004, TMHC has held retainers with Infrastructure Ontario, Hydro One, the Ministry of Transportation, Metrolinx, the City of Hamilton, and Niagara Parks Commission. In 2013, TMHC earned the Ontario Archaeological Society's award for Excellence in Cultural Resource Management. Our seasoned expertise and practical approach have allowed us to manage a wide variety of large, complex, and highly sensitive projects to successful completion. Through this work, we have gained corporate experience in helping our clients work through difficult issues to achieve resolution.

TMHC is skilled at meeting established deadlines and budgets, maintaining a healthy and safe work environment, and carrying out quality heritage activities to ensure that all projects are completed diligently and safely. Additionally, we have developed long-standing relationships of trust with Indigenous and descendent communities across Ontario and a good understanding of community interests and concerns in heritage matters, which assists in successful project completion.

TMHC is a Living Wage certified employer with the [Ontario Living Wage Network](#) and a member of the [Canadian Federation for Independent Business](#).



## KEY STAFF BIOS

### **Matthew Beaudoin, PhD**, Principal, Manager – Archaeological Assessments

Matthew received a PhD in Anthropology from Western University in 2013 and has a professional archaeological license with the Province of Ontario (P324). During his archaeological career, Matthew has conducted extensive field research and artifact analysis in Labrador and Ontario, and has taught the Field Methods Course and Principals of archaeology courses as a part-time faculty member at Western University. Matthew has also conducted ethnographic projects in Labrador, and has volunteered with the OAS to provide archaeological training to several Indigenous communities throughout the province.

Over the course of his career, Matthew has supervised over 600 archaeological assessments in Ontario, including Stages I-4, under a variety of regulatory triggers including provincial and municipal Environmental Assessments, Green Energy projects, development projects under the *Planning Act*, and as due diligence process. Matthew has extensive experience managing large and complex archaeological projects in conjunction with other disciplines, specialists, and Indigenous communities including Enbridge Line 10 Westover Segment, Imperial Oil from Waterdown to Finch, and Highway 3 Widening in Kingsville. Since joining TMHC in 2008, Matthew has also been involved with several notable projects, such as the archaeological assessment of Stoney Point/Camp Ipperwash. For these and other projects, Matthew works closely with heritage staff at TMHC and with heritage staff employed by clients and stakeholder communities.

Matthew is an active member of the Canadian Archaeological Association, the Ontario Archaeological Association, the Society for American Archaeology, and the Society for Historical Archaeology.

### **Lara Wood, MA**, Manager – Transportation Projects

Lara holds a Master's degree in Anthropology from the University of Western Ontario and a professional archaeological licence with the Province of Ontario. Lara has extensive experience managing Stage I-4 archaeological assessments and has worked on numerous Stage I-4 archaeological assessments in a multitude of roles: project manager, field director, report writer, artifact analyst, and Indigenous engagement coordinator.

With over twelve years of experience in the sector, Lara has extensive experience completing archaeological assessments required under a variety of regulatory triggers including Environmental Assessments (EAs), Transit Project Assessment Processes (TPAPs), and private development projects. During this work, Lara has developed meaningful relationships through engagement with multiple Indigenous communities in Ontario. Lara regularly coordinates with clients, Indigenous communities, and various approval authorities, to ensure that projects are completed efficiently and conform to provincial and Indigenous community requirements. She is an active member of the Ontario Archaeological Society and the Canadian Archaeological Association.





## STATEMENT OF QUALIFICATIONS AND LIMITATIONS

The attached Report (the “Report”) has been prepared by TMHC Inc. (TMHC) for the benefit of the Client (the “Client”) in accordance with the agreement between TMHC and the Client, including the scope of work detailed therein (the “Agreement”).

The information, data, recommendations and conclusions contained in the Report (collectively, the “Information”):

- is subject to the scope, schedule, and other constraints and limitations in the Agreement and the qualifications contained in the Report (the “Limitations”);
- represents TMHC’s professional judgment in light of the Limitation and industry standards for the preparation of similar reports;
- may be based on information provided to TMHC which has not been independently verified;
- has not been updated since the date of issuance of the Report and its accuracy is limited to the time period and circumstances in which it was collected, processed, made or issued;
- must be read as a whole and sections thereof should not be read out of such context;
- was prepared for the specific purposes described in the Report and the Agreement.

TMHC shall be entitled to rely upon the accuracy and completeness of information that was provided to it and has no obligation to update such information. TMHC accepts no responsibility for any events or circumstances that may have occurred since the date on which the Report was prepared and, in the case of subsurface, environmental or geotechnical conditions, is not responsible for any variability in such conditions, geographically or over time.

TMHC agrees that the Report represents its professional judgement as described above and that the Information has been prepared for the specific purpose and use described in the Report and the Agreement, but TMHC makes no other representations, or any guarantees or warranties whatsoever, whether express or implied, with respect to the Report, the Information or any part thereof.

Except (1) as agreed to in writing by TMHC and Client; (2) as required by-law; or (3) to the extent used by governmental reviewing agencies for the purpose of obtaining permits or approvals, the Report and the Information may be used and relied upon only by Client.

TMHC accepts no responsibility, and denies any liability whatsoever, to parties other than the Client who may obtain access to the Report or the Information for any injury, loss or damage suffered by such parties arising from their use of, reliance upon, or decisions or actions based on the Report or any of the Information (“improper use of the Report”), except to the extent those parties have obtained the prior written consent of TMHC to use and rely upon the Report and the Information. Any injury, loss or damages arising from improper use of the Report shall be borne by the party making such use.

This Statement of Qualifications and Limitations is attached to and forms part of the Report and any use of the Report is subject to the terms hereof.



## QUALITY INFORMATION

Report prepared by:

\_\_\_\_\_  
Christopher Kerns, Ph.D. (PI269)  
Report Writer/Archaeologist

Project Manager:

\_\_\_\_\_  
Lara Wood, M.A. (PI078)  
Manager of Transportation Projects, Archaeology Division

Report reviewed by:

\_\_\_\_\_  
Matthew Beaudoin, Ph.D. (P324)  
Principal





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## I PROJECT CONTEXT

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### I.1 Development Context

#### I.1.1 Introduction

In 2022, Enbridge Gas Inc. (Enbridge) began planning the proposed Mohawks of the Bay of Quinte and Shannonville Community Expansion Project located in the Tyendinaga Mohawk Territory and Shannonville, Ontario (the “Project”) in order to supply the community with natural gas. The distribution portion of the proposed Project includes the installation of roughly 20.1 km of polyethylene (MOP 550 kPa) natural gas main pipeline ranging from NPS 2 to NPS 4 primarily in an existing right-of-way (ROW) within part of Lots 5-7 and 26-31, Concession 1 South of the Road, part of Lots 5-31, Concession 2 South of the Road, and part of Lots 15-23, Concession A, in the Tyendinaga Mohawk Territory and Shannonville, Ontario. The proposed Project will tie-in to an existing 4” polyethylene pipeline near the intersection of Wyman Road and York Road in the Tyendinaga Mohawk Territory and proceed north along Wyman Road to Lower Slash Road, east along Lower Slash Road to the intersection with Homeland Drive, then splitting and with one branch following Homeland Drive north and east while the other proceeds east along the continuation of Lower Slash Road to the intersection with Highway 2. A separate segment will proceed southwest along Bridge Road to Norways Road from a tie-in near Wyman Road and York Road. The last segment will proceed from a tie-in near Wyman Road and York Road, northwest along York Road to Young Street within Shannonville where it branches out along Atsia Court, Queen Street, Beach Road, Howard Street, and Gore Street. In addition, one station rebuild will be undertaken near the intersection of Lower Slash Road and Highway 49.

In 2022, TMHC Inc. (TMHC) was contracted to carry out the Stage I archaeological assessment for the Project area by Dillon Consulting Limited (Dillon) who are coordinating the Project on behalf of Enbridge. As the Project is in the planning stages, there are no detailed development plans at this time. As such, it has been determined, in discussions with the proponent, that the Stage I Project area should be considered the entire ROW along the length of the proposed route for planning purposes. The Stage I archaeological assessment was undertaken as part of the internal Enbridge environmental screening process and as part of a Leave-To-Construct (LTC) application to be submitted to the Ontario Energy Board (OEB).

All archaeological assessment activities were performed under the professional archaeological license of Lara Wood, M.A. (P1078) and in accordance with the *Standards and Guidelines for Consultant Archaeologists* (MTC 2011, “Standards and Guidelines”). Permission to undertake the archaeological assessment was provided by Tristan Lefler of Dillon.



### **1.1.2 Purpose and Legislative Context**

The *Ontario Heritage Act* (R.S.O. 1990) makes provisions for the protection and conservation of heritage resources in the Province of Ontario. Heritage concerns are recognized as a matter of provincial interest in Section 2.6.2 of the *Provincial Policy Statement* (PPS 2020) which states:

*development and site alteration shall not be permitted on lands containing archaeological resources or areas of archaeological potential unless significant archaeological resources have been conserved.*

In the PPS, the term conserved means:

the identification, protection, management and use of *built heritage resources, cultural heritage landscapes and archaeological resources* in a manner that ensures their cultural heritage value or interest is retained. This may be achieved by the implementation of recommendations set out in a conservation plan, archaeological assessment and/or heritage impact assessment that has been approved, accepted or adopted by the relevant planning authority and/or decision-maker. Mitigative measures and/or alternative development approaches can be included in these plans and assessments.

The Stage I archaeological assessment work was conducted in accordance with Section 4.3.4 Cultural Heritage Resources in the *Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario* (OEB 2016) and the *Provincial Policy Statement* (PPS 2020). The purpose of a Stage I background study is to determine if there are known cultural resources within the proposed areas of impact or potential for such resources to exist. Subsequently, it can act as a planning tool by identifying areas of concern that, where possible, could be avoided to minimize environmental impact. It is also used to determine the need for a Stage 2 field assessment involving the search for archaeological sites. If significant sites are found, a strategy (usually avoidance, preservation, or excavation) must be put forth for their mitigation.





## 2 BACKGROUND REVIEW

### 2.1 Research Methods and Sources

A Stage I overview and background study was conducted to gather information about known and potential cultural heritage resources within the Project area. According to the *Standards and Guidelines*, a Stage I background study must include a review of:

- an up-to-date listing of sites from the Ministry of Heritage, Sport, Tourism and Culture Industries' (MHSTCI) PastPortal for 1 km around the property;
- reports of previous archaeological fieldwork within a radius of 50 m around the property;
- topographic maps at 1:10,000 (recent and historical) or the most detailed scale available;
- historical settlement maps (e.g., historical atlas, survey);
- archaeological management plans or other archaeological potential mapping when available; and,
- commemorative plaques or monuments on or near the property.

For this Project, the following activities were carried out to satisfy or exceed the above requirements:

- a database search was completed through MHSTCI's PastPortal system that compiled a list of registered archaeological sites within 1 km of the Project area (completed April 5, 2022);
- a review of known prior archaeological reports for the property and adjacent lands;
- Ontario Base Mapping (1:10,000) was reviewed through ArcGIS and mapping layers provided by [geographynetwork.ca](http://geographynetwork.ca);
- a series of historic maps and photographs was reviewed related to the post-1800 land settlement; and,
- detailed mapping provided by the client.

Additional sources of information were also consulted, including modern aerial photographs, local history accounts, soils and physiographic data provided by the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA), and both 1:50,000 (Natural Resources Canada) and finer scale topographic mapping.

When compiled, background information was used to create a summary of the characteristics of the Project area, in an effort to evaluate its archaeological potential. The Province of Ontario (MTC 2011; Section 1.3.1) has defined the criteria that identify archaeological potential as:

- previously identified archaeological sites;
- water sources;
  - primary water sources (e.g., lakes, rivers, streams, creeks);
  - secondary water sources (e.g., intermittent streams and creeks, springs, marshes, swamps);
  - features indicating past water sources (e.g., glacial lake shorelines, relic river or stream channels, shorelines of drained lakes or marshes, cobble beaches);
  - accessible or inaccessible shorelines (e.g., high bluffs, sandbars stretching into a marsh);
- elevated topography (e.g., eskers, drumlins, large knolls, plateau);
- pockets of well-drained sandy soils;
- distinctive land formations that might have been special or spiritual places (e.g., waterfalls, rock outcrops, caverns, mounds, promontories and their bases);
- resource areas, including:



- food or medicinal plants (e.g., migratory routes, spawning areas, prairies);
- scarce raw materials (e.g., quartz, copper, ochre, or chert outcrops);
- early Settler industry (e.g., fur trade, logging, prospecting, mining);
- areas of early 19<sup>th</sup>-century settlement, including:
  - early military locations;
  - pioneer settlement (e.g., homesteads, isolated cabins, farmstead complexes);
  - wharf or dock complexes;
  - pioneer churches;
  - early cemeteries;
- early transportation routes (e.g., trails, passes, roads, railways, portage routes);
- a property listed on a municipal register, designated under the *Ontario Heritage Act*, or that is a federal, provincial, or municipal historic landmark or site; and,
- a property that local histories or informants have identified with possible archaeological sites, historical event, activities, or occupations.

In Southern Ontario (south of the Canadian Shield), any lands within 300 m of any of the features listed above are considered to have potential for the discovery of archaeological resources.

Typically, a Stage I assessment will determine potential for Indigenous and 19<sup>th</sup>-century period sites independently. This is due to the fact that lifeways varied considerably during these eras, so the criteria used to evaluate potential for each type of site also varies.

It should be noted that some factors can also negate the potential for discovery of intact archaeological deposits. The *Standards and Guidelines* (MTC 2011; Section 1.3.2) indicates that archaeological potential can be removed in instances where land has been subject to extensive and deep land alterations that have severely damaged the integrity of any archaeological resources. Major disturbances indicating removal of archaeological potential include, but are not limited to:

- quarrying;
- major landscaping involving grading below topsoil;
- building footprints; and,
- sewage and infrastructure development.

Some activities (agricultural cultivation, surface landscaping, installation of gravel trails, etc.) may result in minor alterations to the surface topsoil but do not necessarily affect or remove archaeological potential. It is not uncommon for archaeological sites, including structural foundations, subsurface features and burials, to be found intact beneath major surface features like roadways and parking lots. Archaeological potential is, therefore, not removed in cases where there is a chance of deeply buried deposits, as in a developed or urban context or floodplain where modern features or alluvial soils can effectively cap and preserve archaeological resources.





## 2.2 Project Context: Archaeological Context

### 2.2.1 Project Area: Overview and Physical Setting

The Project area is situated within part of Lots 5-7 and 26-31, Concession 1 South of the Road, part of Lots 5-31, Concession 2 South of the Road, and part of Lots 15-23, Concession A, in the Township of Tyendinaga, Hasting County, Tyendinaga Mohawk Territory and Shannonville, Ontario (Maps 1 and 2). The Project area is comprised of the existing ROW along Wyman Road, Lower Slash Road, Homeland Drive, Bridge Road, York Road, Young Street, Atsia Court, Queen Street, Beach Road, Howard Street, and Gore Street and consists of roughly 20.1 km of ROW. For the majority of the Project area, the surrounding area is rural and comprised primarily of agricultural land. Within Shannonville, the surrounding lands are primarily small residential properties.

The Project area is located within the Napanee Plain physiographic region (Map 3), as defined by Chapman and Putnam (1984:186). This region is a flat to undulating limestone plain from which most of the overburden was stripped during the Wisconsin Glaciation. While the soil is only a few inches deep over much of the region, deeper glacial till occurs in the stream valleys and towards the north where this region borders on the Dummer Moraines (Chapman and Putnam 1984:186). Specifically, the Project area traverses several drumlins and a clay plain in the southern portion of the region.

Soils within the Project area range from well-drained to poorly drained (Gillespie et al. 1962) and are summarized in Table 1 (Map 4). The Project area crosses several drainages including Marysville Creek and unnamed tributaries of Sucker Creek (Map 1). The Project area also crosses an unnamed watercourse that drains directly into Lake Ontario, is within 50 m of the Salmon River, and passes numerous wetland areas. As a consequence, the Project area is never more than 300 m from a watercourse, wetland, or body of water.

**Table 1: Soil Types within the Project Area**

| <b>Soil Type</b> | <b>Classification</b>      | <b>Drainage</b>     |
|------------------|----------------------------|---------------------|
| Otonabee Loam    | Brunisolic Brown Forest    | Well Drained        |
| Sidney Clay      | Orthic Dark Grey Gleysolic | Poorly Drained      |
| Elmbrook Clay    | Gleyed Grey-Brown Podzolic | Imperfectly Drained |
| Waupoos Clay     | Orthic Grey-Brown Podzolic | Well Drained        |



## **2.2.2 Summary of Registered or Known Archaeological Sites**

According to information provided to THMC by the MHSTCI, there are no registered archaeological sites located within 1 km of the Project area. Although there are ample records of historic and Indigenous settlement in the region, the limited number of archaeological assessments undertaken within the Tyendinaga Mohawk Territory have not resulted in the registration of any archaeological sites. It is worth noting that a number of Middle Woodland period burnt stone mounds were documented in the 19<sup>th</sup> century near the Project area along the shores of the Bay of Quinte in Prince Edward County (Robertson 2001).

## **2.2.3 Summary of Past Archaeological Investigations within 50 m**

During the course of this study, it was established that two archaeological assessments have occurred within 50 m of the Project area. These were identified through a review of TMHC corporate records, industry knowledge, and MHSTCI records. However, it should be noted that the MHSTCI currently does not provide an inventory of archaeological assessments to assist in this determination. A summary of the previous assessments and their recommendations are provided below.

### **2.2.3.1 Archaeological Assessments for County Road 49 Road Improvements**

In 2013, The Central Archaeology Group Inc. (CAGI) was retained by the Ainsley Group on behalf of the Ministry of Transportation (MTO) to conduct an archaeological assessment for proposed road resurfacing and infrastructure installations along County Road 49 between Highway 401 and County Road 15 (Map 5). The Stage I background study indicated that portions of the Project area held archaeological potential based on proximity to watercourses, the proximity of a significant archaeological site, mapped 19<sup>th</sup>-century structures, mapped 19<sup>th</sup>-century travel routes, and documented early settlement in the area. As a result, a Stage 2 archaeological assessment was recommended. The results of this assessment are documented in a report entitled *Stage I Background Study: County Road 49 From Highway 401 to County Road 15 for approximately 8.0 km in the Geographic Township of Tyendinaga, Hastings County and the Geographic Township of Sophiasburgh, Prince Edward County* (CAGI 2014; licensee Laura McRae, P248-0193-2013).

The Stage 2 archaeological assessment conducted by CAGI in 2014 did not result in the identification of any archaeological locations and no further assessment was recommended (Map 6). The results of this assessment are documented in a report entitled *Stage 2 Property Survey: County Road 49 From Highway 401 to County Road 15 for approximately 8.0 km in the Geographic Township of Tyendinaga, Hastings County and the Geographic Township of Sophiasburgh, Prince Edward County* (CAGI 2015a; licensee Laura McRae, P248-0194-2014).

## **2.2.4 Dates of Archaeological Fieldwork**

The Stage I site inspection was conducted on May 11, 2021 in sunny and warm weather by Lara Wood, M.A. (P1078).





## 2.3 Project Context: Historical Context

### 2.3.1 Indigenous Settlement in the Bay of Quinte Region

The Bay of Quinte Region was an attractive area for Indigenous settlement in the past containing a wide variety of resources and environmental settings. However, the limited number of systematic archaeological investigations means that the region's settlement history is poorly documented archaeologically. In recent years, our archaeological knowledge of the area has improved at the hands of various cultural resource management surveys and archaeological research Projects that have accompanied development in the region. Using existing data and regional syntheses, it is possible to propose a generalized model of Indigenous settlement in the Bay of Quinte. The general themes, time periods and cultural traditions of Indigenous settlement, based on the limited archaeological evidence for the broader region, are provided below and summarized in Table 2.

**Table 2: Chronology of Indigenous Settlement in the Bay of Quinte**

| Period                      | Time Range      | Diagnostic Features   | Archaeological Complexes                              |
|-----------------------------|-----------------|---|---|
| Early Paleo                 | 9000-8400 BCE   | fluted projectile points  | Gainey, Barnes, Crowfield                             |
| Late Paleo                  | 8400-8000 BCE   | non-fluted and lanceolate points  | Holcombe, Hi-Lo, Lanceolate                           |
| Early Archaic               | 8000-6000 BCE   | serrated, notched, bifurcate base points                                    | LeCroy, Nettling, Otter Creek, Bifurcate Base Horizon |
| Middle Archaic              | 6000-2500 BCE   | stemmed, notched points, copper tools, ground stone items, first cemeteries | Brewerton, Laurentian                                 |
| Late Archaic                | 2000-950 BCE    | narrow points, stemmed, broad points, small points                          | Lamoka, Susquehanna, Normanskill, Genesee, Perkiomen  |
| Early Woodland              | 950-400 BCE     | expanding stemmed points, Vinette pottery                                   | Adena, Meadowood                                      |
| Middle Woodland             | 400 BCE-700 CE  | dentate, pseudo-scallop pottery   | Point Peninsula                                       |
| Middle Woodland             | 700-1000 CE     | cord-wrapped-stick pottery  | Sandbanks Tradition                                   |
| Late Woodland               | 1000-1250 CE    | diverse subsistence strategies, early horticulture,                         | Pickering   |
| Late Woodland               | 1250-1350 CE    | shifting settlement patterns, first villages on the St. Lawrence            | Middleport  |
| Late Woodland               | 1350-1600 CE    | tribal emergence, territoriality, bone tool assemblages                     | St. Lawrence Iroquois, Huron/Wendat                   |
| Contact Period - Indigenous | 1600 CE-present | treaties, mixture of Indigenous & European items                            | Huron/Wendat, Haudenosaunee, Mississauga, Mohawk      |
| Contact Period - Settler    | 1784 CE-present | industrial goods, homesteads  | pioneer life, municipal settlement                    |



### 2.3.1.1 Paleo Period

The entire province of Ontario was covered by the Laurentide Ice Sheet during the last glacial maximum, consequently the earliest archaeological evidence of human occupation occurs only until after the ice-sheet retreated from the area. The retreat began in southwestern Ontario and gradually moved north and east across the province. During the glacial retreat, meltwater collected along the margins of the ice-sheet in a series of glacial lakes that were the forerunners of the modern Great Lakes. As the ice-sheet retreated the water levels, drainages, and river systems were unstable and constantly shifting, sometimes dramatically. When the ice-sheet retreated from eastern Ontario sometime around 11,000 BCE, those area were quickly submerged by Lake Iroquois. Sometime around 9,000 BCE the Laurentide Ice Sheet has retreated to near the Ottawa River Valley, but the St. Lawrence valley was still blocked by the ice-sheet near Montreal forming Lake St. Lawrence. At this point the area between the Trent River Valley and the Rideau Lakes region was no longer submerged. When the Laurentide Ice Sheet retreated beyond the St. Lawrence Valley shortly thereafter, the area east of the Rideau Lakes and Brockville on the St. Lawrence was flooded with ocean water forming the Champlain Sea. As a consequence, much of the region remained inhospitable to human habitation until after the recession of the Champlain Sea around 7,000 BCE. Landforms such as old shorelines and ridges associated with Lake St. Lawrence, early Lake Ontario, and the Champlain Sea are the most likely areas to produce earliest evidence of occupation in the area (Ellis and Deller 1990). Unfortunately, as the Champlain Sea submerged eastern Ontario, the water levels in Lake Ontario dropped dramatically and the former shoreline of the lake is now submerged. Therefore, identifying areas with potential for early occupation in the region is difficult due to the combination of changing water levels and isostatic rebound (Robinson 2012). The first human populations to inhabit the region likely arrived between 10,000 and 9,000 years ago. This earliest known period of human presence in the region is termed the Paleo-Indian period and for Ontario the period is further divided into the Early Paleo-Indian Period (9,000 to 8,400 BCE) and the Late Paleo-Indian period (8,400 to 7,400 BCE). These temporal divisions are characterized by a slight shift in tool assemblages and correlate with a change in projectile point technology particularly a lack of fluting (Ellis and Deller 1990).

Commonly referred to as Paleoindians, Ontario's first peoples would have crossed the landscape in small groups (i.e., bands or family units) searching for food, particularly migratory game species. In the Ottawa region, caribou may have provided the staple of Paleoindian diet, supplemented by wild plants, small game, birds and fish. Evidence of Paleoindian activities in Eastern Ontario are rare, and are generally limited to isolated finds of distinctive, parallel-flaked Paleo-Indian spear points. These points are sometimes manufactured on a highly distinctive whitish-grey chert named "Fossil Hill" (after the formation) or "Collingwood." This material was acquired from sources near the edge of the Niagara escarpment on Blue Mountain. Several Paleoindian sites are known in the Trent River drainage basin, particularly in the southern Rice Lake area (Jackson 2004), west of the current Project area, while additional sites have been identified to the east along the Napanee River, and in the Rideau Lakes region (Watson 1990; 1999).

### 2.3.1.2 Archaic Period

The Archaic Period (7,500 to 900 BCE) is typically subdivided into three temporal units – Early, Middle, and Late – based on changes in material assemblages thought to represent shifting land-use patterns and cultural practices. During this period, the climate of Ontario stabilized with environmental conditions approaching those recorded in the modern era. This includes a shift from jack and red pine forests characteristic of the late Paleo-Indian Period to landscapes dominated by white pine and deciduous trees (Ellis et al 1990). Artifact assemblages from the Archaic Period demonstrate a wider range of subsistence activities and a diversified toolkit that included a variety of stemmed and notched projectile points, tools associated with increased wood





working, ground stone tools (e.g., celts, adzes), and ornamental objects (e.g., bannerstones, gorgets). Archaic populations had a more varied diet, exploiting a range of plant, bird, mammal and fish species. Reliance on specific food resources like fish, deer and nuts becomes more pronounced through time and the presence of more hospitable environments and resource abundance led to the expansion of band and family sizes (Ellis et al 1990). In the archaeological record, this is evident in the presence of larger sites and aggregation camps, where several families or bands would come together in times of plenty. A rise in population density is thought to have led to decreasing mobility in comparatively smaller territories. As a result, Archaic sites are more plentiful than those from the earlier period and have been identified along the Napanee River and Upper St. Lawrence Rivers (Wright and Watson 1999). Small Point Archaic sites have been reported in the region including burial sites near Kingston and near Picton in Prince Edward County (CCPE 2020).

The appearance of side and corner-notched projectile points is thought to be indicative of the Early Archaic Period (7,500 to 6,000 BCE). The Middle Archaic Period (6,000 to 2,500 BCE) across much of Ontario is characterized by changing aesthetics in flaked stone tool technology, the wide-spread appearance of ground stone tools, the advent of netsinkers as well as the introduction of bannerstones. Generally, Middle Archaic assemblages demonstrate an increased reliance on local chert resources – often of poor quality – from glacial tills and river gravels. However, towards the end of the period there is strong evidence for expanding trade networks along rivers, which served as crucial transportation corridors facilitating the expansion of these trade networks. The presence of copper tools at sites in eastern Ontario produced from a source northwest of Lake Superior and marine shell artifacts from the Atlantic seaboard attest to the scale of long-distance interactions during this period (Ellis et al 2009). The Late Archaic Period (2,500 to 900 BCE) continues the trend of increased populations, smaller territories, and broadening subsistence strategies. The emergence of the first defined cemeteries during this period is thought to be linked to resource competition due to increased population densities (Walker 2015). It has been further suggested that mobile Late Archaic groups curated their dead until they could be interred at ancestral burial sites; thereby providing strong ancestral claims over specific territories (Donaldson and Wortner 1995). In Eastern Ontario, these Late Archaic Period cemeteries tend to be situated near waterways on well-drained sandy soils (Walker 2015). However, the preservation characteristics of sandy soils, such as the higher preservation rate of bone, may contribute to the perceived distribution of these cemeteries.

### 2.3.1.3 The Woodland Period

Like the Archaic Period, the Woodland Period (circa 1,000 BCE to 1600 CE) is typically subdivided into three temporal units – Early, Middle, and Late – based on changes in material assemblages thought to represent shifting land-use patterns and cultural practices. Archaeologically, the most significant changes that arrive during the Woodland Period includes the appearance of artifacts manufactured from modeled clay and the construction of house structures. Across Southern Ontario, the Woodland Period is often defined by the occurrence of pottery, storage facilities and residential areas similar to those that define the incipient agricultural or Neolithic period in Europe. However, despite being defined by the presence of ceramic vessels, many of the documented Early Woodland (circa 1,000 to 400 BCE) sites do not contain ceramics. The earliest ceramic vessels resemble carved steatite vessels from the Archaic period and are often described as thick walled and friable (Spence et al 1990). Unique Early Woodland ground stone items include pop-eyed birdstones and gorgets. In addition, there is evidence of the continuation of widespread trading with groups throughout the northeast. The recovery of marine shells from the Lake Superior area indicates that exchanges of exotic materials and finished items from distant places were common place.



Significant changes in cultural and environmental patterns are witnessed in the Woodland Period (circa 3,000 to historic times). By this time, the coniferous forests of earlier times were replaced by stands of mixed and deciduous species. Occupations became increasingly more substantial in this period, culminating in semi-permanent villages by 1,000 years ago. Archaeologically, the most significant changes by Woodland times are the appearance of artifacts manufactured from modeled clay and the construction of house structures. The Woodland Period is often defined by the occurrence of pottery, storage facilities and residential areas similar to those that define the early agricultural (Neolithic) period in Europe.

Throughout southern and Eastern Ontario there is a greater number of known sites attributed to the Middle Woodland period (circa 400 BCE to 700 CE). The larger number of known sites has allowed archaeologists to develop more nuanced models of the seasonal movement and regional land-use patterns connected with the exploitation of particular resources and the maintenance of social networks (Walker 2019). Towards the end of the Middle Woodland Period, agricultural practices were introduced to Southern Ontario. In that region the cultivation of corn, beans, squash, sunflowers and tobacco gradually gained economic importance and incorporated into existing exchange networks (Williamson 2013; Warrick 2008). Eventually the shift in subsistence and land-use patterns led to the development of semi-permanent and permanent villages which were often surrounded by palisades; thereby suggesting increased hostilities (Ferris 2013). The differences in subsistence strategies, settlement patterns, and associated artifact assemblages during this period allows archaeologists for the first time to recognize distinctive regional cultural traditions (Spence et al 1990). The Middle Woodland period in the region is dominated by sites recognized as part of the Point Peninsula archaeological complex. Point Peninsula groups were influenced by Hopewell culture developments in the American Midwest, including mound burial and participation in widespread trade in exotic materials, many of which were used as burial offerings. A number of Middle Woodland sites attributed to the Point Peninsula complex have been identified in Prince Edward County, throughout the Thousand Islands and along the South Nation Drainage (CCPE 2020).

Recent research and improved interpretive models have led to considerable debate regarding the transition from Middle to Late Woodland in southern and eastern Ontario (Hart and Brumbach 2005). In much of eastern Ontario outside of the St. Lawrence River Corridor and along the shores of Lake Ontario, Late Woodland Period populations continued practicing hunter-gatherer-based subsistence strategies while incorporating limited horticulture.

Various groups along the St. Lawrence River during the Middle Woodland Period gathered regularly in large numbers at prime fishing locations, often from spring to fall. Although these groups relied heavily on hunting, fishing, and gathering for their subsistence, they were gradually integrating maize horticulture (Gates St-Pierre 2016:48). Sites, such as Lakeshore Lodge in Prince Edward County, or the Kingston Outer Station, are fishing stations that reflect a continuation of the Late Middle Woodland/Transitional Period settlement patterns. During the later part of the Middle Woodland Period along the St. Lawrence River, a shift occurs in ceramic decoration from pseudo-scalloped, dentate, and rocker stamped decorations to cord-wrapped-stick impressed decoration along with the use of punctates and bosses (Curtis 2002:20; Warrick 2000:427). These ceramics, which share similarities with Princess Point to the west and with Malocheville to the east, have been referred to as the Sandbanks Tradition (Gates St-Pierre 2016:53; Mortimer 2012:23; Warrick 2000). The Late Woodland Period is first identified by shifting ceramic styles that share commonalities with Pickering pottery or Owasco pottery found in New York State (Gates St-Pierre 2016:51). These earliest Late Woodland Period ceramic styles along the St. Lawrence River seem to give way to ceramics sharing commonalities with Middleport (Gates St-Pierre 2016:52; Pendergast 1975:48). Two distinct cultural traditions emerge in the





region around 1350 CE. To the east along the St. Lawrence River Valley emerges the distinctive St. Lawrence Iroquois assemblages accompanying a shift in subsistence and settlement patterns from a seasonal, riverine focused subsistence to more permanent, and slightly inland, agriculturally focused village clusters. In southern Hastings, Frontenac, and Prince Edward counties emerged assemblages thought to be associated with the easternmost branches of the ancestral Huron-Wendat.

Clusters of villages associated with the St. Lawrence Iroquois have been identified between the St. Lawrence and the South Nation River near Spencerville and Prescott, and further east towards Cornwall in Eastern Ontario, and a large number of similar sites are reported from Jefferson County in New York State (Jamieson 1990; Baron et al 2016). There are many similarities between the material culture of the Huron-Wendat and the St. Lawrence Iroquois, but the St. Lawrence Iroquoian populations are distinguished by distinctive ceramic styles and an extensive bone tool technology (Gates St-Pierre 2016). The bone and antler technology of the St. Lawrence Iroquoian may have been more developed in part due to the low quality of stone sources for tool manufacture (Engelbrecht and Jamieson 2016). A disruption in the trade networks that previously brought higher quality cherts into the region may have led to a greater reliance on local resources for tool manufacture during the Late Woodland Period. The “disappearance” of the St. Lawrence Iroquois from the region sometime before the end of the 16th-century has generally been attributed to warfare with neighboring Five Nations groups, disease, and migration; or some combination of all three (Jamieson 1990; Warrick 2008; Warrick & Lesage 2016). The recovery of distinctive St. Lawrence Iroquois ceramics on Huron-Wendat sites in the Trent River system suggests that at least some St. Lawrence Iroquois settled among the Huron-Wendat (Warrick 2008). More recently, Wendat and archaeological scholars have claimed that St. Lawrence Iroquoian groups comprised part of the conglomerate of peoples historically known as the *Yarëndahrönon*’ or Rock Nation associated historically with the Huron-Wendat and who are reported to have arrived in their 17<sup>th</sup> century Lake Simcoe environs by c.1590 CE.

#### 2.3.1.4 Contact Period Indigenous History

The Contact Period (circa 1600 to 1800 CE) is characterized by increasing interactions between Indigenous groups and Europeans in the region and is identified archaeologically by the introduction of European goods through trade. The region around the Bay of Quinte has been identified as inhabited by ancestral Huron-Wendat communities until the late-16<sup>th</sup> to early-17<sup>th</sup> centuries (Williamson 2016:105).

The documented history of the region generally begins with records produced by Samuel de Champlain, who visited the Huron-Wendat in 1615. During the visit he accompanied a hunting and war excursion that travelled through the Trent River Valley eventually arriving in the Haudenosaunee territory on the south side of Lake Ontario (Williamson 2016:105). While travelling through the Trent Valley, the Huron-Wendat informed Champlain that the region was their former homeland and had been abandoned due to conflict.

Throughout much of the 17<sup>th</sup> century there was intermittent conflict throughout the region in what is described as the Iroquois War or the Beaver Wars (Dickason and Newbigging 2010). These conflicts combined with frequent disease epidemics, including smallpox, decimated Indigenous populations, displaced groups and people, and encouraged the adoption of prisoners and the creation of new alliances (Hanewich 2009:1-2; Warrick and Lesage 2016:138). It should be noted that the adoption of prisoners was a common practice among Indigenous groups and acted as an effective way of replenishing depleted populations. By 1673, when Fort Frontenac was constructed, the Haudenosaunee had moved into the region and occupied settlements along the north shore of Lake Ontario (Konrad 1981; Adams 1986). Two villages, Kenté and Ganneious, are the earliest Haudenosaunee settlements recorded at the northeastern end of Lake Ontario.



Kenté was situated near Carrying Place at the western end of Prince Edward County, while Ganneious was somewhere in the vicinity of Hay Bay or Napanee Bay near the mouth of the Napanee River (Adams 1986:6). In 1668, Sulpician priests from France established a mission at Kenté to serve the Haudenosaunee on the north shore of Lake Ontario (OHT 2022a). The mission was abandoned in 1680. The villages at Kenté and Ganneious were apparently destroyed in 1687 after Governor Denonville had villagers taken captive in advance of his attack on the Seneca (Adams 1986:10). The combination of a series of natural disasters, hostilities with the French, and incursions by the Mississauga and Saukteur, likely led to the Haudenosaunee abandoning their settlements along the north shore of Lake Ontario (Adams 1986:13). The Mississauga eventually settled in the area and occupied some of the former Haudenosaunee villages. In 1701, the French brokered a peace treaty in Montreal that effectively ended the Iroquois War and brought about a period of relative stability to the region.

Although hostilities continued between the Mississauga and the Haudenosaunee residing near Fort Frontenac (Adams 1986:14), the relative stability in the broader region lasted until the Seven Years' War broke out in 1755. The Seven Years' War saw the end of the French trade in the region and the rise of British colonial rule. The defeat of the French and their Algonquian allies led to the further loss of Indigenous control over territories in southern Quebec and Eastern Ontario, despite assurances from the British government in 1760 under the terms of the Treaty of Kahnawake. Under the treaty, the British agreed to protect Indigenous rights to their villages and hunting grounds and established free and open trade with English merchants (Morrison 2005:29).

Following the Seven Years' War, King George III issued the Royal Proclamation of 1763 that once again recognized Indigenous land rights while simultaneously ensuring that the British Crown held the sole power to purchase Indigenous lands and, if necessary, terminate Indigenous rights to occupy and use any area under the dominion of the Crown (Dickason and Newbigging 2010). British Colonial rule drastically changed the nature of European interactions with the Indigenous people of the region. Whereas the French were primarily concerned the monopolizing trade, the British were also concerned with securing the surrender of Indigenous lands to be settled by European immigrants. These concerns are expressed in the Quebec Act of 1774, which extended the boundaries of the Province into much of what is now Ontario.





### **2.3.2 Treaty History**

The Project area is encompassed by the Crawford Purchase of 1783 and the Simcoe Deed (Treaty 3½). The Crawford Purchase arose from an effort by the British government to acquire lands on which to resettle refugee loyalists and Indigenous allies after the American Revolution (Surtees 1984:19). The land purchase was facilitated by Captain William Redford Crawford who, in 1783, assembled a number of Mississauga leaders at Carleton Island. According to Surtees (1984:23-24) the agreement with the Mississaugas included the Quinte peninsula and the shoreline between the Gananoque and Trent Rivers extending inland “so far as a man can travel in a day,” which was subsequently interpreted as two or three townships. Therefore, the precise boundaries of the Crawford Purchase are vague and no written treaties or detailed descriptions of the lands it applied to have survived.

Later, as recompense for the loss of allied Indigenous homelands and in recognition of their military support during the American Revolution, the Canadian Governor Frederick Haldimand intended to provide Indigenous allies with some of the land in the Bay of Quinte area recently acquired through the Crawford Purchase (MBQ 2022; Surtees 1984:20). Only two Indigenous groups elected to accept Haldimand’s offer of land; a group of around 200 Mohawks, led by John Deseronto; and a larger group of around 1800 Haudenosaunee led by Joseph Brant. The plan to settle both groups in the Bay of Quinte was altered by Brant’s decision to locate his group along the Grand River (Surtees 1984:21). After travelling by canoe from Lachine, approximately 20 families led by Deseronto arrived on the shores of the Bay of Quinte on May 22, 1784 to settle on the roughly 7000-acre tract granted to them by Haldimand (MBQ 2022; Surtees 1984:113).

As the tract granted by Haldimand was smaller than originally promised, and after being urged by John Deseronto, the first Lieutenant Governor of Upper Canada, John Graves Simcoe, increased the Tyendinaga tract to include all of what is now Tyendinaga Township (92,700 acres) through the Simcoe Deed (Treaty 3½) (Canada 1891:7; Surtees 1894:113). Under pressure from United Empire Loyalists the government made provisions to accommodate settlers through a series of land surrenders between 1820 and 1835 which reduced the Tyendinaga Tract to the roughly 18,000 acres comprising the current Tyendinaga Mohawk Territory in the Bay of Quinte (MBQ 2022; Surtees 1984:113).



### **2.3.3 Nineteenth-Century and Municipal Settlement**

The Project area falls within part of Lots 5-7 and 26-31, Concession 1 South of the Road, part of Lots 5-31, Concession 2 South of the Road, and part of Lots 15-23, Concession A, in the Township of Tyendinaga, Hastings County, Tyendinaga Mohawk Territory and Shannonville, Ontario. A brief discussion of regional and local settlement in this area is provided below to provide a context for understanding current and past land use and identify features of archaeological potential.

#### **2.3.3.1 Hastings County**

Originally part of the Mecklenburg District of the Province of Quebec, Hastings County was established in the Midland District when Governor Simcoe issued a proclamation dividing Upper Canada into nineteen counties for the purposes of representation (H. Belden & Co. 1878:ii). Some administrative boundaries had already been established prior to the creation of Hastings County including five townships that had been surveyed and divided into lots and concessions by 1784 (Boyce 1967:25). By 1800, the county consisted of the townships of Sidney, Thurlow, Tyendinaga, Huntingdon, Hungerford, and Rawdon. The townships of Elizevir, Madoc, and Marmora were added to the county in 1821 and the county was constituted as the District of Victoria in 1839. The District of Victoria was dissolved in 1850 at which time the county consisted of twelve townships. By World War II the county held 24 townships. After the war the consolidation of township administrations began; a trend that continued into the 21<sup>st</sup> century.

Settlement in the county began immediately following the American Revolution when a number of United Empire Loyalists and Indigenous allies were resettled in the region. Loyalists were offered land with the stipulation that they cleared a portion of land and built a house. The initial settlement of Hastings County was primarily confined to the shores of the Bay of Quinte and the Trent and Moira River systems. Early settlement was facilitated by the construction of an east-west route from Windsor to Halifax which began construction in 1793, but did not extend through Hastings County until 1802 (Bagnato and Shragge 1984). The road is now known as Old Highway 2 and crosses through the southern portion of the County. By 1830, the population of Hastings County has reached 5,819, with the majority of people living in Sidney, Thurlow and Tyendinaga townships. The richness of the land for agriculture, as well as the development of the mining and lumber industries helped facilitate the growth of the county. By 1836, the port of Belleville has become one of the busiest in Upper Canada (Boyce 1967).

The Grand Trunk Railway was incorporated in 1852 to build a railway line from Montreal to Toronto. Construction of the railway started in 1853 and was completed by late 1856 (HCHS 2022a). The rail line passes through the southern portion of the County, roughly following the route of the Old Highway 2 and further increased settlement and industry. By 1860, Hastings County has grown to a population of 45,000. In 1866, gold was discovered at Eldorado near Madoc, causing a gold rush which resulted in an influx of people to the area. It was also during this time that new roads, including Hastings Road, Tudor Road and Peterson Road were built and a number of railways allowed for goods such as lumber and iron ore to be exported easily (Boyce 1967).

By the end of the 19<sup>th</sup> century the population of the county was in decline. The lumber industry was diminishing due to the exhaustion of the lumber supply and the decline in the mining industry. Agriculture continued to be the dominant industry in the county (Boyce 1967).





#### 2.3.3.2 Tyendinaga Township

Tyendinaga Township was initially set aside for the Mohawks as recompense for the loss of their homeland and in recognition of their military service during the American Revolution. The township takes its name from a variation of Joseph Brant's traditional Mohawk name – Thayendanegea (Boyce 1967:269). Due to the rich resources in the township, the government was soon pressured to open more land for settlement. As a consequence, the government accommodated settlers through a series of land deals between 1820 and 1835 wherein the Mohawks surrendered large portions of the township to the Crown. The portions of the township surrendered by the Mohawk was quickly settled in the 1820s, with as many as 350 settlers by 1826 (H. Belden & Co. 1878:vi). Some of the first settlers of Tyendinaga Township included the Sweeneys from Ireland. John Sweeney was an Irish immigrant who arrived from Ireland in the 1820s. Sweeney's home also doubled as the first Roman Catholic church until 1837 when a new Roman Catholic Church was built in Marysville (Boyce 1967:271).

The population of the township increased drastically during the 1830s due to labour unrest in the British Isles and further land surrenders by the Mohawk. At this time Tyendinaga Township was one of the only front townships which still had new land available for settlement (Boyce 1967: 270-271). By 1837 the township had seven saw mills, a grist mill, five taverns, two general stores, a chair factory and a tailor. The 1850s brought a wave of Irish immigrants escaping the Great Potato Famine of 1847-56. The township continued to experience population growth and reached 7,000 inhabitants in 1860, but sharply declined by the turn of the century due to the decline in the lumber industry in the county (Boyce 1967:273).

#### 2.3.3.3 Tyendinaga Mohawk Territory

Following the American Revolution, where the Mohawk allied with the British, the Mohawk lost their traditional ancestral homeland in the Mohawk River Valley in New York State. In compensation for the loss of their homelands and in recognition for their military alliance with the British Crown, the Six Nations were to select any of the unsettled lands in Upper Canada (MBQ 2022). The Six Nations selected lands on the north shore of Lake Ontario, lands that they were already familiar with, as they were part of a vast northern territory controlled by the Iroquois Confederacy previously. On May 22, 1784 a group of about 100 Mohawks landed on the shore of the Bay of Quinte, west of Deseronto, where they were met by Mississaugas who lived in the area at that time (Boyce 1967:22; MBQ 2022).

Initially encompassing the entirety of Tyendinaga Township, the Tyendinaga Mohawk Territory was reduced to roughly 18,000 acres through a series of land surrenders during the 1820s and 1830s. Shortly after occupying the territory, the Mohawks constructed a log church in the village of Tyendinaga, the first in the region (H. Belden & Co. 1878:vi). A school was also soon established in the village. A new and more substantial church was erected in 1843 and named Christ Church. The church is Her Majesty's Royal Chapel of the Mohawks and is one of only six Royal chapels outside of Great Britain (MBQ 2022).

#### 2.3.3.4 Shannonville

Prior to the land surrenders by the Mohawks in the 1820s, prospective settlers were interested in parts of Tyendinaga township, particularly near the mouth of the Salmon River which offered a good mill site (Boyce 1967:269). In 1818, the Mohawks leased 200 acres of land along the Salmon River to Warren Nobel and Frederick Keeler to construct a mill. The lease was for 999 years and the annual rent was thirty barrels of flour. This lease developed into the village of Shannonville which was named after Shannon, Ireland where the Portt family and other early settlers had originated from (Boyce 1967:269). The population of Shannonville



grew during the 1830s along with rest of the township and a post office was established in the village in 1833 with Thomas Appleby the first postmaster (Boyce 1967:271). By 1860, Shannonville had a population of over 700 people and 115 dwellings. At the time the Wallbridge saw mill produced around 5,000,000 feet of lumber annually, while the adjoining grist mill had the capacity to process 40,000 bushels annually. In 1860, the common school in Shannonville had an average of 100 students (Boyce 1967:271). Population declined during the latter part of the 19<sup>th</sup> century as the lumber industry was depleted.

#### 2.3.3.5 All Saints' Anglican Church and Cemetery

All Saints' Anglican Church and Cemetery were consecrated in 1858 (APT 2022). The church is located on the north side of Ridge Road, while the cemetery is situated on both sides of the road. Precisely when the portion of the cemetery on the southern side of Ridge Road was incorporated as part of the cemetery is uncertain. Based on land registry records, at least a portion of the land was donated in 1931, but the land transfer was not registered until 1980 (ILRS 2022; Maracle 2022; Appendix A). According to Reverend Rob BrantFrancis, the land for the southern portion of the cemetery went into use during the 1960s after being donated for use as a cemetery by a community member (BrantFrancis 2022; Appendix B). The church may have been designed by John G. Howard who designed Christ Church, Her Majesty's Chapel Royal of the Mohawk in nearby Deseronto (APT 2022). Howard not only designed a number of churches through a commission from the Anglican church, but he designed a substantial number of houses, shops, and offices (Howard 1885; Firth 1982). An addition to the church, called the Queen Anne Parish Centre, was built in 1988 to provide additional space and amenities for community events (APT 2022). A land survey conducted for the addition identified a number of unmarked graves within the cemetery north of the road (BrantFrancis 2022). More recently the shoulder on the northern side of Ridge Road has been extended to provide additional parking for the church. The cemetery is managed by the Mohawks of the Bay of Quinte and is not registered with the Bereavement Authority of Ontario (BAO).





### **2.3.4 Review of Historic Maps**

The Project area falls within part of Lots 5-7 and 26-31, Concession I South of the Road, part of Lots 5-31, Concession 2 South of the Road, and part of Lots 15-23, Concession A, in the Township of Tyendinaga, Hasting County, Tyendinaga Mohawk Territory and Shannonville, Ontario. A review of 19th-century mapping and property history was undertaken, the results of which are presented below.

The 1835 *A Map of the Front, or Southerly Part of Tyendinaga in the Midland District* depicts portions of York Road, Norways Road, Lower Slash Road, and Highway 49 as open at this time (Benson 1835; Map 7). Gees Bridge is depicted immediately west of the Project area along with a house and water mill. The Salmon River, Marysville Creek (labeled Mud Creek), and Sucker Creek are also depicted. Shannonville is labeled on the maps, but details of the village are not depicted. The alignment of York Road (labeled Kingston Road) does not appear to match the current alignment; however, the alignment on the map appears to have been drawn in as straight lines and is likely an approximation rather than an accurate depiction of the road alignment.

According to the 1878 *Illustrated Historical Atlas of the Counties of Hastings and Prince Edward*, the Project area primarily follows existing roadways lined with scattered buildings (H. Belden & Co. 1878; Map 8). A church and a school house are depicted on the north side of Ridge Road in Lot 21, Concession A and a separate school house is depicted in the northeast corner of the intersection of Ridge Road and Norways Road on Lot 16, Concession A. Although the alignments of York Road and Ridge Road do not precisely match the current alignments it is unclear how much the difference represents an actual change in the road alignments rather than the accuracy and limitations of the map survey. No individuals are depicted as associated with the surveyed lots, but every lot the Project area passes through depicts at least one structure.

There are few changes depicted on the 1895 *Map of Tyendinaga Indian Reserve, Ont.* (Department of Indian Affairs 1895; Map 9). The alignments of York Road, Ridge Road, and Lower Slash Road do not precisely match their current alignments. It appears that Lower Slash Road was initially depicted south of the current alignment, erased, and then depicted north of the current alignment, suggesting that the road alignments are approximations rather than precise representations. A church and school are depicted in part of Lot 22, Concession A, immediately north of Ridge Road and the council house is depicted between Mark's Road and York Road within part of Lot 24, Concession A. All of the roads, with the exception of Homeland Drive are depicted at this time. As with the 1878 map, no individuals are depicted as associated with the surveyed lots, but every lot adjacent to the Project area depicts at least one structure.

The 1851 Plan of the Village of Shannonville for the Crown Lands Office was also reviewed (Map 10). The residential lots are divided into approximately 0.25 ac lots, and a number of structures are depicted within the lots, particularly at the intersection of Dundas Street (now York Road) and Young Street.

### **2.3.5 Built Heritage Environment**

The *Ontario Heritage Act* allows for municipalities to protect properties that are considered to hold cultural heritage value or interest. However, there are no designated heritage properties within Tyendinaga Mohawk Territory (OHT 2022b). There are no historic plaques or monuments within or adjacent to the Project area, however, there are several within Tyendinaga Mohawk Territory. The nearest monuments are located at 1807 York Road outside the Mohawk Community Centre; one is dedicated to Deganawidah, the founder of the Five Nations and the other is in recognition of the Mohawk Agricultural Society erected on its centenary in 2000



(HCHS 2022b). This area around the intersection of York Road and Ridge Road has been an important gathering place for the community for many years.





### 3 PROPERTY INSPECTION

As the Project area was in proximity to several features signaling archaeological potential, a Stage I property inspection was conducted to evaluate the current conditions of the Project area and its integrity. The property inspection was conducted on May 11, 2022 in sunny and warm weather that allowed for good visibility for the inspection of surface features. The field review was completed from public ROWs and began in the western part of the Project area and continued east.

#### 3.1 Shannonville

The Shannonville segment of the Project area encompasses the existing right of way for York Road from Old Highway 2 to Meadow Drive, and portions of Atsia Court, Queen Street, Young Street, Howard Street, Gore Street, and Beach Road. This portion of the Project area is situated within Lots 5-7, Concession 1 South of the Road in the Township of Tyendinaga (Maps 10-13). York Road is the main throughfare through the village with wide gravel shoulders and a sidewalk. Wide gravel shoulders and a sidewalk are also present along Queen Street. The streets within the village are typically ditched on one or both sides with the road bed slightly raised above the surrounding land to allow for drainage as storm sewers are not present. Overhead utilities are common and the presence of watermains is evident by the fire hydrants along the ROW. Most of the residential lots within the village have maintained their original boundaries based on the 1851 plan of the village, with each lot typically around 0.25 acres in size (OLR 2022). Overall, this segment of the Project area can be characterized as a situated within a rural village setting (Images 1-12).

##### 3.1.1 Areas Retaining Archaeological Potential

- Grassed areas along Atsia Court northeast of Gore Street (Image 1);
- Grassed areas along Young Street between York Road and Old Highway 2 (Image 2);
- Grassed areas along Gore Street between Young Street and Howard Street (Image 3);
- Grassed areas along Howard Street between York Road and Gore Street (Image 4);
- Grassed areas along Young Street between Beach Road and York Road (Image 5); and
- Wooded area west of the intersection of Queen Street and Beach Road (Image 6).

##### 3.1.2 Areas Deemed of Low Archaeological Potential

- Areas disturbed by the construction of paved roads and sidewalks within Shannonville (Images 7-9);
- Areas disturbed by the construction of residential driveways and drainage ditches (Images 5, 10-12); and,
- Areas disturbed by buried utilities such as watermains linked to fire hydrants (Image 5).



### 3.2 York Road – Upper Slash Road to Milltown Road

The segment of the Project area along York Road between Upper Slash Road and Milltown Road is situated within Lots 6-10, Concession 2 South of the Road in the Township of Tyendinaga (Maps 12, 14-19). The segment crosses through slightly rolling terrain that is primarily agricultural with residences fronting York Road (Images 13-15). The Project area is contained within the existing York Road ROW. The road is paved with either paved or gravel shoulders and drainage ditches on one or both sides.

#### 3.2.1 Areas Retaining Archaeological Potential

- None

#### 3.2.2 Areas Deemed of Low Archaeological Potential

- The entire ROW has been disturbed by the construction of York Road and its associated paved or gravel shoulders and drainage ditches (Images 13-15).

### 3.3 York Road – Milltown Road to Norways Road

The segment of the Project area along York Road between Milltown Road and Norways Road is situated within Lots 11-15, Concession 2 South of the Road in the Township of Tyendinaga (Maps 19-24). The segment crosses Marysville Creek and the surrounding area is primarily agricultural with wooded areas typically set back from the road (Images 16-19). The Project area is contained within the existing York Road ROW. The road is paved with either paved or gravel shoulders and drainage ditches on one or both sides.

#### 3.3.1 Areas Retaining Archaeological Potential

- Grassed area on the south side of the ROW within Lot 11, Concession 2 South of the Road;
- Grassed area on the north side of the ROW within Lots 12 and 13, Concession 2 South of the Road (Images 16 and 17); and,
- Lightly wooded area on the north side of the ROW within Lot 15, Concession 2 South of the Road.

#### 3.3.2 Areas Deemed of Low Archaeological Potential

- Portions of the ROW disturbed by the construction of York Road and its associated paved or gravel shoulders and drainage ditches (Images 18 and 19); and,
- Portions of the ROW deemed low and wet where the ROW crosses Marysville Creek.

### 3.4 York Road – Norways Road to Meadow Drive

The segment of the Project area along York Road between Milltown Road and Norways Road is situated within Lots 16-21, Concession 2 South of the Road in the Township of Tyendinaga (Map 24-31). The surrounding area is primarily agricultural with some wooded areas along the road (Images 20-23). The Project area is contained within the existing York Road ROW. The road is paved with either paved or gravel shoulders and drainage ditches on one or both sides. This segment crosses an unnamed watercourse that drains directly into Lake Ontario.





### **3.4.1 Areas Retaining Archaeological Potential**

- A grassed area on the south side of the ROW within Lot 18, Concession 2 (Image 20).

### **3.4.2 Areas Deemed of Low Archaeological Potential**

- Portions of the ROW disturbed by the construction of York Road and its associated paved or gravel shoulders, drainage ditches, and buried utilities (Images 21-23).

## **3.5 Ridge Road – Norways Road to Airport Road**

The segment of the Project area along Ridge Road between Norways Road and Airport Road is situated within Lots 16-22, Concession A in the Township of Tyendinaga (Maps 32-39). The surrounding area is predominantly agricultural, but there are some wooded areas along the edge of the road (Images 24-34). The Project area is contained within the existing Ridge Road ROW. The road is paved with gravel shoulders and is often accompanied by a drainage ditch along at least one side of the road. In some areas the road bed is slightly raised above the surrounding landscape or cut through rolling terrain to create a more level surface with better drainage.

### **3.5.1 All Saints' Anglican Church and Cemetery**

A portion of the Project area intersects the All Saints' Anglican Church and Cemetery property. The Church, which appears on the 1878 historic map (Map 8), is situated on Lot 21, Concession A. The church is associated with an adjacent cemetery which is located on both the north and south sides of Ridge Road (Images 24-26). The shoulder on the north side of the ROW is within 2 m of several grave markers and there are no physical barriers separating the cemetery from the ROW (Image 24). As such, the northern side of the ROW has potential to contain burials associated with the cemetery. The shoulder on the southern side of the ROW contains buried utilities including an existing watermain as is evident by the placement of a fire hydrant (Image 26). The southern portion of the cemetery is also separated from shoulder by a chain-link fence, clearly demarcating the current boundary of the cemetery (Image 25).

### **3.5.2 Areas Retaining Archaeological Potential**

- Grassed areas on the north side of the ROW within Lots 16-18, Concession A (Images 27 and 28);
- Agricultural land on the north side of the ROW within Lots 17-19, Concession A (Images 29 and 30);
- Grassed areas interrupted by graveled driveways on the north side of the ROW within Lots 19-21, Concession A (Images 31 and 32); and
- Grassed areas on the south side of the ROW within Lots 21-22, Concession A (Image 33).

### **3.5.3 Areas Deemed of Low Archaeological Potential**

- Portions of the ROW disturbed by the construction of Ridge Road and its associated gravel shoulders and drainage ditches (Images 28-34); and
- Portions of the ROW disturbed by the construction of gravelled driveways (Images 31 and 32).



### 3.6 Wyman Road – York Road to Lower Slash Road

The segment of the Project area along Wyman Road between York Road and Lower Slash Road is situated within Lots 22-23, Concession A and Lots 22-23 Concession 2 South of the Road in the Township of Tyendinaga (Maps 40-42). The surrounding area is predominantly lightly wooded, but there are some agricultural and grassed areas along the edge of the road (Images 35-40). The Project area is contained within the existing Wyman Road ROW. The road is paved with gravel shoulders and is often accompanied by a drainage ditch along at least one side of the road. In some areas the road bed is slightly raised above the surrounding landscape or cut through rolling terrain to create a more level surface with better drainage. This segment crosses several unnamed tributaries of Sucker Creek (Map 1).

#### 3.6.1 Areas Retaining Archaeological Potential

- A wooded area along the western side of the ROW within Lot 22, Concession A (Image 35);
- Grassed areas along the eastern side of the ROW within Lot 23, Concession A (Image 36);
- Lightly wooded areas along both sides of the ROW within Lots 22 and 23, Concession 2 South of the Road (Image 37);
- Agricultural land on the east side of the ROW within Lot 23, Concession 2 South of the Road; and
- Grassed areas along the eastern side of the ROW within Lot 23, Concession 2 South of the Road (Images 38 and 39);

#### 3.6.2 Areas Deemed of Low Archaeological Potential

- Portions of the ROW disturbed by the construction of Ridge Road and its associated gravel shoulders and drainage ditches (Images 36-40); and
- Portions of the ROW disturbed by the construction of gravelled driveways (Image 36).

### 3.7 Lower Slash Road – Wyman Road to Homeland Drive

The segment of the Project area along Lower Slash Road between Wyman Road and Homeland Drive is situated within Lots 23-28, Concession 2 South of the Road in the Township of Tyendinaga (Maps 42-48). The surrounding area is predominantly agricultural, but there are some wooded areas along the edge of the road (Images 41-48). The Project area is contained within the existing Lower Slash Road ROW. The road is paved with gravel shoulders and is often accompanied by a drainage ditch along at least one side of the road.

#### 3.7.1 Areas Retaining Archaeological Potential

- Lightly forested area on the north side of the ROW within Lot 23, Concession 2 South of the Road (Image 41);
- Grassed areas on both sides of the ROW interrupted by gravel driveways within Lots 24-28, Concession 2 South of the Road (Images 42-45); and
- Agricultural land on the south side of the ROW within Lot 24, Concession 2 South of the Road (Image 46).





### **3.7.2 Areas Deemed of Low Archaeological Potential**

- Portions of the ROW disturbed by the construction of Lower Slash Road and its associated gravel shoulders and drainage ditches (Images 41 and 48); and
- Portions of the ROW disturbed by the construction of gravelled driveways (Image 45 and 48).

## **3.8 Homeland Drive**

The segment of the Project area along Homeland Drive is situated within Lots 26-28, Concession I South of the Road in the Township of Tyendinaga (Maps 48-50). The surrounding area is predominantly residential (Images 49-52). The Project area is contained within the existing Homeland Drive ROW. The road is paved with gravel shoulders and is often accompanied by a drainage ditch along at least one side of the road. In some areas the road bed is slightly raised above the surrounding landscape or cut through rolling terrain to create a more level surface with better drainage. This segment crosses an unnamed tributary of Sucker Creek.

### **3.8.1 Areas Retaining Archaeological Potential**

- Grassed areas on the east side of the ROW interrupted by gravel driveways within Lot 28, Concession I South of the Road (Image 49); and
- Grassed areas on both sides of the ROW interrupted by gravel driveways within Lots 26 and 27, Concession I South of the Road (Images 50-52).

### **3.8.2 Areas Deemed of Low Archaeological Potential**

- Portions of the ROW disturbed by the construction of Homeland Drive and its associated gravel shoulders and drainage ditches (Images 49-52); and
- Portions of the ROW disturbed by the construction of gravelled driveways (Images 49-52).

## **3.9 Lower Slash Road – Homeland Drive to Highway 49**

The segment of the Project area along Lower Slash Road between Homeland Drive and Highway 49 is situated within Lots 28-30, Concession I South of the Road and Lots 28-30, Concession 2 South of the Road in the Township of Tyendinaga (Maps 48; 52-53). The surrounding area is comprised of residential properties and agricultural land, but there are some wooded areas along the edge of the road (Images 53-56). The Project area is contained within the existing Lower Slash Road ROW. The road is paved with gravel shoulders and is often accompanied by a drainage ditch along at least one side of the road. In some areas the road bed is slightly raised above the surrounding landscape or cut through rolling terrain to create a more level surface with better drainage. This segment crosses an unnamed tributary of Sucker Creek (Map 1).

### **3.9.1 Areas Retaining Archaeological Potential**

- Grassed areas on both sides of the ROW within Lots 28-30, Concession I South of the Road and Lots 28-30, Concession 2 South of the Road (Image 53); and,
- Lightly wooded areas on both sides of the ROW within Lots 28-30, Concession I South of the Road and Lots 28-30, Concession 2 South of the Road (Images 54 and 55);



### 3.9.2 Areas Deemed of Low Archaeological Potential

- Portions of the ROW disturbed by the construction of Lower Slash Road and its associated gravel shoulders and drainage ditches (Images 53-55);
- Portions of the ROW disturbed by the construction of gravelled driveways (Images 53 and 54);
- A portion of the ROW disturbed by the construction of a paved parking lot at the intersection Lower Slash Road and Highway 49 (Image 56); and
- A portion of the ROW where it crosses an unnamed tributary of Sucker Creek was deemed low and wet.

### 3.10 Summary

The Stage I property inspection confirmed that portions of the Project area retain archaeological potential. Those areas retaining archaeological potential include areas of grass, woodland, and agricultural land (5.18 ha; 14.94%). The northern portion of the ROW which adjoins the All Saints' Anglican Church and Cemetery property is of archaeological concern due to the potential for burials within the ROW (0.07 ha; 0.20%). The property inspection also determined that the majority of the Project area held low or no archaeological potential due to previous disturbance associated with the construction of roads and driveways as well as the installation of buried utilities including water lines (29.35 ha; 84.73%). Further, a small portion of the Project area was determined to be low-lying and wet, specifically where it crosses mapped watercourses (0.04 ha; 0.12%).

The results of the Stage I archaeological assessment, as well as the location and orientation of report photographs, are presented on Maps 11 to 53.

### 3.11 Documentary Records

All files are currently being stored at the TMHC corporate office located at 1108 Dundas Street, Unit 105, London, ON, N5W 3A7 (Table 3).

**Table 3: Documentary Records**

| Date         | Field Notes             | Field Maps              | Digital Images |
|--------------|-------------------------|-------------------------|----------------|
| May 11, 2022 | Digital and hard copies | Digital and hard copies | 135 Images     |



## 4 ANALYSIS AND CONCLUSIONS

As noted in Section 2.1, the Province of Ontario has identified numerous factors that signal the potential of a property to contain archaeological resources. The Stage I background study included a review of current land use, historic and modern maps, registered archaeological sites and previous archaeological studies, past settlement history for the area and a consideration of topographic and physiographic features, soils and drainage. According to the map-based review and background research, potential for the discovery of archaeological sites is indicated by the presence of or proximity (within 300 m) to:

- An area of 19<sup>th</sup>-century settlement (Shannonville, Tyendinaga);
- 19<sup>th</sup>-century travel routes (e.g. York Road, Ridge Road, Beach Road, Wyman Road, Lower Slash Road, and Highway 49);
- mapped 19<sup>th</sup>-century structures (numerous homesteads, a church, and two schoolhouses);
- documented 19<sup>th</sup>-century cemetery; and,
- historic watercourses (Salmon River, Marysville Creek, unnamed creek, and tributaries of Sucker Creek).

The Stage I background research and property inspection confirmed that portions of the Stage I Project area have witnessed prior disturbance and lack integrity, and therefore have low or no archaeological potential. This disturbance primarily relates to the construction of roads, ditches, and the installation of buried utilities. A small portion of the Project area was determined to be low-lying and wet, specifically where it crosses Marysville Creek and a tributary of Sucker Creek.

The background research and property inspection also indicated that the Stage I Project area bisects the All Saints' Anglican Church and Cemetery property. The Church and Cemetery were consecrated in 1858 and both the Church and Ridge Road are depicted on the 1878 map. The Stage I property inspection confirmed that many of the grave markers in the northern portion of the cemetery date to the latter part of the 19<sup>th</sup>-century, including those within 2 m of the gravel shoulder. The gravel shoulder was recently extended towards the cemetery to increase available parking and no physical boundary demarcates the northern portion of the cemetery from the shoulder. When a land survey was conducted for construction of the addition of the Queen Anne Parish Centre, a number of unmarked graves were identified within the cemetery (BrantFrancis 2022). As such, a Cemetery Investigation is required for the northern portion of the ROW adjacent to the All Saints' Anglican Church and Cemetery.

Although the northern portion of the ROW adjacent to the All Saints' Anglican Church and Cemetery requires a Cemetery Investigation, the southern portion does not. Although precisely when the portion of the Cemetery south of Ridge Road was acquired by the Church is unclear, it was not used as a cemetery until the middle of the 20<sup>th</sup> century. The southern portion of the ROW contains buried utilities including a water main, and the cemetery is separated from the gravel shoulder by a chain-link fence. Considering the above, it is unlikely that there are any unmarked graves outside the established boundaries of the cemetery.

## 5 RECOMMENDATIONS

The Stage I archaeological assessment for the proposed Mohawks of the Bay of Quinte and Shannonville Community Expansion Project has been completed in advance of the proposed installation of a natural gas main pipeline. All work met provincial standards and the Stage I background research and property inspection identified several areas retaining archaeological potential. The recommendations for the Stage I Project area are presented below.

- Portions of the Project area that are not obviously disturbed consisting of grasslands, woodlands, agricultural land, and manicured lawns retain archaeological potential (5.18 ha; 14.94%). These areas are recommended for Stage 2 assessment. In keeping with provincial standards, agricultural fields should be ploughed for pedestrian survey; however, as the impact area is a linear corridor less than 10 m wide, they can be assessed via standard test pit survey at 5 m intervals (MTC 2011; Section 2.1.2, Standard 1.f). The non-ploughable lands should be assessed via standard test pit survey at 5 m intervals to achieve the provincial standard (MTC 2011; Section 2.1.2, Standard 1);
- A portion of the Project area bisects the All Saints' Anglican Church and Cemetery properties, located north and south of the Ridge Road ROW. As the background research and property inspection could not precisely establish the limits of the Cemetery on the north side of the road, there remains potential for burials to be identified within the northern portion of the Ridge Road ROW (0.07 ha; 0.20%). Following any required Stage 2 assessment and site excavation, a Cemetery Investigation is required. The Cemetery Investigation should focus on the northern portion of the ROW adjoining the cemetery in the area extending from the known cemetery limits to the northern edge of the pavement on Ridge Road, which acts as a physical constraint. The purpose of the Cemetery Investigation is to confirm the presence or absence of graves within the road shoulder
- The portions of the Project area consisting of paved roads, ditches, and driveways have been identified as extensively disturbed (29.35 ha; 84.73%), do not retain archaeological potential, and no further assessment is recommended;
- The portions of the Project area deemed low-lying and permanently wet (0.04 ha; 0.12%), do not retain archaeological potential, and no further assessment is recommended; and,
- If the overall Project area is changed to incorporate lands not previously assessed, further assessment will be required.

Our recommendations are subject to the conditions laid out in Section 7.0 of this report and to the MHSTCI's review and acceptance of this report into the provincial register of archaeological reports.





## 6 SUMMARY

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A Stage I archaeological assessment was conducted for the proposed Mohawks of the Bay of Quinte and Shannonville Community Expansion Project. The Project area is comprised of the existing ROW along Wyman Road, Lower Slash Road, Homeland Drive, Bridge Road, York Road, Young Street, Atsia Court, Queen Street, Beach Road, Howard Street, and Gore Street and consists of roughly 20.1 km of ROW within part of Lots 5-7 and 26-31, Concession 1 South of the Road, part of Lots 5-31, Concession 2 South of the Road, and part of Lots 15-23, Concession A, in the Tyendinaga Mohawk Territory and Shannonville, Ontario. The background research indicated that the Project area was in proximity to features signaling archaeological potential and a Stage I field inspection was undertaken. The Stage I background research and property inspection confirmed that portions of the Stage I Project area have witnessed prior disturbance, lack integrity, or have low archaeological potential. Disturbance is primarily related to the construction of roads, ditches, and driveways, and buried utilities, while additional low archaeological potential is associated with low-lying wet areas. The remainder of the Project area consists of grassland, woodland, agricultural land, and manicured lawns situated along the edge of the ROW and appears to retain archaeological potential. Finally, the northern portion of the Ridge Road ROW where it adjoins the All Saints' Anglican Church and Cemetery retains potential for unmarked burials and a Cemetery Investigation is required.



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## 7 ADVICE ON COMPLIANCE WITH LEGISLATION

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This report is submitted to the MHSTCI as a condition of licensing in accordance with Part VI of the *Ontario Heritage Act*, R.S.O. 1990, c. 0.18. The report is reviewed to ensure that it complies with the standards and guidelines that are issued by the minister, and that the archaeological fieldwork and report recommendations ensure the conservation, protection and preservation of the cultural heritage of Ontario. When all matters relating to archaeological sites within the Project area of a development proposal have been addressed to the satisfaction of the MHSTCI, a letter will be issued by the ministry stating that there are no further concerns with regard to alterations to archaeological sites by the proposed development.

It is an offence under Sections 48 and 69 of the *Ontario Heritage Act* for any party other than a licensed archaeologist to make any alteration to a known archaeological site or to remove any artifact or other physical evidence of past human use or activity from the site, until such time as a licensed archaeologist has completed archaeological fieldwork on the site, submitted a report to the minister stating that the site has no further cultural heritage value or interest, and the report has been filed in the Ontario Public Register of Archaeology Reports referred to in Section 65.1 of the *Ontario Heritage Act*.

Should previously undocumented (i.e., unknown or deeply buried) archaeological resources be discovered, they may be a new archaeological site and therefore subject to Section 48(1) of the *Ontario Heritage Act*. The proponent or person discovering the archaeological resources must cease alteration of the site immediately and engage a licensed consultant archaeologist to carry out archaeological fieldwork, in compliance with Section 48(1) of the *Ontario Heritage Act*.

The *Funeral, Burial and Cremation Services Act*, 2002, S.O. 2002, c.33 requires that any person discovering human remains must notify the police or coroner and Crystal Forrest, A/Registrar of Burial Sites, Ontario Ministry of Government and Consumer Services. Her telephone number is 416-212-7499 and e-mail address is [Crystal.Forrest@ontario.ca](mailto:Crystal.Forrest@ontario.ca).





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## 9 IMAGES

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**Image 1: Atsia Court Northeast of Gore Street**

Looking Southwest



**Image 2: Young Street between York Road and Old Highway 2**

Looking Northeast





**Image 3: Gore Street between Young Street and Howard Street**

Looking Northwest



**Image 4: Howard Street between York Road and Gore Street**

Looking Northeast





**Image 5: Young Street between Beach Road and York Road**

Looking Northeast



**Image 6: Intersection of Beach Road and Queen Street – Wooded Area**

Looking Northwest





**Image 7: Intersection of Queen Street and Beach Road – Road, Sidewalk, Utilities**

Looking Northeast



**Image 8: Intersection of York Road and Young Street – Road and Sidewalk**

Looking Southeast





**Image 9: Intersection of Queen Street and York Road – Road and Sidewalk**

Looking Southwest



**Image 10: Young Street – Road Ditch and Driveways**

Looking Northeast





**Image 11: Young Street – Road and Gravel Driveways**

Looking Northeast



**Image 12: Intersection of Gore and Queen Streets – Road Ditch**

Looking Southwest





**Image 13: York Road between Upper Slash and Milltown Roads – Road, Shoulders, and Ditch**

Looking Southeast



**Image 14: York Road between Upper Slash and Milltown Roads – Road and Embankment**

Looking Southeast







**Image 15: York Road between Upper Slash and Milltown Roads – Road, Ditch, and Driveways**

Looking East



**Image 16: York Road between Milltown and Norways Roads near Marysville Creek**

Looking Northeast





**Image 17: York Road between Milltown and Norways Roads near Marysville Creek**

Looking West



**Image 18: York Road between Milltown and Norways Roads**

Looking East





**Image 19: York Road between Milltown and Norways Roads**

Looking East



**Image 20: York Road between Norways Road and Meadow Drive – Grassed Area**

Looking Northwest







**Image 21: York Road between Norways Road and Meadow Drive**

Looking East



**Image 22: York Road between Norways Road and Meadow Drive – Road and Ditch**

Looking Southeast





**Image 23: York Road between Norways Road and Meadow Drive**

Looking East



**Image 24: All Saints' Anglican Church and Cemetery**

Looking Southwest





**Image 25: All Saints' Anglican Church Cemetery – South of ROW**

Looking Southwest



**Image 26: All Saints' Anglican Church and Cemetery – Fire Hydrant in ROW**

Looking Northeast





**Image 27: Ridge Road between Norways and Airport Roads**

Looking West



**Image 28: Ridge Road between Norways and Airport Roads**

Looking Northeast







**Image 29: Ridge Road between Norways and Airport Roads – Agricultural Land**

Looking Northeast



**Image 30: Ridge Road between Norways and Airport Roads – Agricultural Land**

Looking Northeast





**Image 31: Ridge Road between Norways and Airport Roads**

Looking Northeast



**Image 32: Ridge Road between Norways and Airport Roads**

Looking Northeast





**Image 33: Ridge Road between Norways and Airport Roads**

Looking West



**Image 34: Ridge Road between Norways and Airport Roads – Drainage Ditch and Buried Utility**

Looking Southwest





**Image 35: Wyman Road between York and Lower Slash Roads – Wooded Area**

Looking South



**Image 36: Wyman Road between York and Lower Slash Roads**

Looking North





**Image 37: Wyman Road between York and Lower Slash Roads**

Looking North



**Image 38: Wyman Road between York and Lower Slash Roads**

Looking North





**Image 39: Wyman Road between York and Lower Slash Roads**

Looking South



**Image 40: Wyman Road between York and Lower Slash Roads**

Looking North





**Image 41: Lower Slash Road between Wyman Road and Homeland Drive**

Looking Northeast



**Image 42: Lower Slash Road between Wyman Road and Homeland Drive**

Looking Northeast





**Image 43: Lower Slash Road between Wyman Road and Homeland Drive**

Looking Southwest



**Image 44: Lower Slash Road between Wyman Road and Homeland Drive**

Looking Northeast





**Image 45: Lower Slash Road between Wyman Road and Homeland Drive**

Looking North



**Image 46: Lower Slash Road between Wyman Road and Homeland Drive**

Looking Northeast





**Image 47: Lower Slash Road between Wyman Road and Homeland Drive**

Looking Northeast



**Image 48: Lower Slash Road between Wyman Road and Homeland Drive**

Looking Northeast





**Image 49: Homeland Drive**

Looking North



**Image 50: Homeland Drive**

Looking West





**Image 51: Homeland Drive**

Looking West



**Image 52: Homeland Drive**

Looking West





**Image 53: Lower Slash Road between Homeland Drive and Highway 49**

Looking East



**Image 54: Lower Slash Road between Homeland Drive and Highway 49**

Looking East





**Image 55: Lower Slash Road between Homeland Drive and Highway 49**

Looking East



**Image 56: Lower Slash Road between Homeland Drive and Highway 49**

Looking East



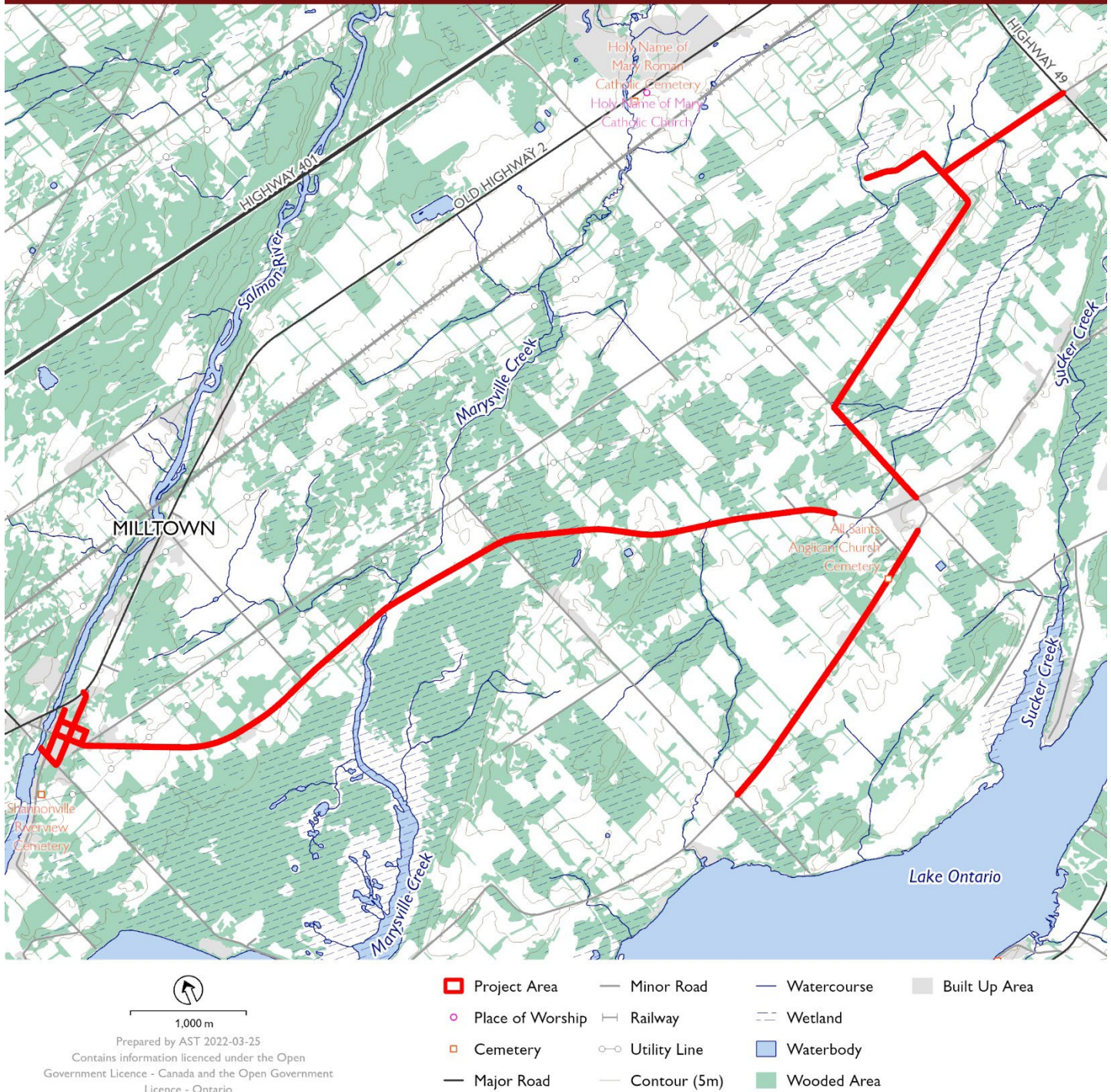


## **10 MAPS**

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## PROJECT LOCATION



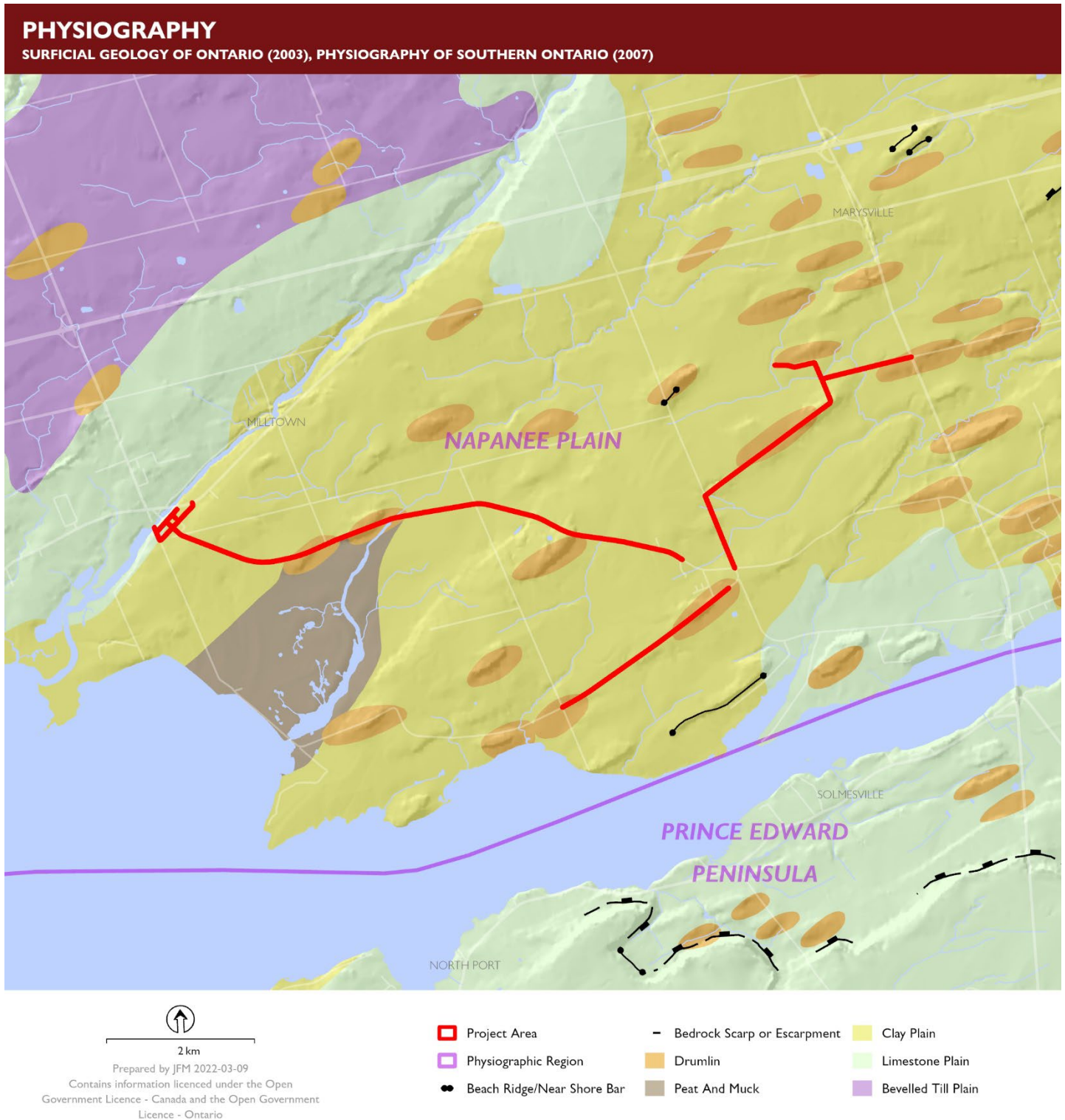
**Map I: Location of the Project Area in Tyendinaga Mohawk Territory and Shannonville, ON**



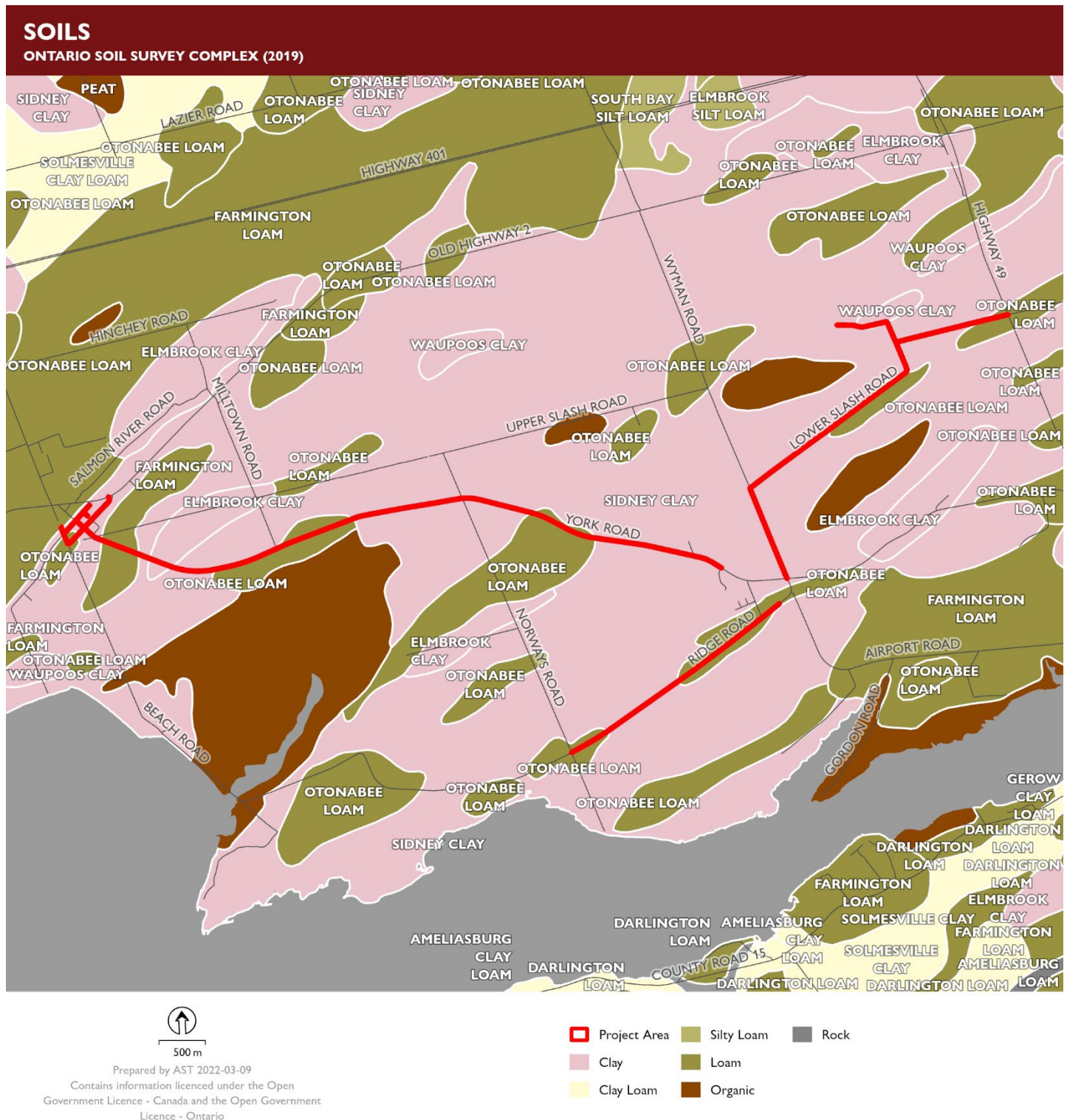


**Map 2: Aerial Photograph Showing the Location of the Project Area**

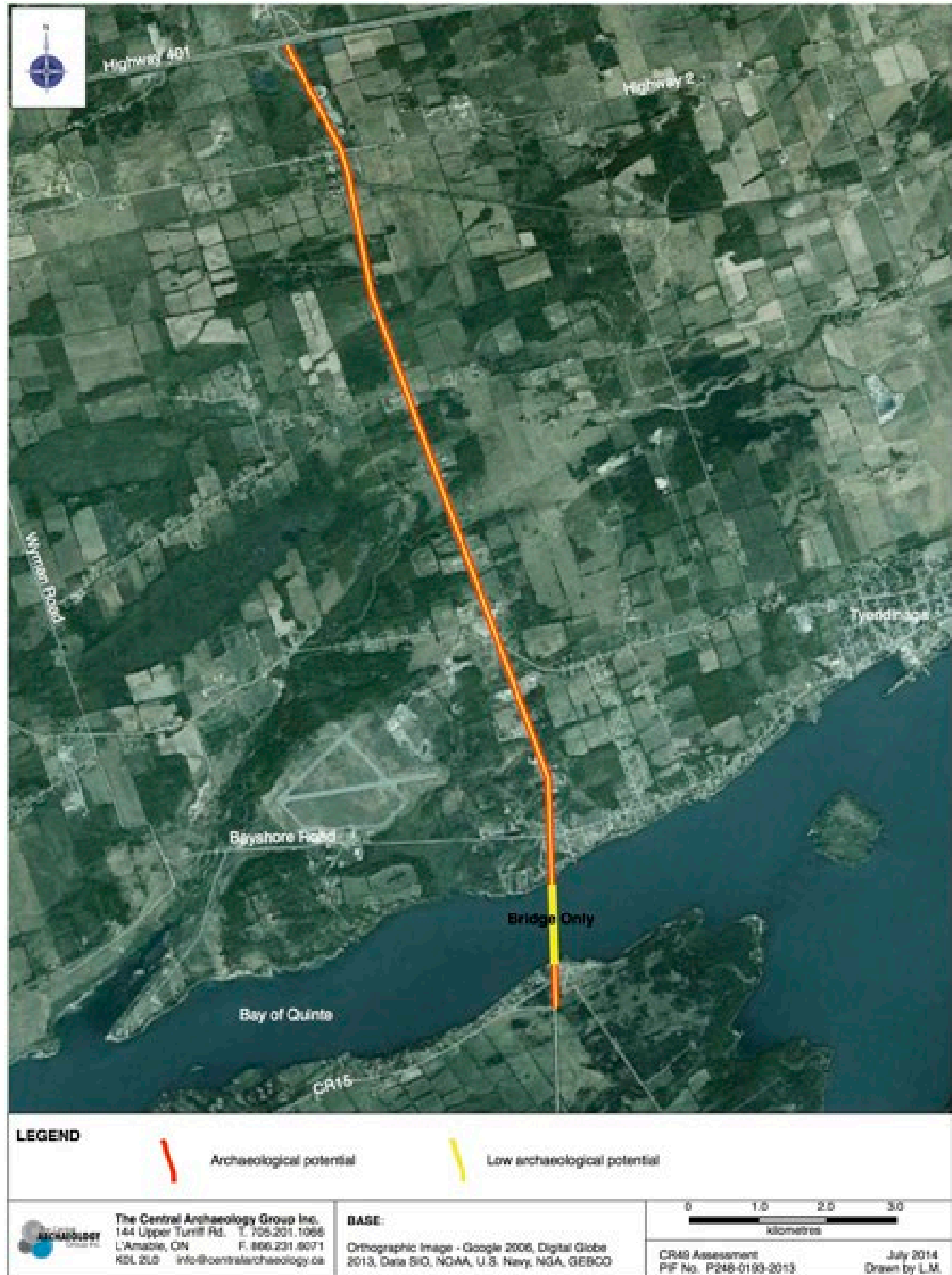




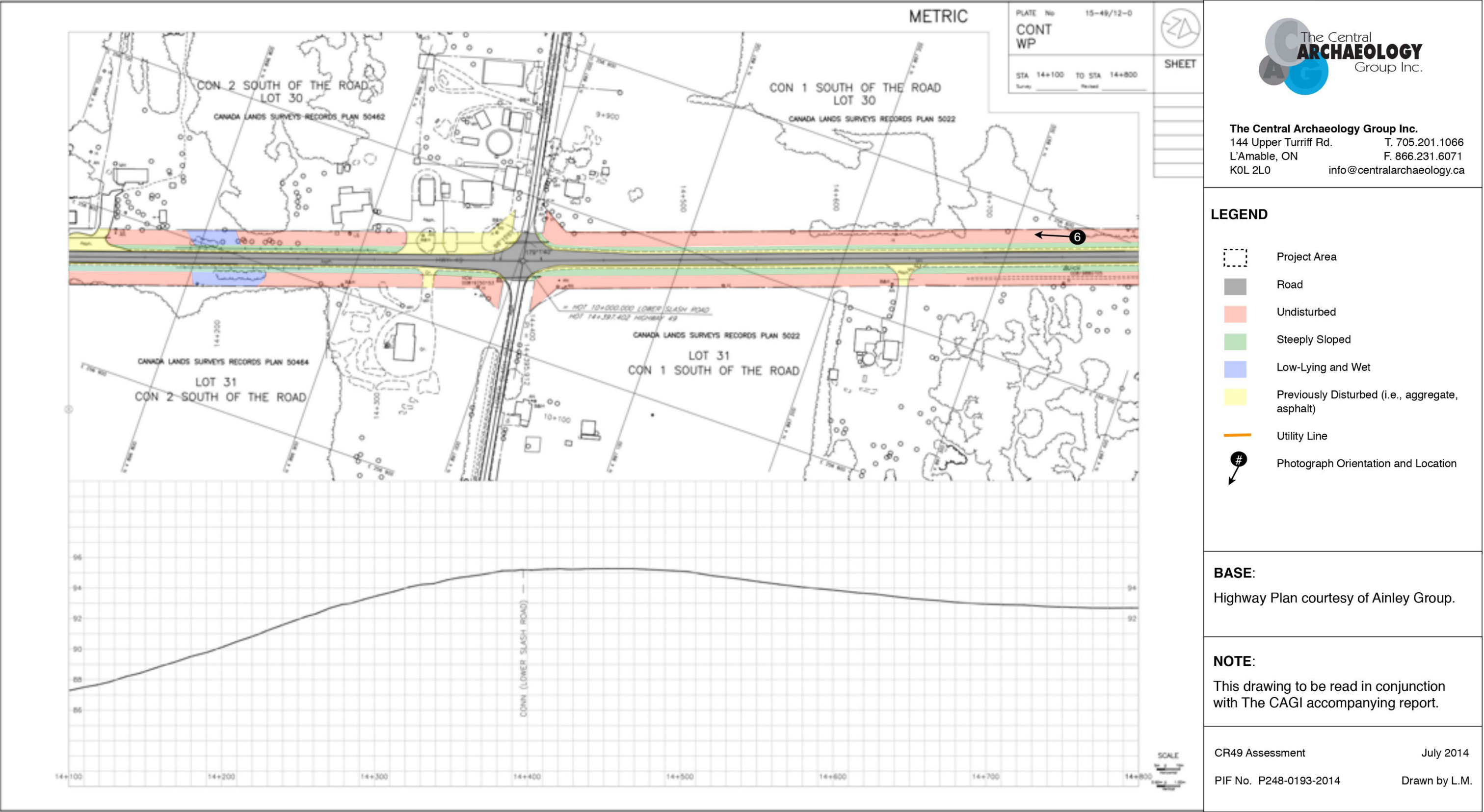
**Map 3: Physiography Within the Vicinity of the Project Area**







Map 5: Stage I Results County Road 49 Improvements (CAGI 2014)



Map 6: Stage 2 Results for County Road 49 Improvements Near Current Project Area (CAGI 2015a)



**A MAP OF THE FRONT, OR SOUTHERLY PART OF TYENDINAGA IN THE MIDLAND DISTRICT**



### Map 7: Location of the Project Area Shown on the 1835 Benson Map





1,000 m

Prepared by AST 2022-03-09

Contains information licenced under the Open  
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 Project Area

**Map 8: Location of the Project Area Shown on the 1878 Historic Atlas Map**



## 1895 HISTORIC MAP

PLAN OF TYENDINGA INDIAN RESERVE



1,000 m

Prepared by AST 2022-03-10

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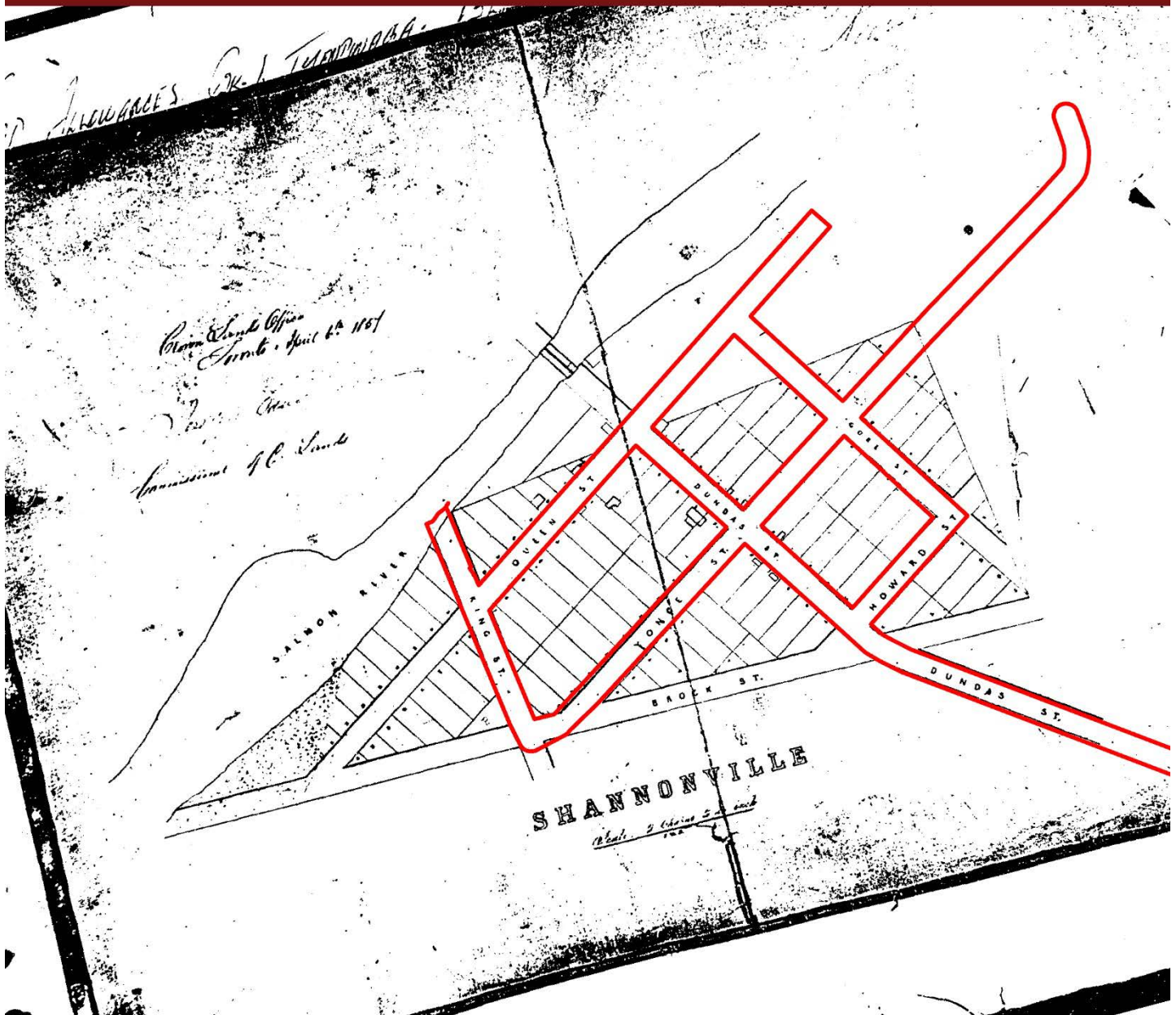
 Project Area

**Map 9: Location of the Project Area Shown on the 1895 Plan of Tyendinga**



## 1851 HISTORIC MAP

PLAN OF THE VILLAGE OF SHANNONVILLE FOR THE CROWN LANDS OFFICE



250 m

Prepared by AST 2022-05-19

Contains information licenced under the Open

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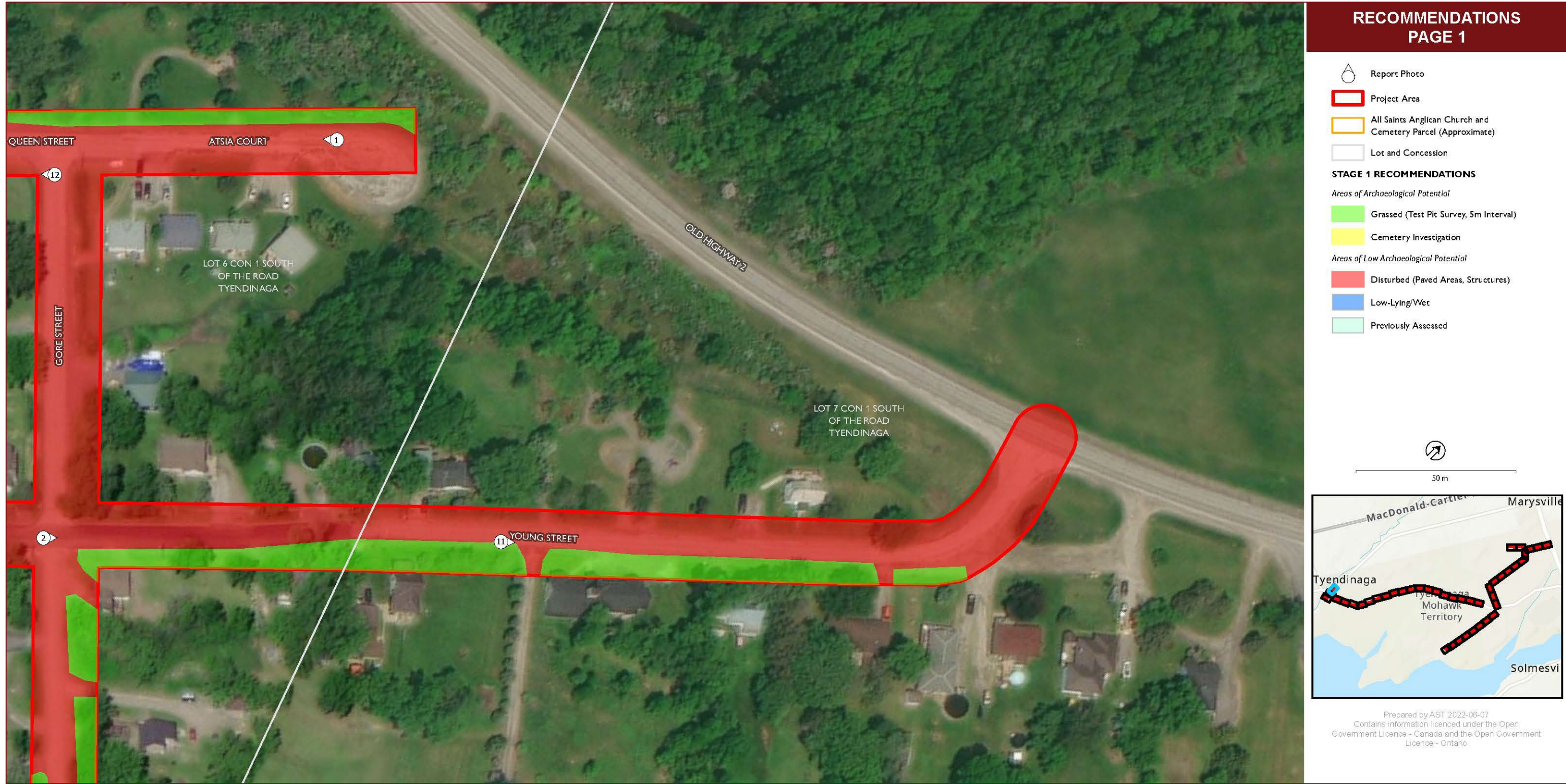
Licence - Ontario



Project Area

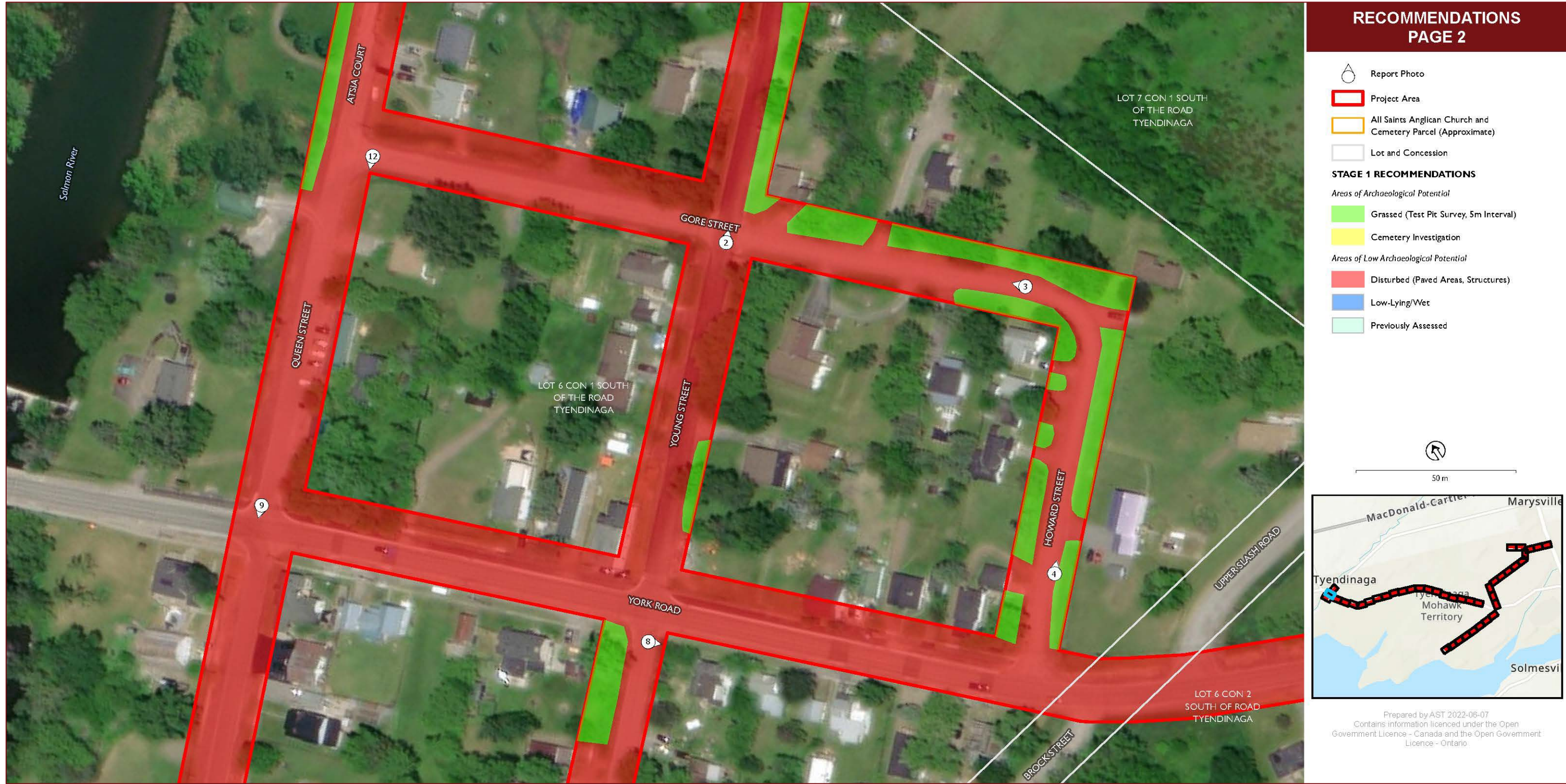
**Map 10: Shannonville portion of the Project Area Shown on the 1851 Plan**





Map 11: Stage I Recommendations – Shannonville





Map 12: Stage I Recommendations – Shannonville





Map 13: Stage I Recommendations – Shannonville





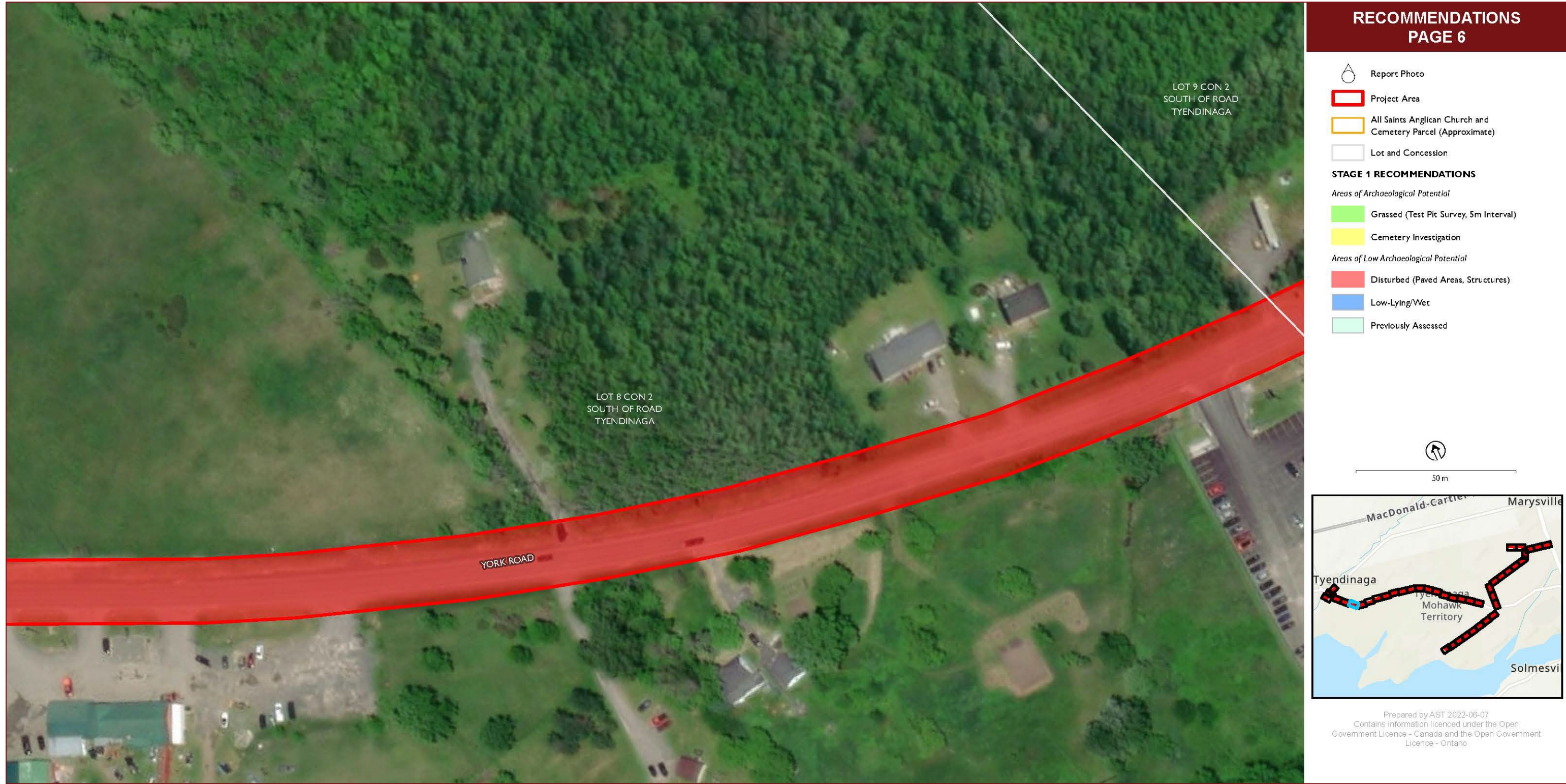
**Map 14: Stage I Recommendations – York Road – Upper Slash Road to Milltown Road**





Map 15: Stage I Recommendations – York Road – Upper Slash Road to Milltown Road





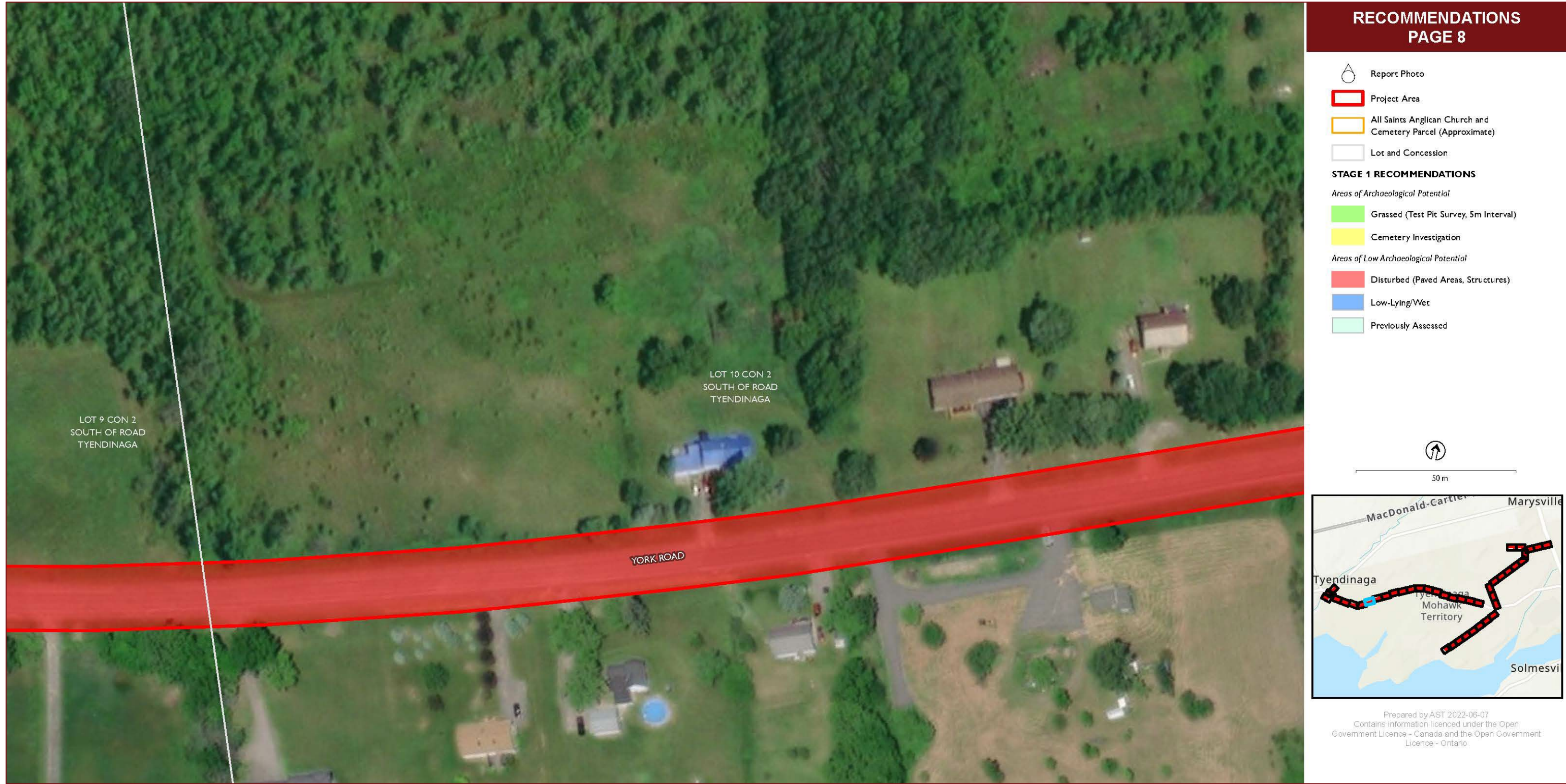
Map 16: Stage I Recommendations – York Road – Upper Slash Road to Milltown Road





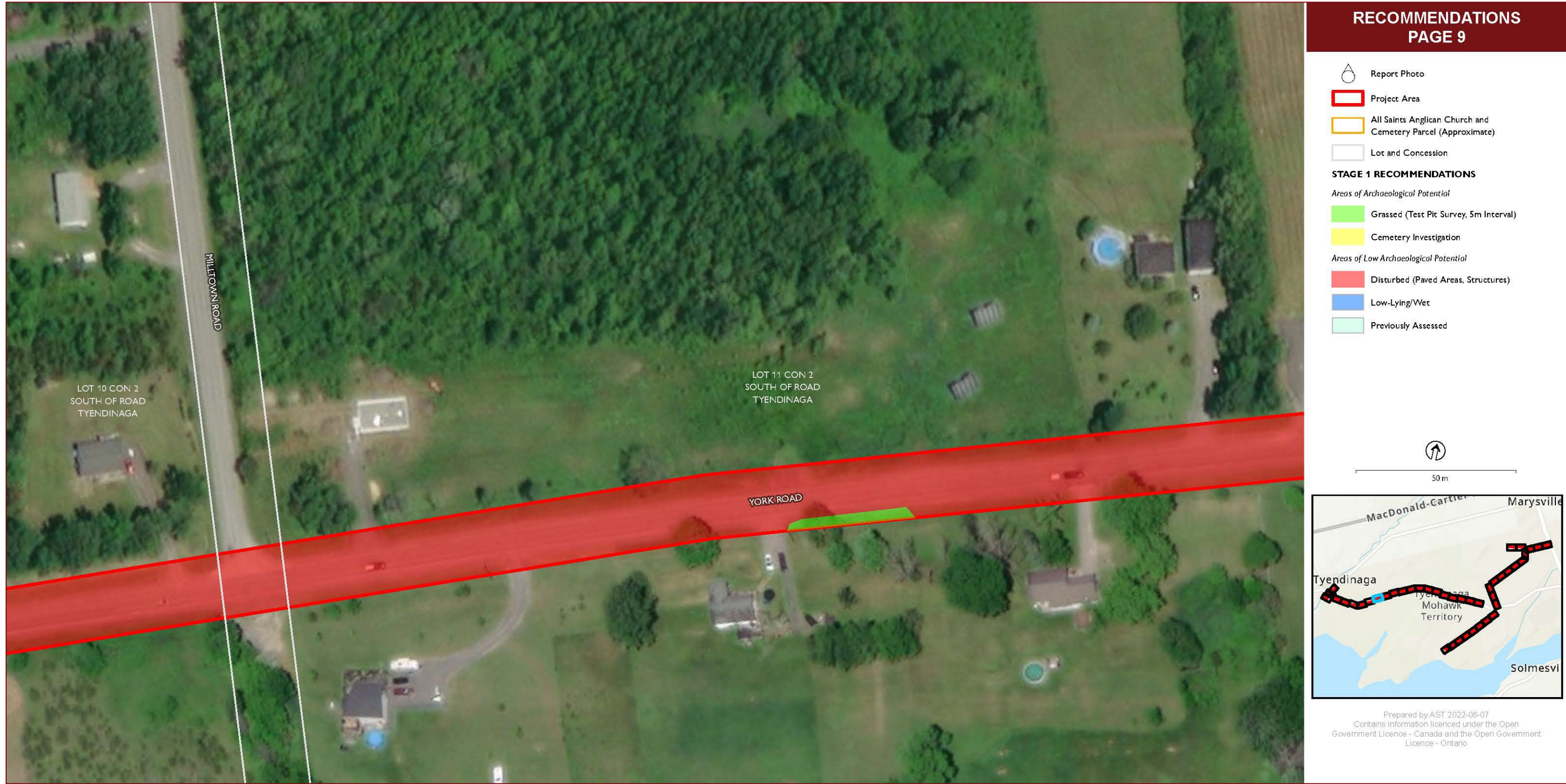
Map 17: Stage I Recommendations – York Road – Upper Slash Road to Milltown Road





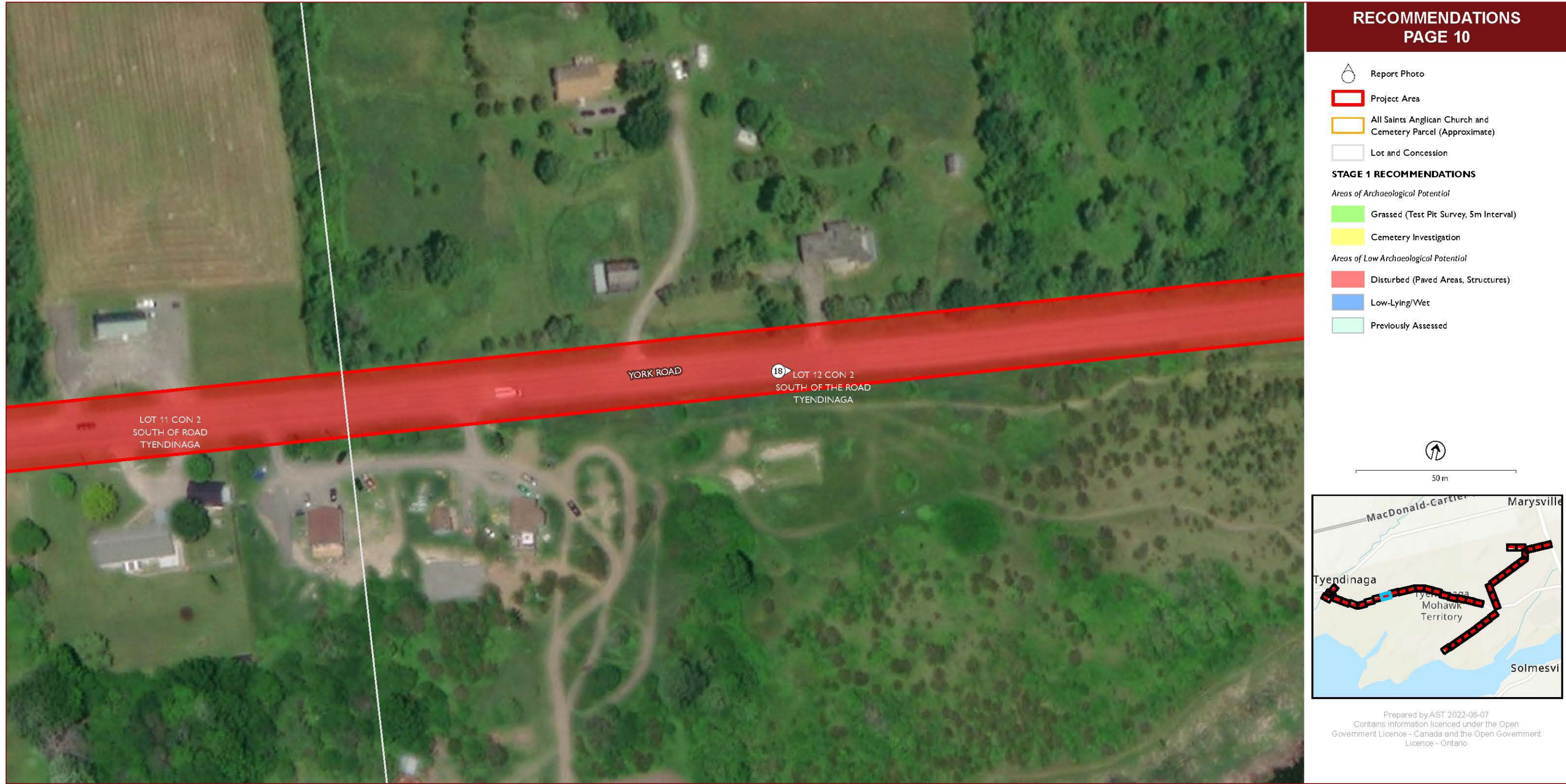
Map 18: Stage I Recommendations – York Road – Upper Slash Road to Milltown Road





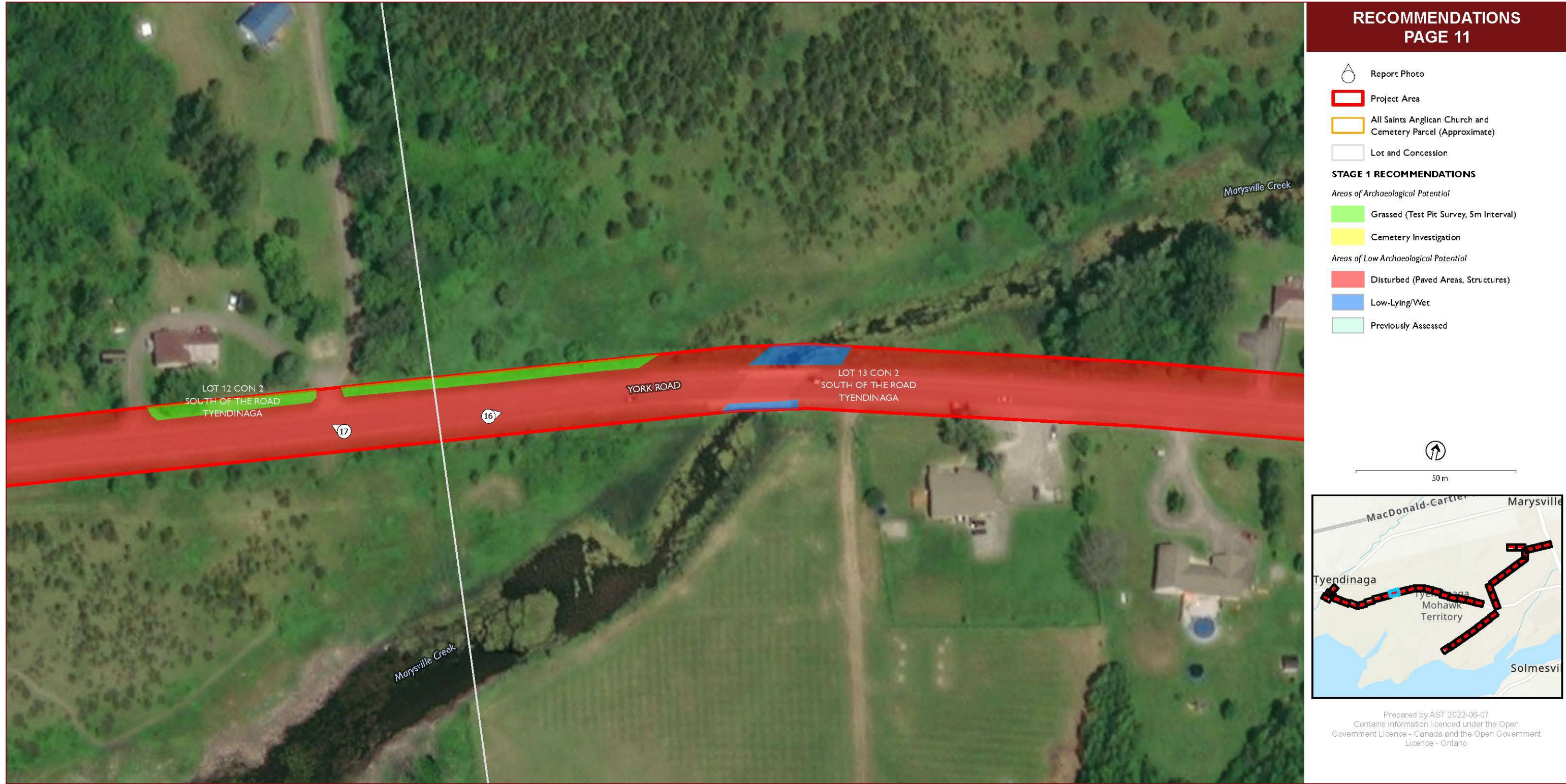
Map 19: Stage I Recommendations – York Road – Milltown Road to Norways Road





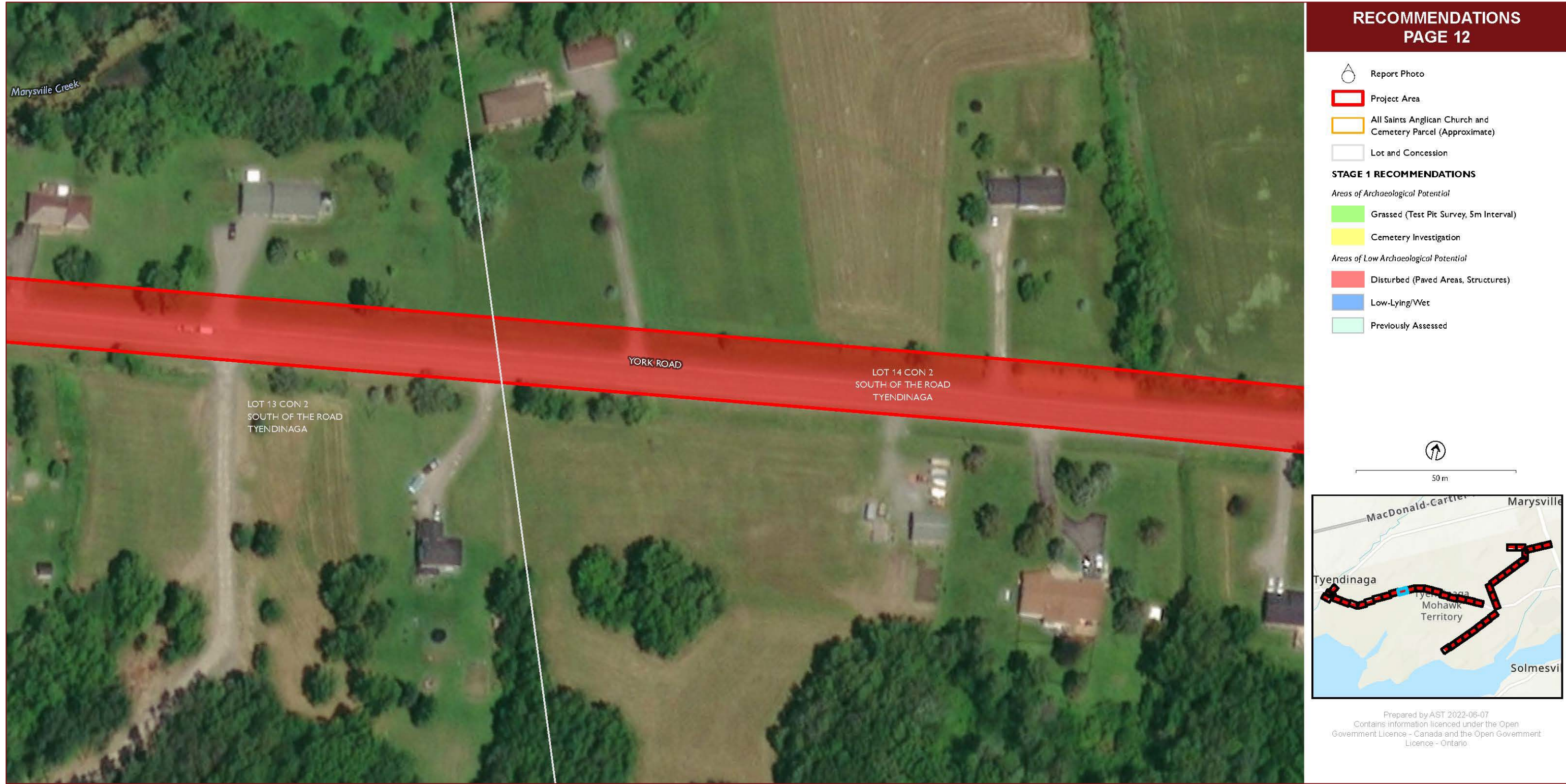
Map 20: Stage I Recommendations – York Road – Milltown Road to Norways Road





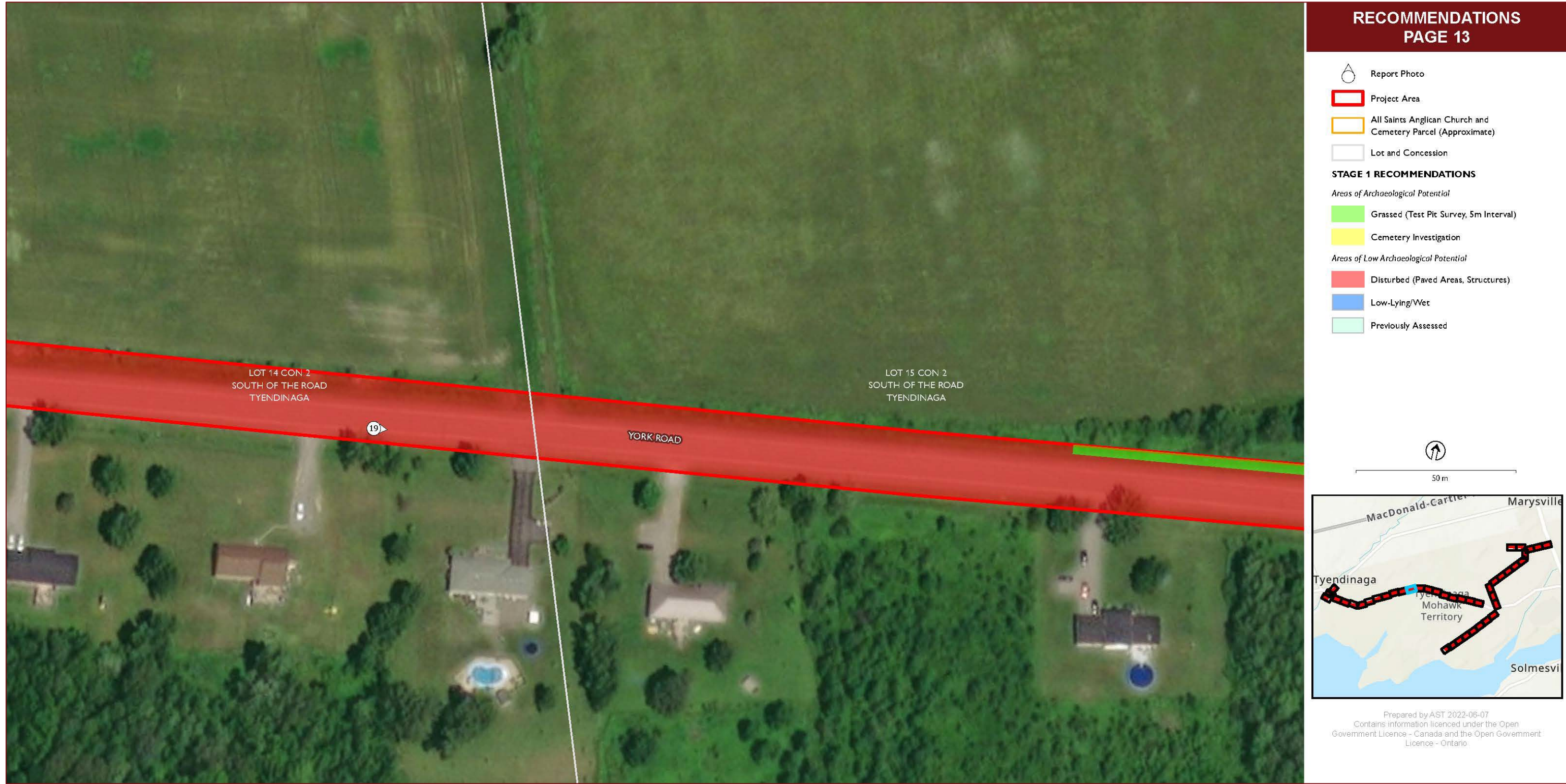
Map 21: Stage I Recommendations – York Road – Milltown Road to Norways Road





Map 22: Stage I Recommendations – York Road – Milltown Road to Norways Road





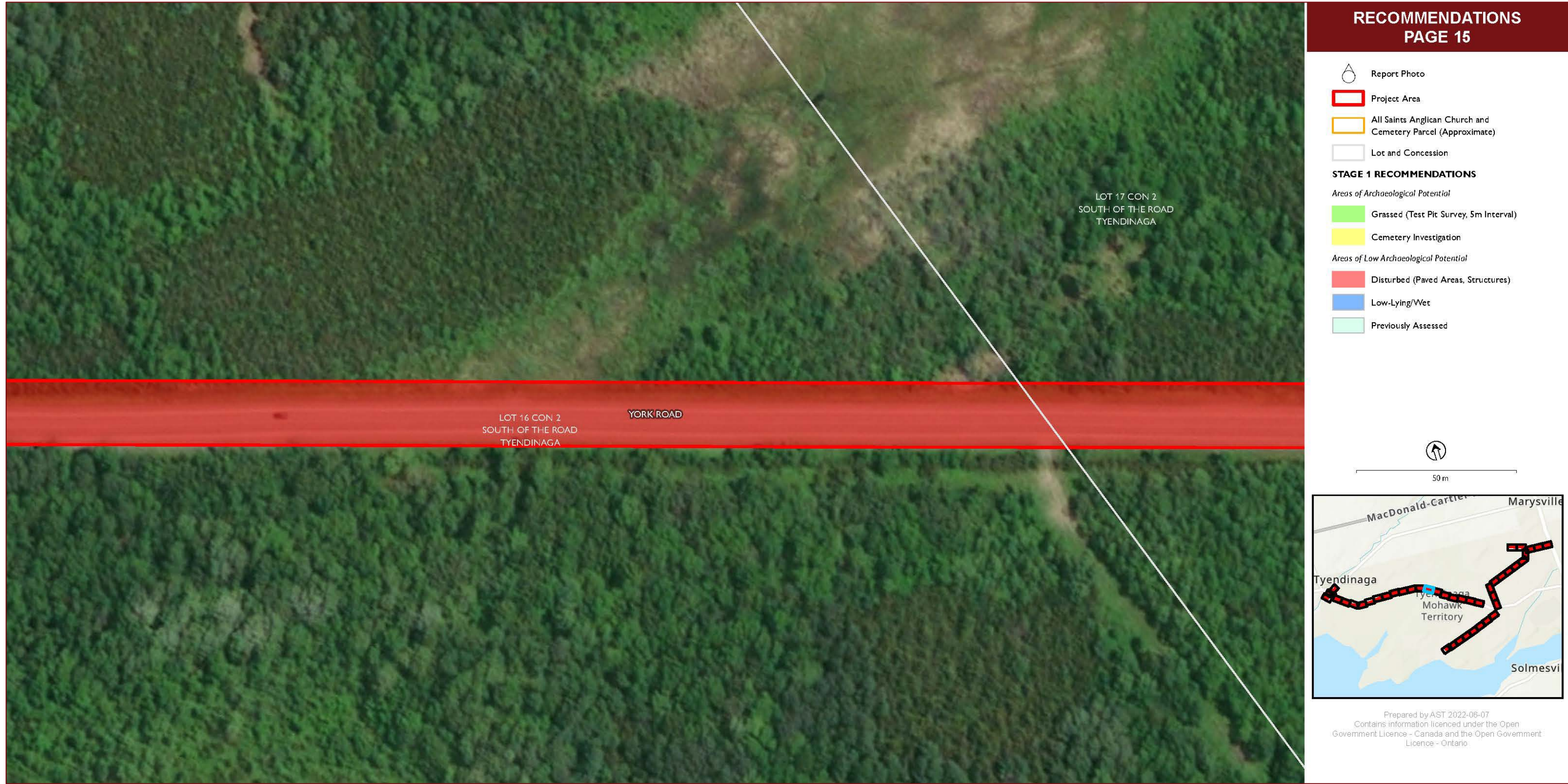
Map 23: Stage I Recommendations– York Road – Milltown Road to Norways Road





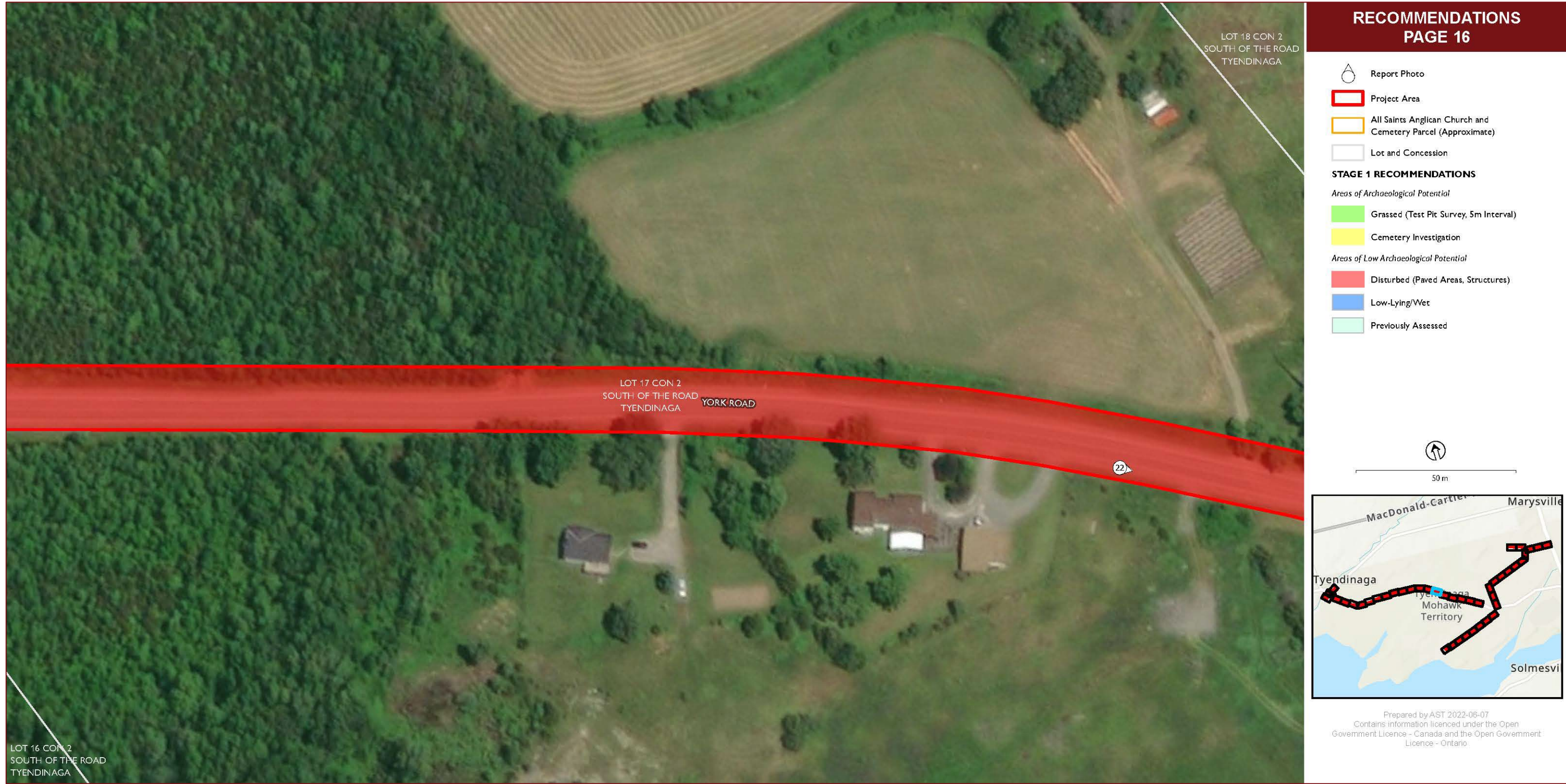
Map 24: Stage I Recommendations – York Road – Norways Road to Meadow Drive





Map 25: Stage I Recommendations – York Road – Norways Road to Meadow Drive





Map 26: Stage I Recommendations – York Road – Norways Road to Meadow Drive





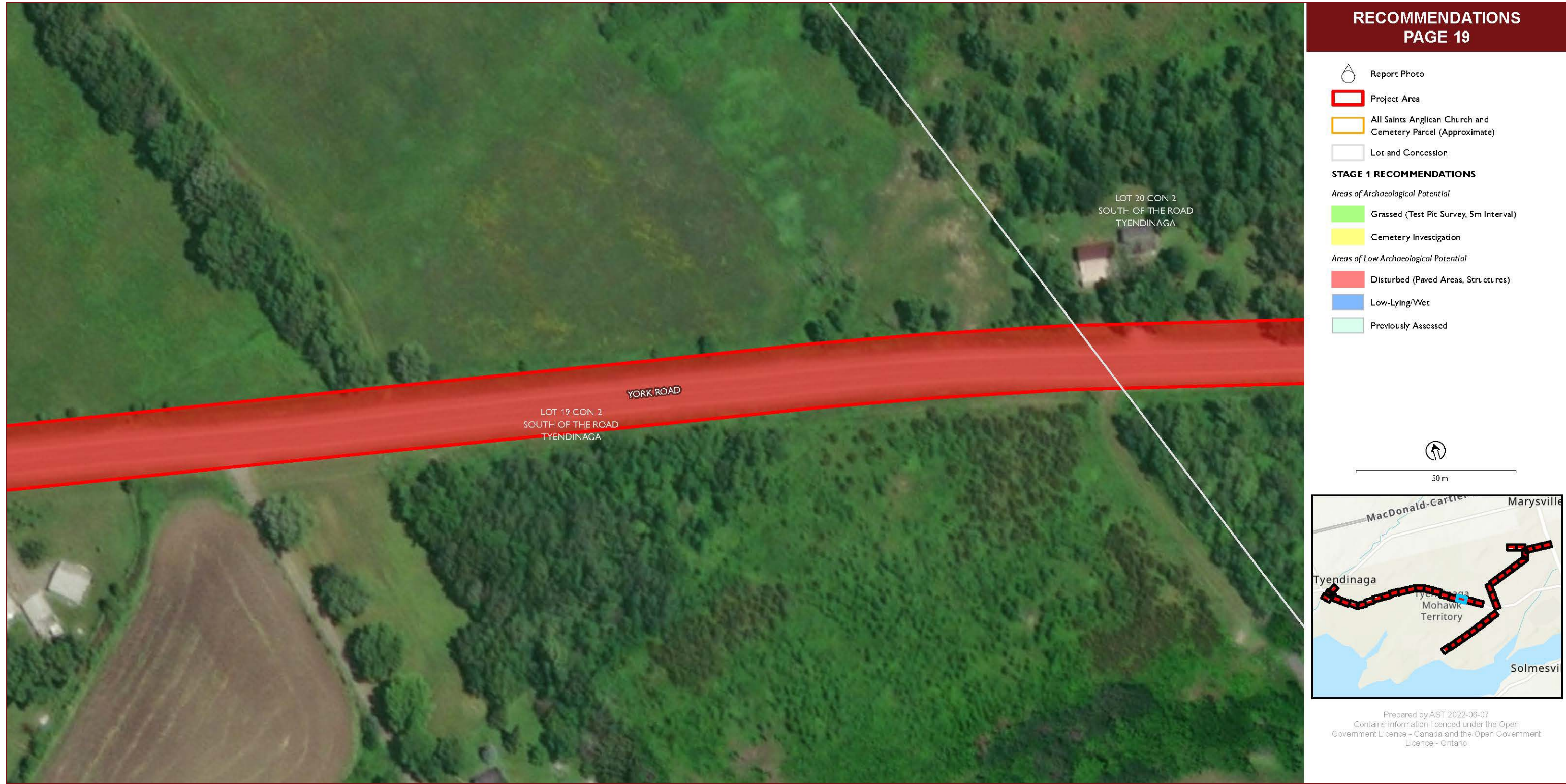
Map 27: Stage I Recommendations – York Road – Norways Road to Meadow Drive





Map 28: Stage I Recommendations – York Road – Norways Road to Meadow Drive





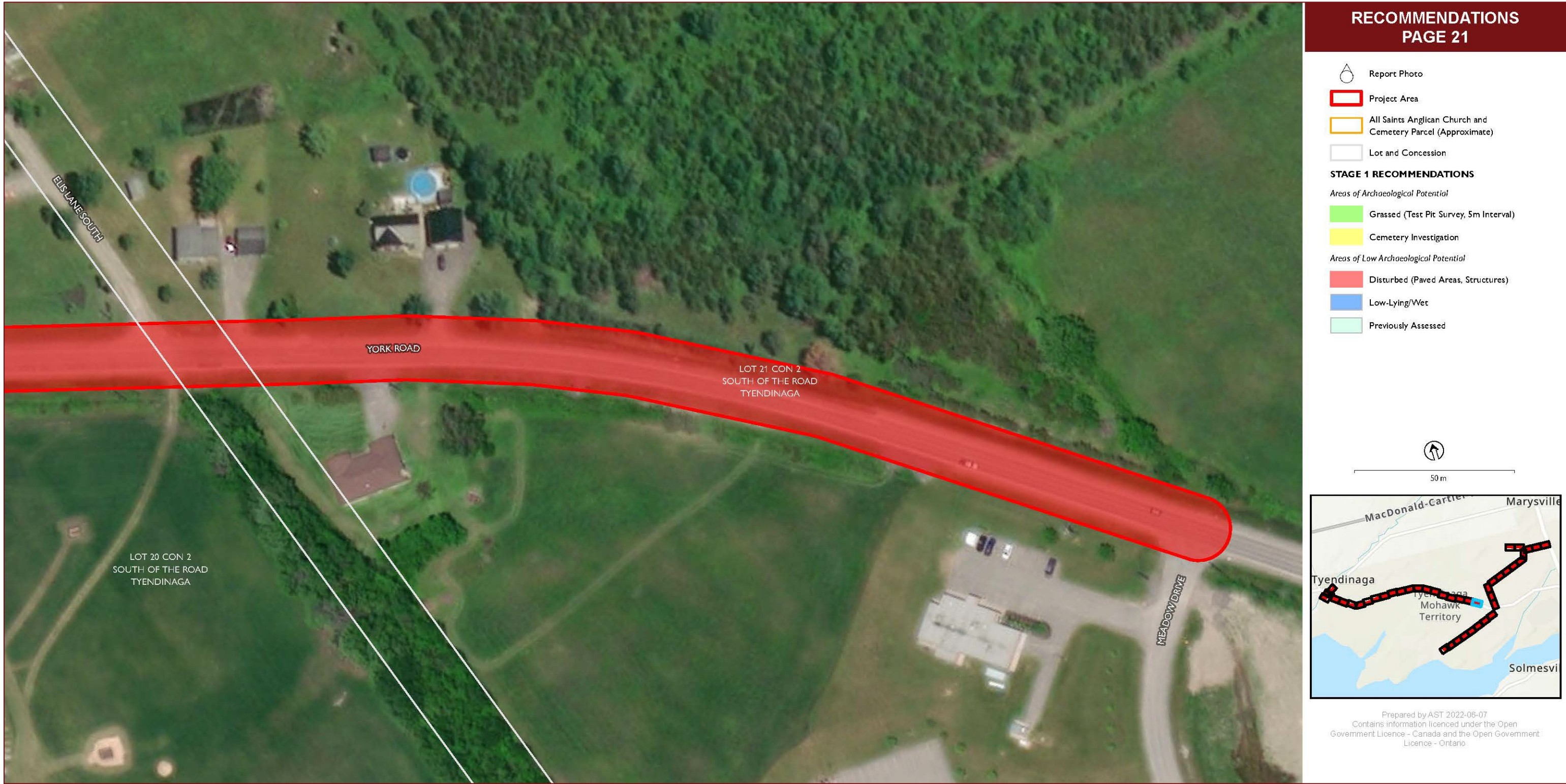
Map 29: Stage I Recommendations – York Road – Norways Road to Meadow Drive





Map 30: Stage I Recommendations – York Road – Norways Road to Meadow Drive





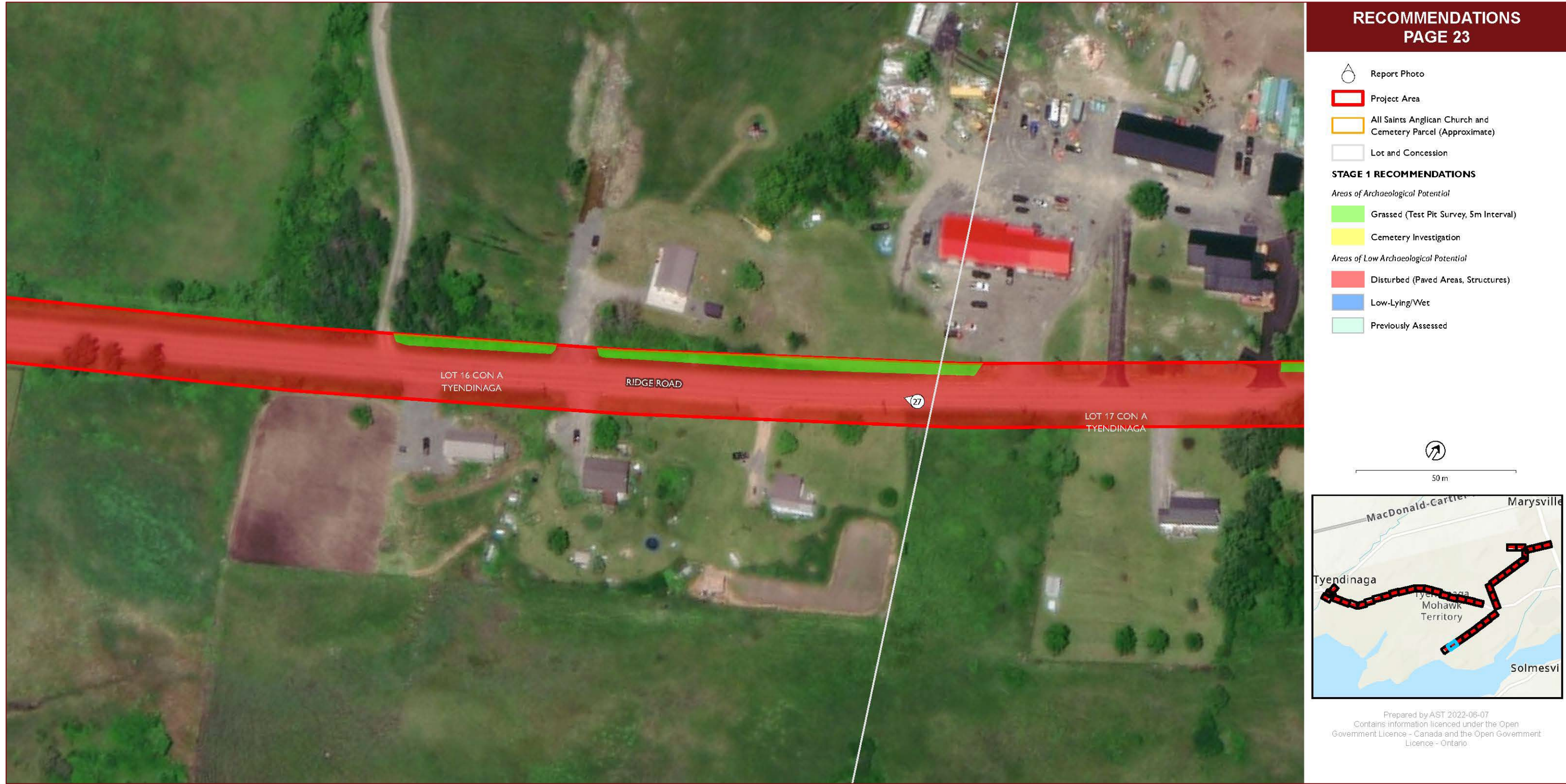
Map 31: Stage I Recommendations – York Road – Norways Road to Meadow Drive





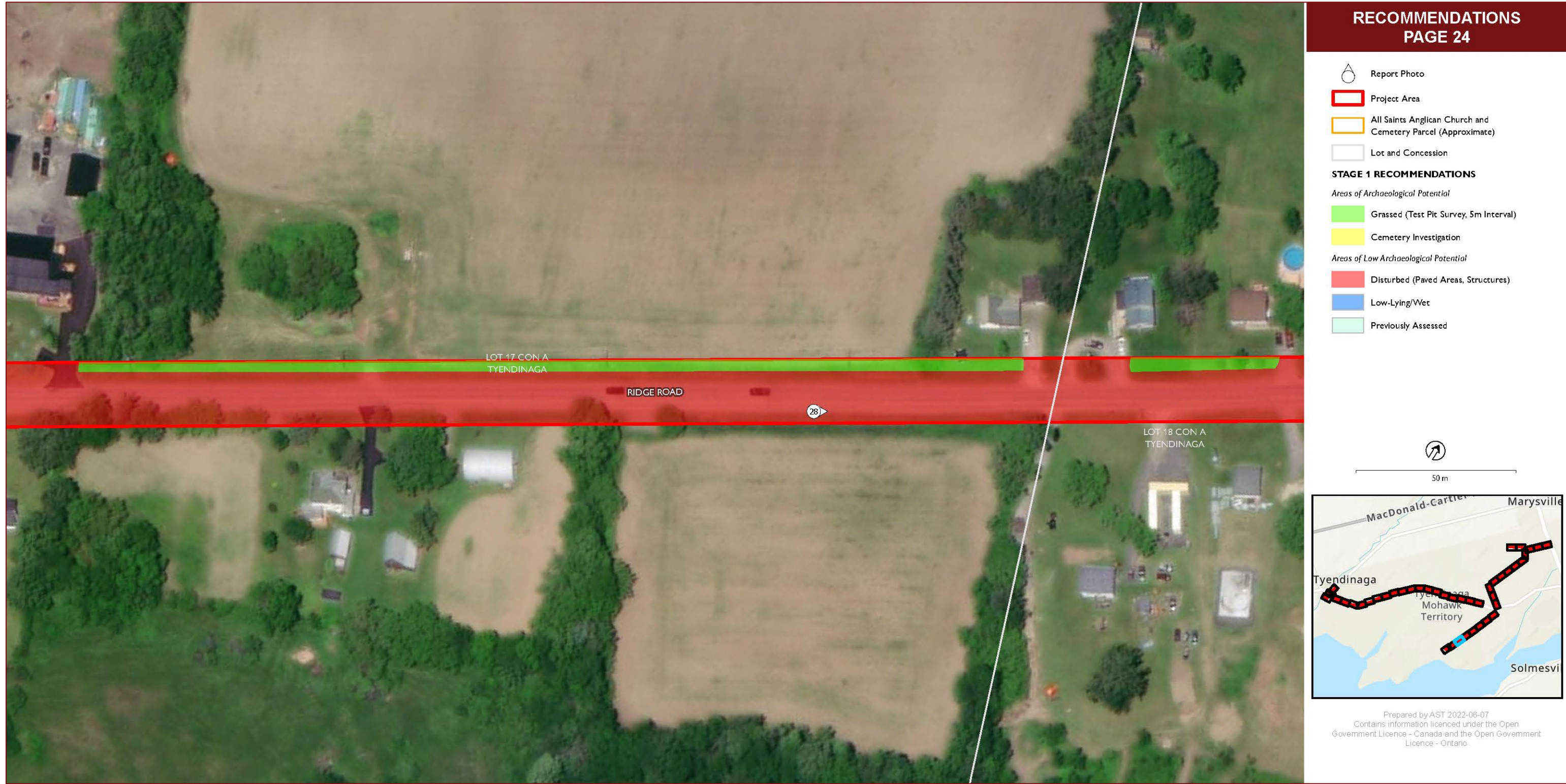
Map 32: Stage I Recommendations – Ridge Road – Norways Road to Airport Road





Map 33: Stage I Recommendations – Ridge Road – Norways Road to Airport Road





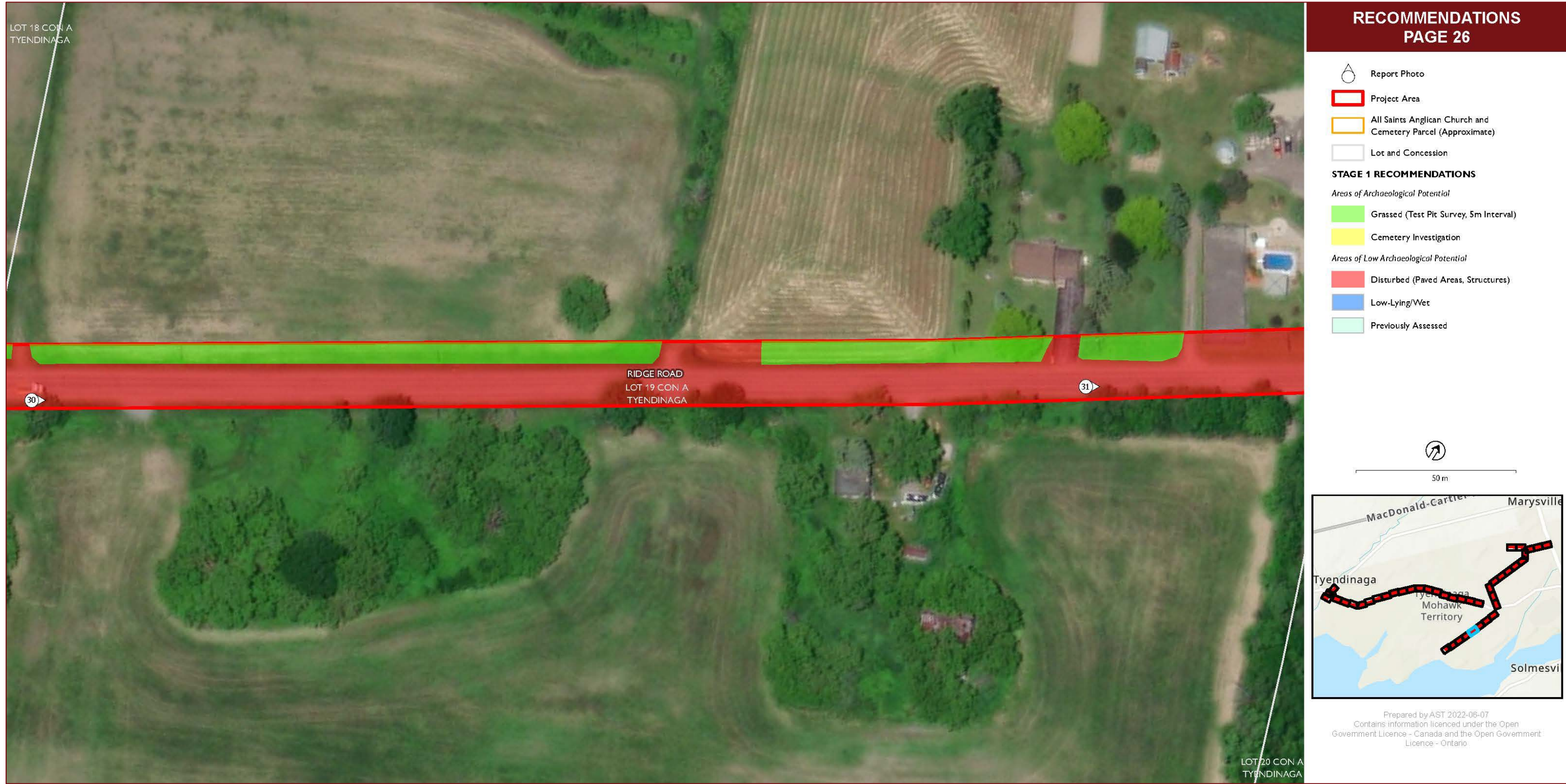
Map 34: Stage I Recommendations – Ridge Road – Norways Road to Airport Road





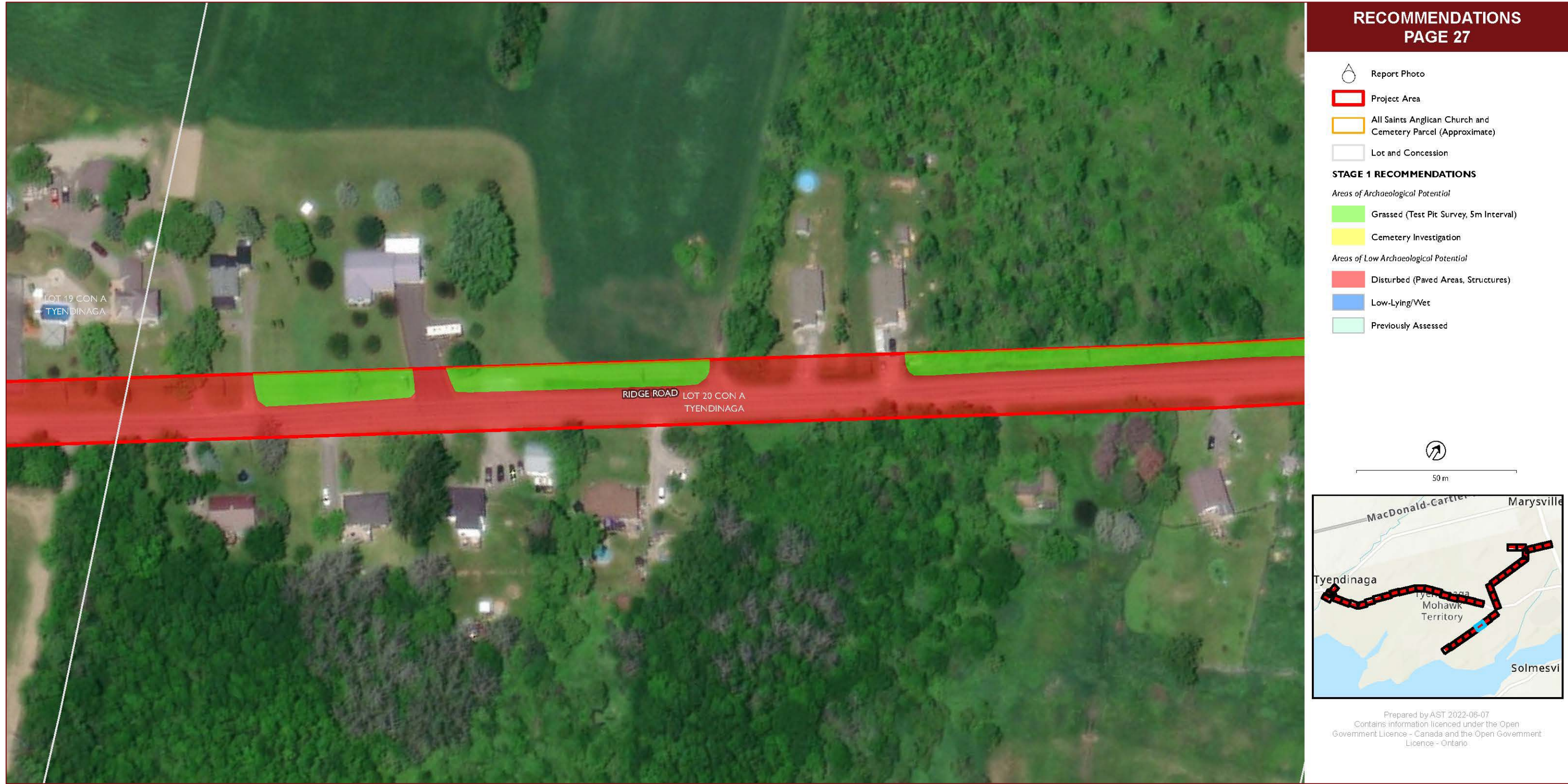
Map 35: Stage I Recommendations – Ridge Road – Norways Road to Airport Road





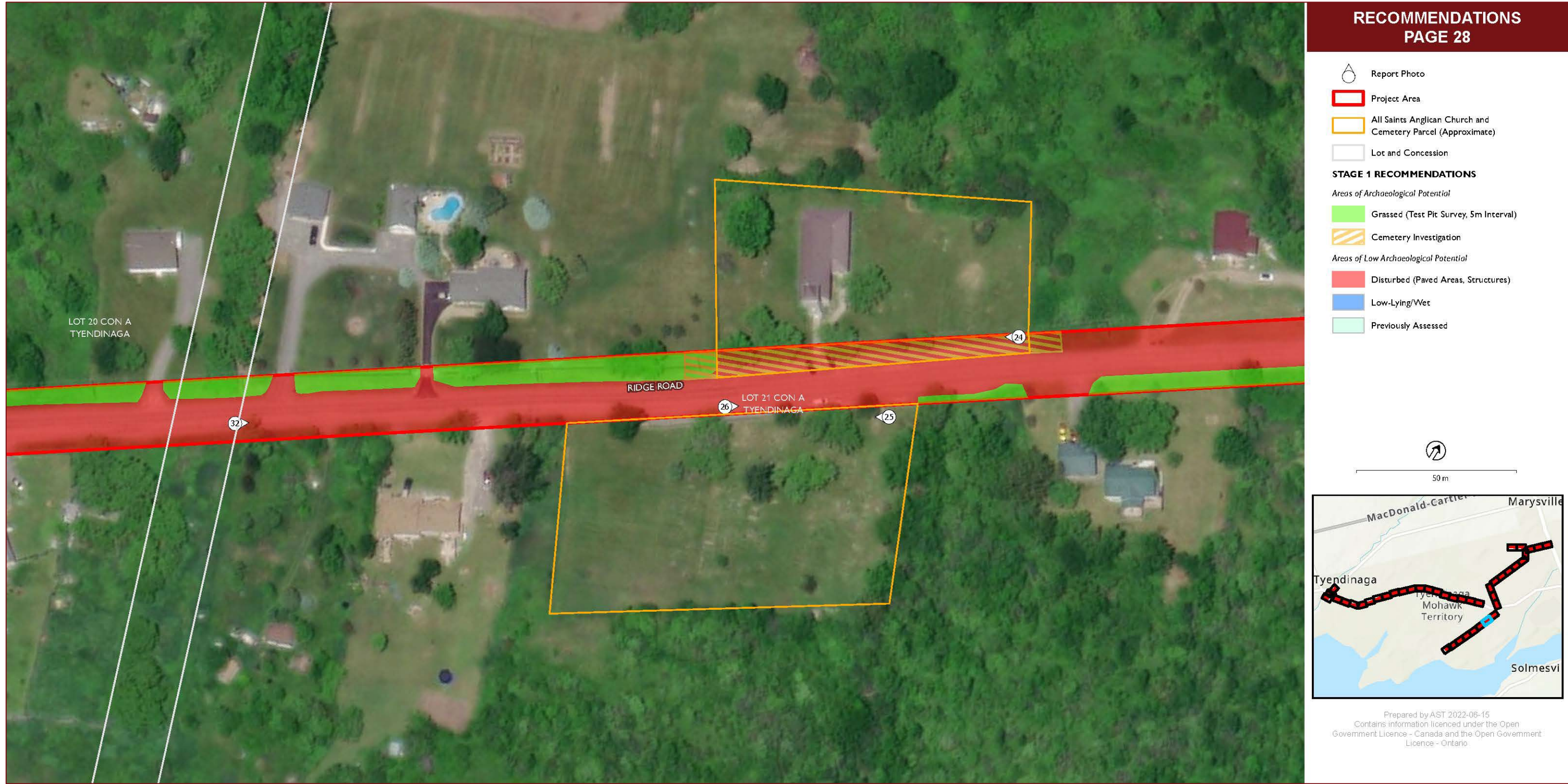
Map 36: Stage I Recommendations – Ridge Road – Norways Road to Airport Road





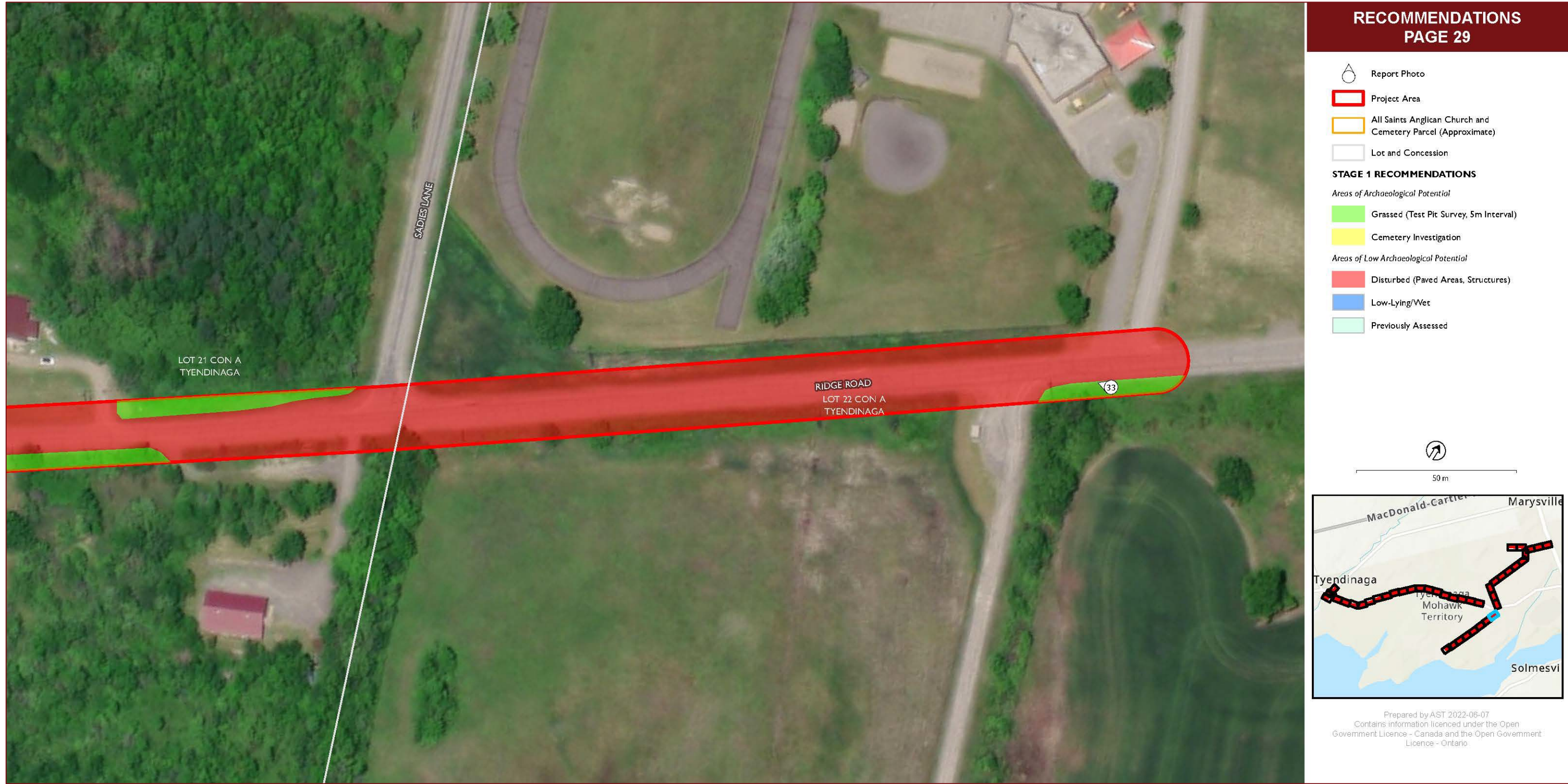
Map 37: Stage I Recommendations – Ridge Road – Norways Road to Airport Road





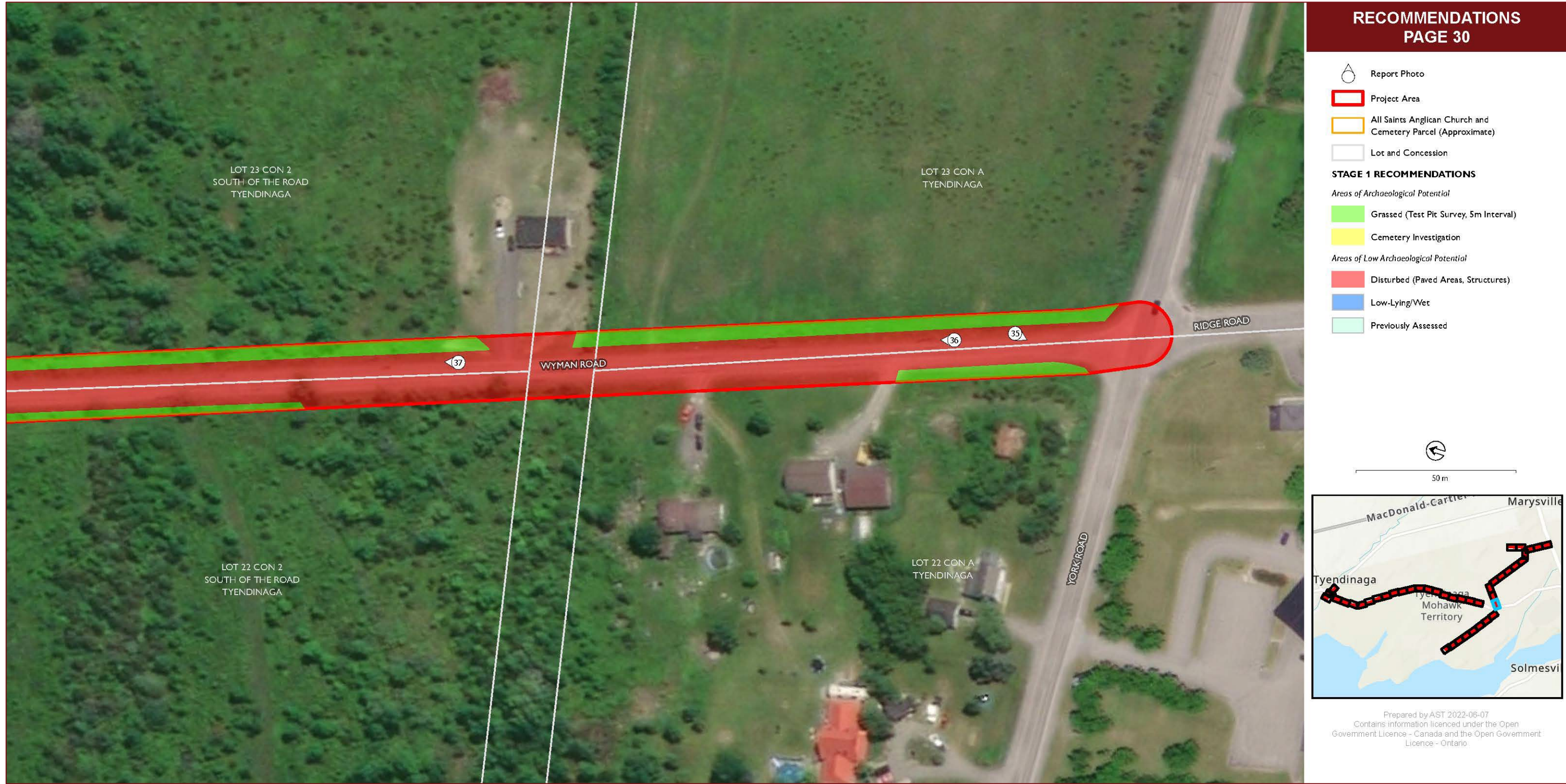
Map 38: Stage I Recommendations – Ridge Road – Norways Road to Airport Road





Map 39: Stage I Recommendations – Ridge Road – Norways Road to Airport Road





**Map 40: Stage I Recommendations – Wyman Road – York Road to Lower Slash Road**





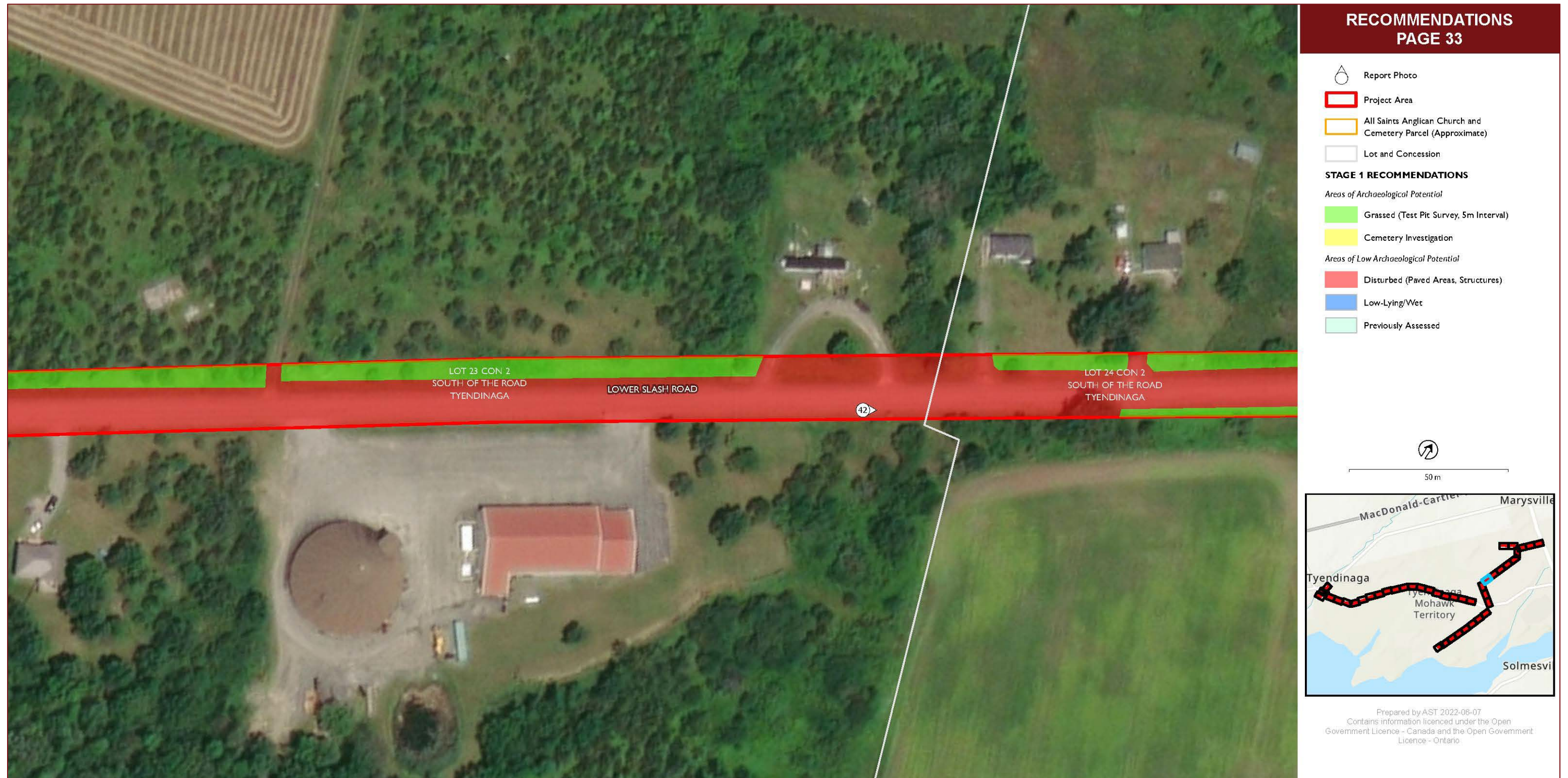
Map 41: Stage I Recommendations – Wyman Road – York Road to Lower Slash Road





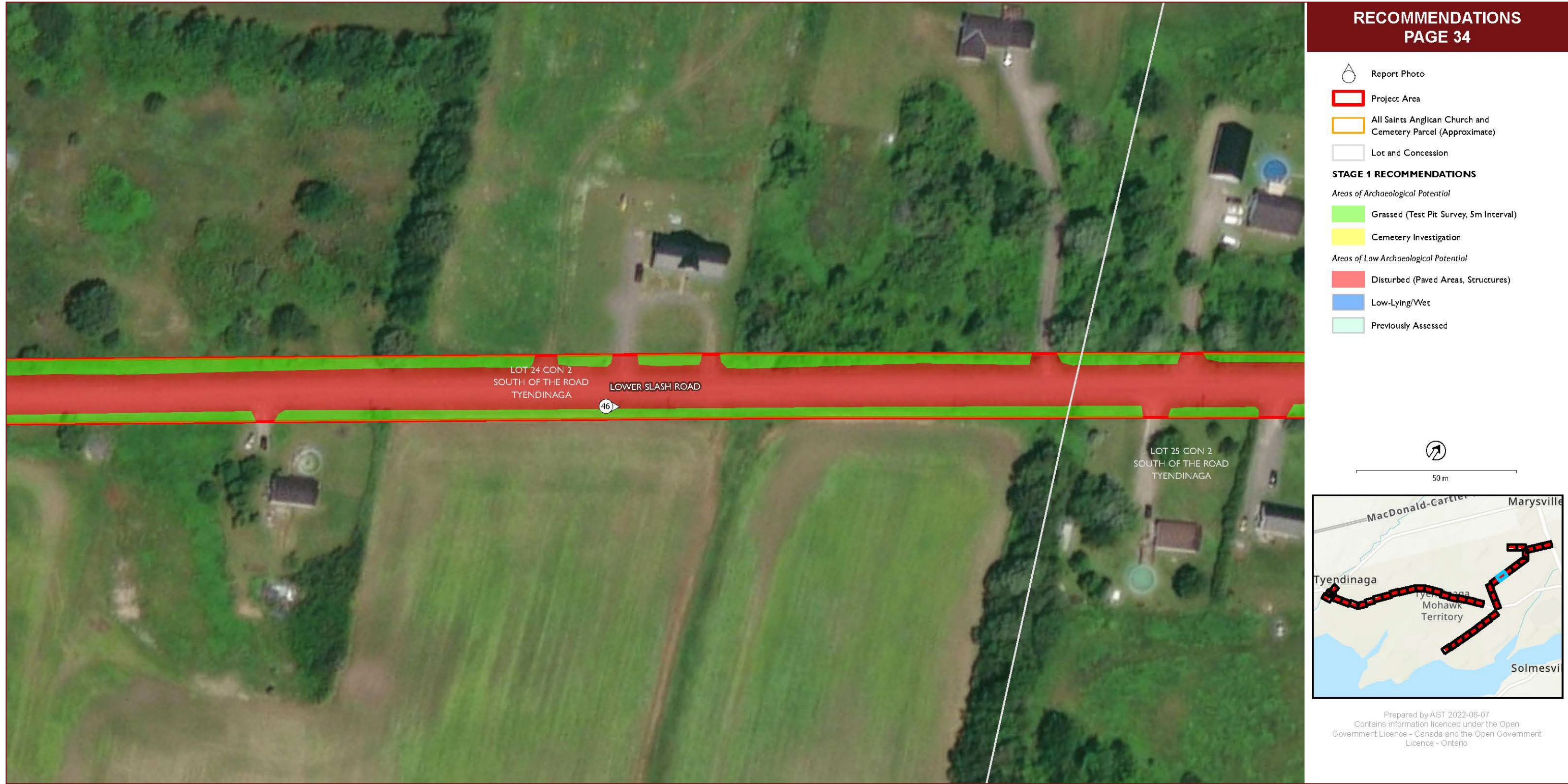
Map 42: Stage I Recommendations – Wyman Road – York Road to Lower Slash Road





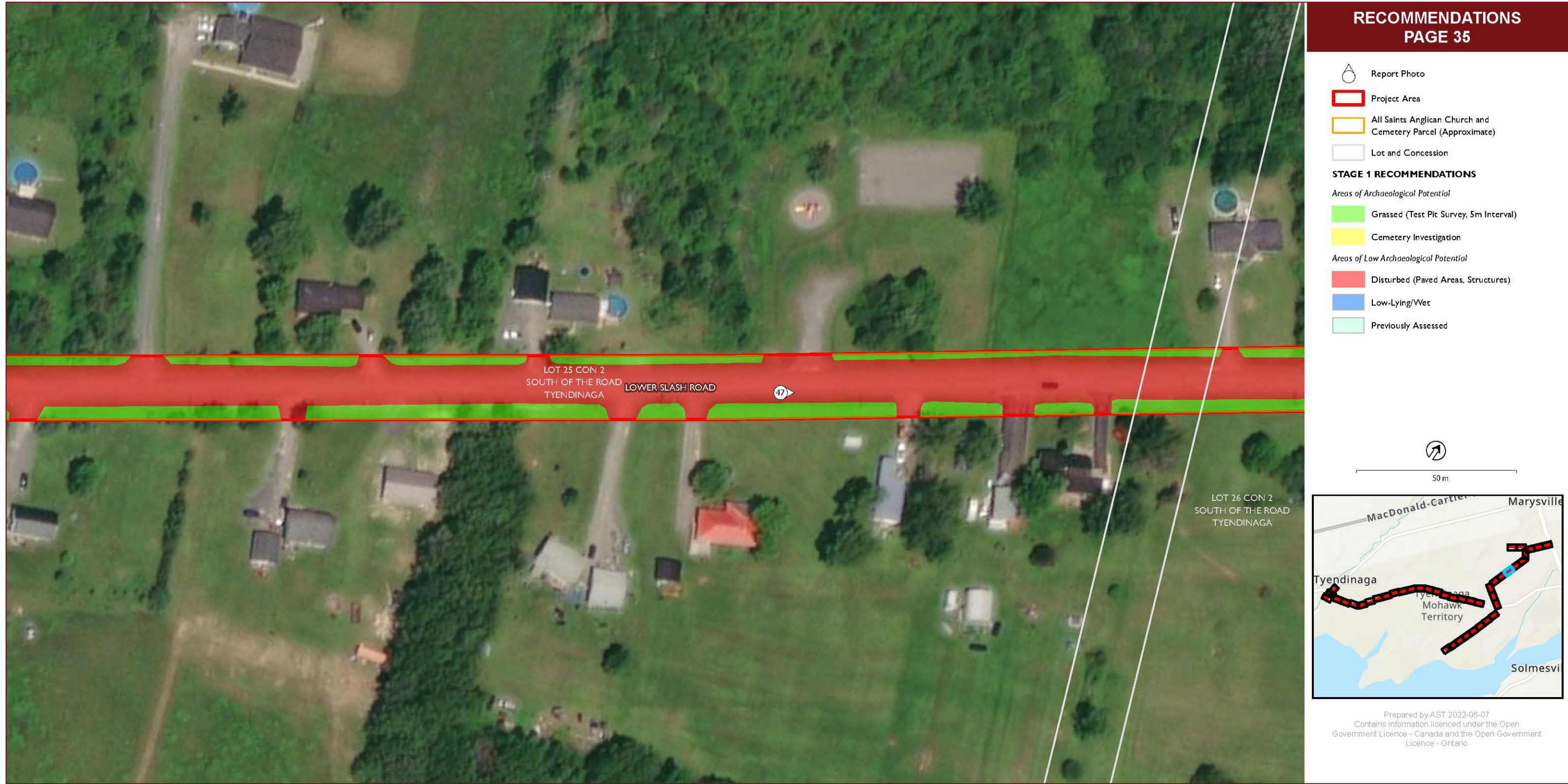
### Map 43: Stage I Recommendations – Lower Slash Road – Wyman Road to Homeland Drive





Map 44: Stage I Recommendations – Lower Slash Road – Wyman Road to Homeland Drive





Map 45: Stage I Recommendations – Lower Slash Road – Wyman Road to Homeland Drive





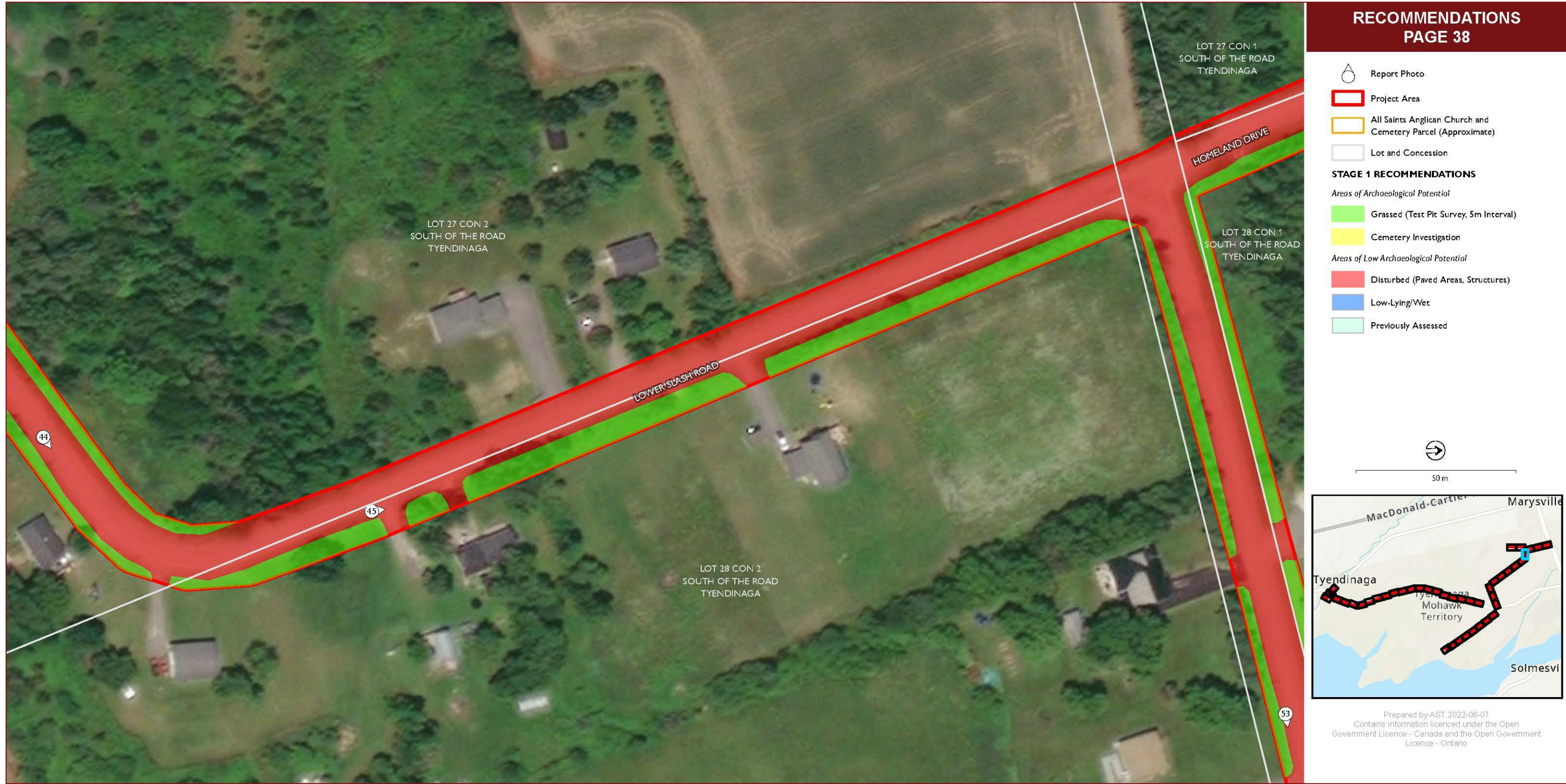
Map 46: Stage I Recommendations – Lower Slash Road – Wyman Road to Homeland Drive





Map 47: Stage I Recommendations – Lower Slash Road – Wyman Road to Homeland Drive





Map 48: Stage I Recommendations – Lower Slash Road – Wyman Road to Homeland Drive





Map 49: Stage I Recommendations – Homeland Drive





**Map 50: Stage I Recommendations – Homeland Drive**



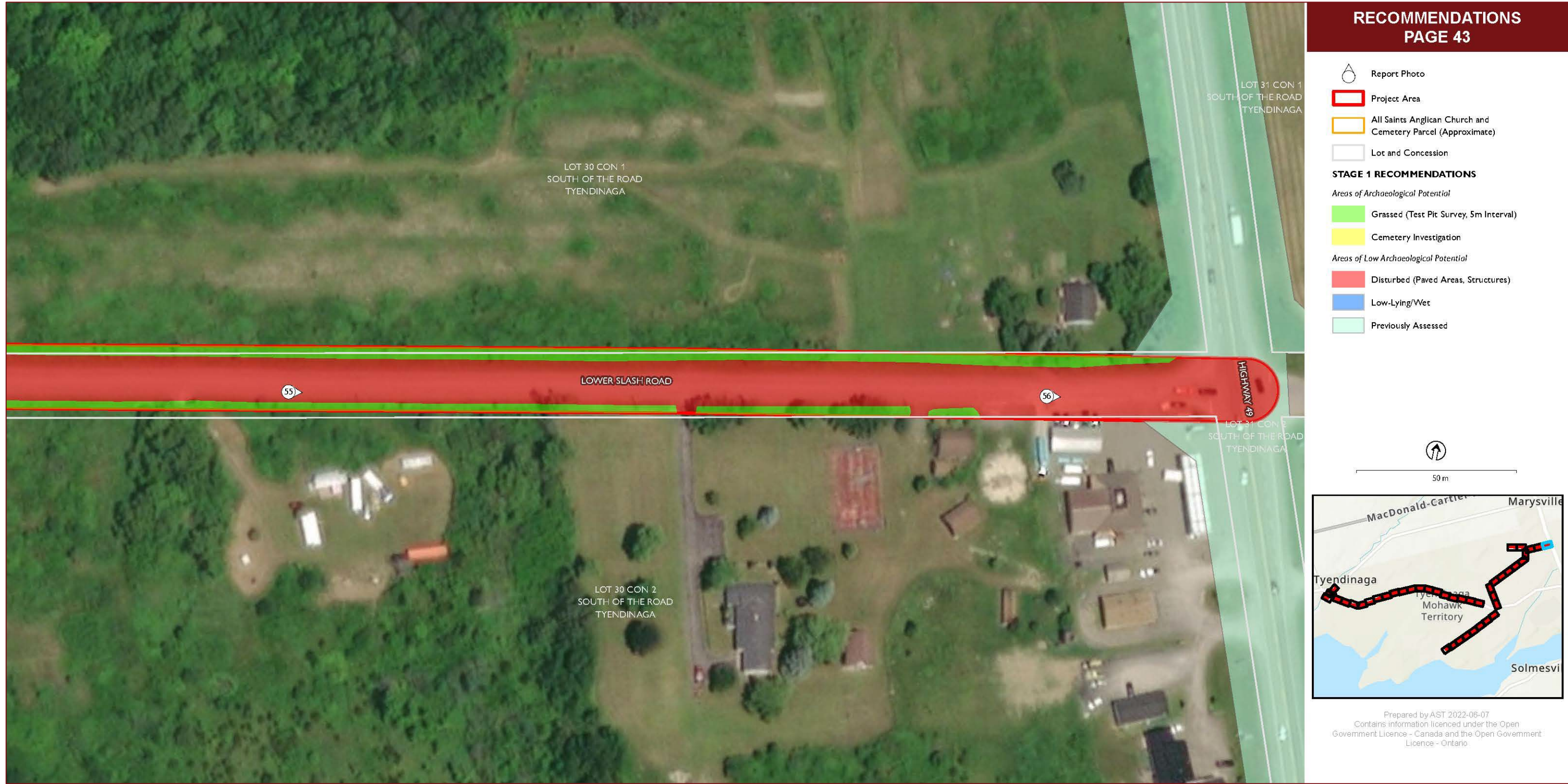


Map 51: Stage I Recommendations – Lower Slash Road – Homeland Drive to Highway 49









Map 53: Stage I Recommendations – Lower Slash Road – Homeland Drive to Highway 49



## APPENDIX A: LAND REGISTRY RECORD REPORT

|   |  |                                    |
|---|--|------------------------------------|
|    | Indigenous Services<br>Canada                    | Services aux<br>Autochtones Canada |
| <b>INDIAN LANDS REGISTRY SYSTEM</b><br><b>Parcel Abstract Report</b><br><i>Sorted by: PIN / Instrument Date - Ascending</i><br>Selected Criteria:<br>Registry: ILRS<br>PIN: 402003514 |  |                                    |
| Printed on: 2022/06/02 11:57 AM   |  | UNCLASSIFIED                       |
| <b>Legal Description:</b>   | Parcel Type:                                     | PIN:                               |
| <b>PARCEL E LOT 21 CONCESSION A CLSR 5072</b>   | Surface  | 402003514                          |
| Reserve:  | Previous Legal Description:                      |                                    |
| 06217 TYENDINAGA MOHAWK TERRITORY   |  |                                    |
| External Registry:  |  |                                    |
| Plan Type & No:   | PIN Status:                                      | Province:                          |
| CLSR 5072   | Active   | ONTARIO                            |
| Retired Reason:   | Retired by Registration No:                      |                                    |
|   |  |                                    |
| Band:   |  |                                    |
| 164 - Mohawks of the Bay of Quinte  |  |                                    |
| <b>PIN Hierarchy :</b>  |  |                                    |
| ROOT PIN(s)   | 402003514 PARCEL E LOT 21 CONCESSION A CLSR 5072 |                                    |






Stage I Archaeological Assessment  
Proposed Mohawks of the Bay of Quinte and Shannonville Community Expansion Project

|   |  |                                    |                         |
|---|--|------------------------------------|-------------------------|
|    | Indigenous Services<br>Canada                | Services aux<br>Autochtones Canada |                         |
| <b>INDIAN LANDS REGISTRY SYSTEM</b><br><b>Parcel Abstract Report</b><br><i>Sorted by: PIN / Instrument Date - Ascending</i> |  |                                    |                         |
| Printed on: 2022/06/02 11:57 AM   |  | UNCLASSIFIED                       |                         |
| <b>Legal Description:</b><br><b>PARCEL E LOT 21 CONCESSION A CLSR 5072</b>  | <b>Parcel Type:</b><br>Surface               | <b>PIN:</b><br>402003514           |                         |
| <b>INSTRUMENTS REGISTERED AGAINST PIN: 402003514</b>  |  |                                    |                         |
| Registration Number:<br>*****   | Reference Registration Number:<br>           | Instrument Date:<br>1895/03/26     |                         |
| Registration Date:<br>  | Effective Date:<br>                          | Expiry Date:<br>                   | Actual Expiry Date:<br> |
| Instrument Type:<br><b>BCR</b>  | Purpose:<br>                                 |                                    |                         |
| OCPC:<br>   | IOGC:<br>                                    | Area:<br>                          | Term:<br>               |
| Land Affected:  | WEST PORTION PCL E LOT 21 CON A CLSR 5072    |                                    |                         |
| Remarks:  |  |                                    |                         |
| Grantor(s):   | 164 - Mohawks of the Bay of Quinte           |                                    |                         |
| Grantee(s):   | ELIZABETH HILL - NETI                        |                                    |                         |
| <b>INSTRUMENTS REGISTERED AGAINST PIN: 402003514</b>  |  |                                    |                         |
| Registration Number:<br>*****   | Reference Registration Number:<br>           | Instrument Date:<br>1895/03/26     |                         |
| Registration Date:<br>  | Effective Date:<br>                          | Expiry Date:<br>                   | Actual Expiry Date:<br> |
| Instrument Type:<br><b>BCR</b>  | Purpose:<br>                                 |                                    |                         |
| OCPC:<br>   | IOGC:<br>                                    | Area:<br>                          | Term:<br>               |
| Land Affected:  | EAST PORTION PARCEL E LOT 21 CON A CLSR 5072 |                                    |                         |
| Remarks:  |  |                                    |                         |
| Grantor(s):   | 164 - Mohawks of the Bay of Quinte           |                                    |                         |
| Grantee(s):   | ABRAM SERO - NETI                            |                                    |                         |



Stage I Archaeological Assessment  
Proposed Mohawks of the Bay of Quinte and Shannonville Community Expansion Project

|   |   |                                    |
|---|---|------------------------------------|
|    | Indigenous Services<br>Canada             | Services aux<br>Autochtones Canada |
| <b>INDIAN LANDS REGISTRY SYSTEM</b><br><b>Parcel Abstract Report</b><br><i>Sorted by: PIN / Instrument Date - Ascending</i> |   |                                    |
| Printed on: 2022/06/02 11:57 AM   |   | UNCLASSIFIED                       |
| <b>Legal Description:</b><br><b>PARCEL E LOT 21 CONCESSION A CLSR 5072</b>  |   | <b>Parcel Type:</b><br>Surface     |
|   |   | <b>PIN:</b><br>402003514           |
| <b>INSTRUMENTS REGISTERED AGAINST PIN: 402003514</b>  |   |                                    |
| Registration Number:<br>*****   | Reference Registration Number:<br>        | Instrument Date:<br>1902/01/01     |
| Registration Date:<br>  | Effective Date:<br>                       | Expiry Date:<br>                   |
| Instrument Type:<br><b>Admin Transfer</b>   |   | Purpose:<br>                       |
| OCPC:<br>   | IOGC:<br>                                 | Area:<br>                          |
| Term:<br>   |   |                                    |
| Land Affected:  | EAST PORTION PCL E LOT 21 CON A CLSR 5072 |                                    |
| Remarks:  |   |                                    |
| Grantor(s):   | ABRAM SERO                                |                                    |
| Grantee(s):   | DENNIS SERO - NETI                        |                                    |
| <b>INSTRUMENTS REGISTERED AGAINST PIN: 402003514</b>  |   |                                    |
| Registration Number:<br>*****   | Reference Registration Number:<br>        | Instrument Date:<br>1910/01/01     |
| Registration Date:<br>  | Effective Date:<br>                       | Expiry Date:<br>                   |
| Instrument Type:<br><b>Transfer</b>   |   | Purpose:<br>                       |
| OCPC:<br>   | IOGC:<br>                                 | Area:<br>                          |
| Term:<br>   |   |                                    |
| Land Affected:  | EAST PORTION PCL E LOT 21 CON A CLSR 5072 |                                    |
| Remarks:  | CONFIRMED BY COUNCIL 14SEP1910            |                                    |
| Grantor(s):   | DENNIS SERO                               |                                    |
| Grantee(s):   | LEWIS A. LOFT - NETI                      |                                    |






Stage I Archaeological Assessment  
Proposed Mohawks of the Bay of Quinte and Shannonville Community Expansion Project

|   |   |                                    |
|---|---|------------------------------------|
|    | Indigenous Services<br>Canada             | Services aux<br>Autochtones Canada |
| <b>INDIAN LANDS REGISTRY SYSTEM</b><br><b>Parcel Abstract Report</b><br><i>Sorted by: PIN / Instrument Date - Ascending</i> |   |                                    |
| Printed on: 2022/06/02 11:57 AM   |   | UNCLASSIFIED                       |
| <b>Legal Description:</b>   |   | <b>Parcel Type:</b>                |
| <b>PARCEL E LOT 21 CONCESSION A CLSR 5072</b>   |   | Surface                            |
|   |   | <b>PIN:</b>                        |
|   |   | 402003514                          |
| <b>INSTRUMENTS REGISTERED AGAINST PIN: 402003514</b>  |   |                                    |
| Registration Number:  | Reference Registration Number:            | Instrument Date:                   |
| 113404  |   | 1910/09/01                         |
| Registration Date:  | Effective Date:                           | Expiry Date:                       |
| 1987/08/31 12:00:00AM   |   |                                    |
| Instrument Type:  | Purpose:                                  |                                    |
| <b>Quit Claim</b>   |   |                                    |
| OCPC:   | IOGC:                                     | Area:                              |
|   |   |                                    |
| Land Affected:  | EAST PORTION PCL E LOT 21 CON A CLSR 5072 |                                    |
| Remarks:  |   |                                    |
| Grantor(s):   | CATHERINE LOFT<br>LOUIS ALFRED LOFT       |                                    |
| Grantee(s):   | JOHN A. LOFT - NETI                       |                                    |
| <b>INSTRUMENTS REGISTERED AGAINST PIN: 402003514</b>  |   |                                    |
| Registration Number:  | Reference Registration Number:            | Instrument Date:                   |
| *****   |   | 1921/01/01                         |
| Registration Date:  | Effective Date:                           | Expiry Date:                       |
|   |   |                                    |
| Instrument Type:  | Purpose:                                  |                                    |
| <b>Admin Transfer</b>   |   |                                    |
| OCPC:   | IOGC:                                     | Area:                              |
|   |   |                                    |
| Land Affected:  | WEST PORTION PCL E LOT 21 CON A CLSR 5072 |                                    |
| Remarks:  |   |                                    |
| Grantor(s):   | ELIZABETH HILL                            |                                    |
| Grantee(s):   | FRANCIS GERTRUDE JOHN - NETI              |                                    |



Stage I Archaeological Assessment  
Proposed Mohawks of the Bay of Quinte and Shannonville Community Expansion Project

|   |   |                                    |
|---|---|------------------------------------|
|    | Indigenous Services<br>Canada   | Services aux<br>Autochtones Canada |
| <b>INDIAN LANDS REGISTRY SYSTEM</b><br><b>Parcel Abstract Report</b><br><i>Sorted by: PIN / Instrument Date - Ascending</i>                                       |   |                                    |
| Printed on: 2022/06/02 11:57 AM   |   | UNCLASSIFIED                       |
| <b>Legal Description:</b>   |   | <b>Parcel Type:</b>                |
| <b>PARCEL E LOT 21 CONCESSION A CLSR 5072</b>   |   | Surface                            |
|   |   | <b>PIN:</b>                        |
|   |   | 402003514                          |
| <b>INSTRUMENTS REGISTERED AGAINST PIN: 402003514</b>  |   |                                    |
| Registration Number:  | Reference Registration Number:  | Instrument Date:                   |
| 70262   |   | 1931/01/28                         |
| Registration Date:  | Effective Date:   | Expiry Date:                       |
| 1980/08/08 12:00:00AM   |   |                                    |
| Instrument Type:  | Purpose:  |                                    |
| <b>Quit Claim</b>   |   |                                    |
| OCPC:   | IOGC:   | Area:                              |
|   |   |                                    |
| Land Affected:  | WEST PORTION PCL E LOT 21 CON A CLSR 5072 DESCRIBED BY METES & BOUNDS               |                                    |
| Remarks:  | RELINQUISHES LAND TO THE SUPERINTENDENT GENERAL FOR THE BAND FOR CEMETARY PURPOSES. |                                    |
| Grantor(s):   | GERTRUDE JOHN   |                                    |
| Grantee(s):   | 164 Mohawks of the Bay of Quinte - Band 60230                                       |                                    |
| <b>INSTRUMENTS REGISTERED AGAINST PIN: 402003514</b>  |   |                                    |
| Registration Number:  | Reference Registration Number:  | Instrument Date:                   |
| *****   |   | 1992/09/02                         |
| Registration Date:  | Effective Date:   | Expiry Date:                       |
|   |   |                                    |
| Instrument Type:  | Purpose:  |                                    |
| <b>Registrar's Note</b>   |   |                                    |
| OCPC:   | IOGC:   | Area:                              |
|   |   |                                    |
| Land Affected:  | EAST PORTION PCL E LOT 21 CON A CLSR 5072   |                                    |
| Remarks:  | USED BY ALL SAINTS' CHURCH  |                                    |
| Grantor(s):   |   |                                    |
| Grantee(s):   |   |                                    |
| <b>EASEMENTS/PERMITS AND RELATED INSTRUMENTS AFFECTING PIN: 402003514</b><br>(Blanket permits for utilities distribution are found in the Reserve General Report) |   |                                    |
| No Easements/Permits  |   |                                    |
| --- END OF REPORT ---   |   |                                    |





## APPENDIX B: PERSONAL COMMUNICATION NOTES

## 2022-035 Rev. Brant Francis call re: All Saints cemetery ##  
call from Rev. Brant Francis.

→ contact MBO lands department - website has email address.  
- band handles burials. Amy Smart: 615-396-3424 x 117  
lands@mbo-tmt.org.

Anglican dico

- website - archives - email archivist.  
maybe not cemetery maps

→ doubt burials under Road  
- donated by community member.  
- cemetery existed around church.  
- established south side of Road in 60's.  
- south side established after road existed.  
- north side burials ARE close to shoulder but  
not covered by Road construction.

built hall in 80's - did land survey.  
- lots of unmarked graves

- will check for details. - Brant Francis.

- 1900's - Road existed.

## Appendix B

### *Cultural Heritage Screening Report*



**Proposed Mohawks of the Bay of Quinte and Shannonville Community  
Expansion Project  
Tyendinaga Mohawk Territory and Shannonville, Ontario  
Cultural Heritage Screening – Technical Memo**

**Prepared for:**

Dillon Consulting Limited  
51 Breithaupt Street, Suite 200  
Kitchener, Ontario, N2H 5G5

and

Enbridge Gas Inc.  
500 Consumers Road  
North York, ON M2J 1P8

**Prepared by:**

TMHC Inc.  
1108 Dundas Street  
Unit 105  
London, ON N5W 3A7  
519-641-7222

[tmhc.ca](http://tmhc.ca)



Project No: 2022-034

Revised Draft Dated: June 5, 2022







# PROJECT PERSONNEL

|                               |  |
|-------------------------------|--|
| Principal                     | Matthew Beaudoin, Ph.D.                |
| Senior Review                 | Joshua Dent, Ph.D., CAHP               |
| Project Manager               | Joan Crosbie, M.A.                     |
| Cultural Heritage Specialist  | Elise Geschiere, M.Sc.                 |
| Project Administrator         | Kellie Theaker, CHRP                   |
| Health and Safety Coordinator | Wendi Jakob, C. Tech., CAPM            |
| GIS Mapping                   | John Moody, Ph.D., Andrew Turner, B.A. |

# ACKNOWLEDGEMENTS

|  |               |
|--|---------------|
| Ministry of Heritage, Sport,<br>Tourism and Culture Industries | Karla Barboza |
| Hastings County  | Justin Harrow |
| Ontario Heritage Trust   | Krystal Power |



## **TERRITORIAL ACKNOWLEDGEMENT**

The project area is located on the traditional lands of the Anishinaabeg (Ah-nish-in-a-beg), Haudenosaunee (Ho-den-no-show-nee), and Huron-Wendat peoples on lands connected with the Crawford Purchase of 1783 and the Simcoe Deed (Treaty 3½). Most recently, the land is home to the Mohawks of the Bay of Quinte within the Tyendinaga Mohawk Territory. This land continues to be home to diverse Indigenous peoples (e.g., First Nations and Métis) whom we recognize as contemporary stewards of the land and vital contributors to our society.





## ABOUT TMHC

Established in 2003 with a head office in London, Ontario, TMHC Inc. (TMHC) provides a broad range of archaeological assessment, heritage planning and interpretation, cemetery, and community consultation services throughout the Province of Ontario. We specialize in providing heritage solutions that suit the past and present for a range of clients and intended audiences, while meeting the demands of the regulatory environment. Over the past two decades, TMHC has grown to become one of the largest privately-owned heritage consulting firms in Ontario and is today the largest predominately woman-owned Cultural Resource Management (CRM) business in Canada.

Since 2004, TMHC has held retainers with Infrastructure Ontario, Hydro One, the Ministry of Transportation, Metrolinx, the City of Hamilton, and Niagara Parks Commission. In 2013, TMHC earned the Ontario Archaeological Society's award for Excellence in CRM. Our seasoned expertise and practical approach have allowed us to manage a wide variety of large, complex, and highly sensitive projects to successful completion. Through this work, we have gained corporate experience in helping our clients work through difficult issues to achieve resolution.

TMHC is skilled at meeting established deadlines and budgets, maintaining a healthy and safe work environment, and carrying out quality heritage activities to ensure that all projects are completed diligently and safely. Additionally, we have developed long-standing relationships of trust with Indigenous and descendent communities across Ontario and a good understanding of community interests and concerns in heritage matters, which assists in successful project completion.

TMHC is a Living Wage certified employer with the [Ontario Living Wage Network](#) and a member of the [Canadian Federation for Independent Business](#).

## KEY STAFF BIOS

### **Matthew Beaudoin, PhD.** Principal, Manager – Archaeological Assessments

Matthew Beaudoin received a Ph.D. in Anthropology from Western University in 2013 and became a Principal at TMHC in 2019. During his archaeological career, Matthew has conducted extensive field research and artifact analysis on Indigenous and Settler sites from Labrador and Ontario. In addition, Matthew has also conducted ethnographic projects in Labrador. Since joining TMHC in 2008, Matthew has been involved with several notable projects, such as the Imperial Oil's Waterdown to Finch Project, the Camp Ipperwash Project, and the Scugog Island Natural Gas Pipeline Project.

Matthew is an active member of the Canadian Archaeological Association, the Ontario Archaeological Association, the Ontario Historical Society, the World Archaeology Congress, the Council for Northeastern Historical Archaeology, the Society for American Archaeology, and the Society for Historical Archaeology.

### **Joshua Dent, PhD., CAHP** Manager – Community Engagement and Heritage Division

Joshua (Josh) Dent received a Ph.D. in Anthropology from Western University under a Joseph-Bombardier CGS Scholarship in 2016, and specializes in heritage resource management, archival research and heritage regulations. Since relocating to London, Ontario after experience conducting built heritage assessments in Western Canada, Josh has participated in both the not-for-profit advocacy for and municipal oversight of built



heritage resources and cultural landscapes. His role as a resource member of the London Advisory Committee on Heritage (LACH) provided significant insight into municipal heritage review processes and the composition of successful built heritage assessments and research. With TMHC, he has participated in the background research for and field assessment of cultural heritage assessment projects across Southwestern Ontario. With extensive field and archival research experience and a broad personal network of urban planners, historians and institutions, Josh is well-equipped to produce comprehensive land-use histories and field assessments.

**Joan Crosbie, M.A.** Manager – Cultural Heritage Division

Joan has extensive cultural heritage management experience in both the private and public sectors with a strong background in preservation services, built and landscape heritage assessment, archival/historical research and Museums services. She earned her M.A. in Architectural History from York University. In her role in Preservation Services with the Toronto Historical Board (City of Toronto), Joan was part of a small team of professionals who advised City Council on a broad range of heritage preservation and planning matters. Later, as Curator of Casa Loma, she gained extensive experience as part of the Senior Management team and honed her skills in cultural and community engagement and short to long term planning for a major tourism/heritage facility. She was a key staff liaison with the restoration architects and skilled trades as the Casa Loma Estate underwent a major exterior restoration programme. More recently, as Manager of Culture and Community Services, Town of Whitchurch-Stouffville, Joan managed the Heritage and Museums services portfolios and has widened her experience in cultural planning to include the adaptive reuse of heritage buildings and historic main street revitalization. For many years, she was also the staff representative on the municipality's Heritage Advisory Committee. She has published articles on architecture and architectural preservation for a wide range of organizations, including the Canadian Society for Industrial Heritage, the City of Toronto and the Society for the Study of Architecture in Canada.

Joan currently sits on the Uxbridge Downtown Revitalization Advisory Committee providing heritage and revitalization advice regarding her community's historic main street.

**Elise Geschiere, MSc – Cultural Heritage Specialist**

Elise Geschiere received a B. A. in Sociology with a minor in Public History from Western University in 2019 and went on to complete an M.Sc. in Planning and Development with a concentration in Indigenous Planning at the University of Guelph in 2021. Elise joined TMHC in 2021 as a Cultural Heritage Specialist and is involved in the creation of cultural heritage evaluation reports, heritage impact assessments, and related studies.

Elise's research background is multidisciplinary and involves projects related to affordable housing and social development, the role of planning in the historical production of underserved communities, and the relationship between aggregates and agriculture. Public history and cultural heritage have been an undercurrent through her undergraduate and graduate career, where she has pursued research looking at the role of material culture in elevating diverse historic narratives, the evolution of Canadian conservation ethos and practice, and the intersections of heritage conservation and sustainable development. Recently, Elise's research interests have focused on Indigenous perspectives of cultural heritage and opportunities for decolonization and empowering Indigenous voices in the heritage sector.

Elise also worked as the heritage research and planning student for the Corporation of the Town of Essex and led efforts to conserve and interpret local cultural heritage sites. She has experience with archival and community-based research, public engagement, and policy development and review.





Elise is a student member of Ontario Professional Planners Institute and the provincial branch of Architectural Conservancy of Ontario. She is an Intern member of the Canadian Association of Heritage Professionals.



## STATEMENT OF QUALIFICATIONS AND LIMITATIONS

The attached Memo (the “Memo”) has been prepared by TMHC Inc. (TMHC) for the benefit of the Client (the “Client”) in accordance with the agreement between TMHC and the Client, including the scope of work detailed therein (the “Agreement”).

The information, data, recommendations and conclusions contained in the Memo (collectively, the “Information”):

- is subject to the scope, schedule, and other constraints and limitations in the Agreement and the qualifications contained in the Memo (the “Limitations”);
- represents TMHC’s professional judgment in light of the Limitation and industry standards for the preparation of similar reports;
- may be based on information provided to TMHC which has not been independently verified;
- has not been updated since the date of issuance of the Memo and its accuracy is limited to the time period and circumstances in which it was collected, processed, made or issued;
- must be read as a whole and section thereof should not be read out of such context;
- was prepared for the specific purposes described in the Memo and the Agreement.

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This Statement of Qualifications and Limitations is attached to and forms part of the Memo and any use of the Memo is subject to the terms hereof.





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## I BACKGROUND AND OVERVIEW

### I.1 Memo Purpose and Scope

Dillon Consulting Limited, on behalf of Enbridge Gas Inc., has engaged TMHC Inc. (TMHC) to produce a Cultural Heritage Screening and Technical Memorandum for the proposed Mohawks of the Bay of Quinte and Shannonville Community Expansion Project (referred to as the “Project”) located in Tyendinaga Mohawk Territory and Shannonville. The goal of the broader Project is to provide natural gas distribution services to the Mohawks of the Bay of Quinte First Nation residing in the Tyendinaga Mohawk Territory as well as to parts of the community of Shannonville.

The Study Area stretches across Tyendinaga Mohawk Territory and is planned to be confined to mainly within the existing municipal rights-of-way (ROWs) with additional Temporary Working Space (TWS) potentially required for excess soil management and storage. The proposed project will tie-in to an existing 4” polyethylene pipeline near the intersection of Wyman Road and York Road in the Tyendinaga Mohawk Territory. The proposed pipeline then runs west along Lower Slash Road from the intersection with Homeland Drive to Wyman Road, then south to the intersection of Wyman Road and York Road. The pipeline will then run southwest along Ridge Road to the intersection of Ridge Road and Norways Road. The proposed facilities also include a pipeline that runs northwest along York Road to Young Street, Atsia Court, Queen Street, Beach Road and Gore Street within Shannonville. The Distribution portion of the project includes ~ 20.1 km of polyethylene (MOP 550 kPa) natural gas main pipeline ranging from NPS 2 to NPS 4.

This screening fulfills part of the Ontario Energy Board’s (OEB) *Environmental Guidelines for the Location, Construction and Operation for Hydrocarbon Pipelines and Facilities in Ontario*, 7th ed. 2016 requirement for consideration of the cultural environment by:

- I. Completing a cultural heritage screening that encompasses all properties within the Project Area based on the Ministry of Heritage, Sport, Tourism and Culture Industries’ (MHSTCI) *Criteria for Evaluating Potential for Built Heritage Resources and Cultural Heritage Landscapes*.

### I.2 Historical Context

The Study Area falls within part of Lots 5, 6, 28-31, Concession 1 South of the Road; part of Lots 5-31, Concession 2 South of the Road; and part of Lots 15-22, Concession A, in the Township of Tyendinaga, Hasting County, Tyendinaga Mohawk Territory and Shannonville, Ontario.

The Study Area is encompassed by the Crawford Purchase of 1783 and the Simcoe Deed (Treaty 3½). The Crawford Purchase arose from an effort by the British government to acquire lands on which to resettle refugee Loyalists and Indigenous allies after the American Revolution.<sup>1</sup> The land purchase was facilitated by Captain William Redford Crawford who, in 1783, assembled a number of Mississauga leaders at Carleton Island. According to Surtees, the agreement with the Mississaugas included the Quinte Peninsula and the shoreline between the Gananoque and Trent rivers extending inland “so far as a man can travel in a day.” As

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<sup>1</sup> Surtees 1984:19





this was subsequently interpreted as a distance of two or three townships, the precise boundaries of the Crawford Purchase are vague and no written treaties or detailed descriptions of the lands it applied to have survived.<sup>2</sup>

Later, as recompense for the loss of allied Indigenous homelands, and in recognition of their military support during the American Revolution, Canadian Governor Frederick Haldimand intended to provide Indigenous allies with some of the land in the Bay of Quinte area recently acquired through the Crawford Purchase.<sup>3</sup> Only two Indigenous groups elected to accept Haldimand's offer of land - a group of approximately 200 Mohawks, led by John Deseronto and a larger group of approximately 1,800 Haudenosaunee, led by Joseph Brant. The plan to settle both groups in the Bay of Quinte was altered by Brant's later decision to locate his group along the Grand River.<sup>4</sup> After travelling by canoe from Lachine, approximately 20 families led by Deseronto arrived on the shores of the Bay of Quinte on May 22, 1784 to settle on the roughly 7,000-acre (ac) tract granted to them by Haldimand.<sup>5</sup>

As this tract was smaller than originally promised, Deseronto petitioned John Graves Simcoe, the first Lieutenant Governor of Upper Canada. Consequently, Simcoe increased the Tyendinaga tract to include all of what is now Tyendinaga Township (92,700 ac) through the Simcoe Deed (Treaty 3½).<sup>6</sup> In 1820 and 1835, under pressure from United Empire Loyalists, the government made provisions to accommodate settlers through a series of land surrenders which reduced the Tyendinaga Tract to the roughly 18,000 ac comprising the current Tyendinaga Mohawk Territory in the Bay of Quinte.<sup>7</sup>

Shortly after occupying the territory, the Mohawks constructed a log church in the village of Tyendinaga, the first in the region.<sup>8</sup> In 1843, a new and more substantial church was erected. Named Christ Church, Her Majesty's Royal Chapel of the Mohawks, this church is one of only six Royal chapels outside of Great Britain.<sup>9</sup> In the 1880s, four Federal Indian Day Schools were constructed within the territory and were operated by the Anglican Church: Eastern (No. 1), Western (No. 2), Central (No. 3), and Mission (No. 4). The Mission School opened in 1883 and was closed in 1956. The Eastern, Western, and Central schools all opened in 1882 and all closed in 1969.<sup>10</sup> Several schools were built within the territory prior to these Federal Indian Day Schools, including the Upper Mohawk School, which was operating in 1870. Following the closure of these early schools, The Quinte Mohawk Indian Day School was built in 1960. It closed in 1997.<sup>11</sup> This school, along with the four earlier federally-run day schools, was included in the Federal Indian Schools Class Action Lawsuit.

### **1.2.1 Shannonville**

Prior to the land surrenders by the Mohawks in the 1820s, prospective settlers were interested in parts of Tyendinaga Township, particularly near the mouth of the Salmon River because it offered a good mill site.<sup>12</sup> In 1818, the Mohawks leased 200 ac of land along the Salmon River to Warren Nobel and Frederick Keeler to

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<sup>2</sup> Surtees 1984:23-24

<sup>3</sup> MBQ 2022; Surtees 1984:20

<sup>4</sup> Surtees 1984:21

<sup>5</sup> MBQ 2022; Surtees 1984:113

<sup>6</sup> Canada 1891:7; Surtees 1894:113

<sup>7</sup> MBQ 2022; Surtees 1984:113

<sup>8</sup> H. Belden & Co. 1878:vi

<sup>9</sup> MBQ 2022

<sup>10</sup> Federal Indian Day School Class Action n.d.

<sup>11</sup> Tsi Tyónnheht Onkwawén:na 2022

<sup>12</sup> Boyce 1967:269



construct a mill. The lease was for 999 years and the annual rent was thirty barrels of flour. This lease formed the foundation of the village of Shannonville, which was named after the Irish town of Shannon.<sup>13</sup> The population of Shannonville grew during the 1830s along with rest of the township and a post office was established in the village in 1833. Thomas Appleby was the first postmaster.<sup>14</sup> By 1860, Shannonville had a population of over 700 people and 115 dwellings. In 1860, the common school in Shannonville had an average of 100 students.<sup>15</sup> At this time the Wallbridge saw mill produced around 5,000,000 feet of lumber annually, while the adjoining grist mill had the capacity to process 40,000 bushels every year. The population declined during the latter part of the 19<sup>th</sup> century as the lumber industry waned.

### 1.3 Methodology

This screening was prepared in accordance with the MHSTCI *Criteria for Evaluating Potential for Built Heritage Resources and Cultural Heritage Landscapes*. A completed MHSTCI checklist can be found in Appendix A. The Study Area encompasses a rough set of line picks with a 50 m buffer to account for indirect impacts to potential heritage properties.

A site visit to the Study Area was not conducted as part of this work.

### 1.4 Client Contact Information

Tristan Lefler  
Dillon Consulting Limited  
51 Breithaupt Street, Suite 200  
Kitchener, Ontario, N2H 5G5  
[TLefler@dillon.ca](mailto:TLefler@dillon.ca)

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<sup>13</sup> Boyce 1967:269

<sup>14</sup> Boyce 1967:271

<sup>15</sup> Boyce 1967:271



## 2 CULTURAL HERITAGE SCREENING

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The following cultural heritage screening considers potential heritage concerns for the Study Area. For the purposes of this screening and for ease of understanding, the Study Area has been subdivided into three geographic corridors: a Western Corridor, a Southwestern Corridor, and a Northeastern Corridor. Potential cultural heritage concerns have been evaluated for each corridor and are summarized in the sections below.

### 2.1 Western Corridor

The Western Corridor is approximately 8 km in length and is composed of several streets within the community of Shannonville. This corridor includes a stretch of York Road that curves eastward within the Tyendinaga Mohawk Territory. For this high-level review, the built fabric within the community of Shannonville has been identified as being primarily composed of buildings 40 years or older and thus potentially requiring further cultural heritage assessment. Several structures in particular demonstrate the notable architectural styles of an early period, including a Neoclassical style stone house and several Gothic Revival style houses. A portion of this corridor extends from Shannonville's Queen Street, northwest to the edge of the Salmon River. Tangible and intangible cultural heritage related to the traditional activities along the Salmon River should be considered.

The remainder of this corridor extends east along the York Road ROW, which traverses the agricultural and natural interior of the Tyendinaga Mohawk Territory. This stretch of the corridor is populated with rural residential parcels on either side of the ROW up to the intersection of York Road and Norways Road. The majority of these structures have been preliminarily identified as 40 years or older, potentially requiring further cultural heritage assessment. Of note in this portion of York Road is Mud Creek (Marysville Creek) which runs perpendicular to York Road and empties into Hungry Bay. Historic maps of the area reveal that this natural heritage feature has functioned within its existing pathway for over 150 years and was first identified on an 1835 survey of Tyendinaga.<sup>16</sup> The current bridge crossing over Mud Creek is of a common concrete design and does not merit heritage concern.

From Norways Road onward, several rural residential parcels dot the landscape. These residential parcels are also considered to preliminarily meet the threshold of 40 years or older and require further study. Of note along this stretch of road is the Kenhteke Seed Sanctuary, an important site for cultural regeneration through the planting and preservation of heirloom and Indigenous seeds.<sup>17</sup>

There are no federally designated heritage properties within the Western Corridor, nor are there any properties known to be designated or listed on a municipal heritage register. No cemeteries or other properties/landscapes of heritage interest were identified during this high-level review.

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<sup>16</sup> Benson 1835

<sup>17</sup> Kenhteke Seed Sanctuary n.d.

**Table 1: Identified Heritage Properties Within the Western Corridor**

| Federally Designated Heritage Properties            |  |  |
|---|--|--|
| none  |  |  |
| Municipal Heritage Register – Designated Properties |  |  |
| none  |  |  |
| Municipal Heritage Register – Listed Properties     |  |  |
| none  |  |  |

## 2.2 Southwestern Corridor

The Southwestern Corridor is approximately 3 km in length and extends southwest from York Road along Ridge Road to Norways Road. This stretch of the Study Area features several clusters of buildings interspersed across an agricultural and natural landscape setting including residential parcels, several commercial businesses, and a church with an associated cemetery. For this high-level review, the majority of these structures have been preliminarily identified as 40 years or older. The church, known as All Saints Church & Queen Ann Parish, was reportedly built in 1858 by notable architect John George Howard and is of a distinct vernacular style.<sup>18</sup> This institution is described as having important historic and contemporary connections to the Mohawks of the Bay of Quinte.<sup>19</sup> The church and cemetery properties will require further cultural heritage assessment.

An 1878 historical map identifies an additional building to the northeast of the church. An 1895 survey of the Tyendinaga Reserve identifies it as a school building, it warrants further potential cultural heritage assessment. The 1878 historical map also identifies a school building situated at the intersection of Ridge and Norways Road. While it no longer appears on contemporary maps, the location should be noted for further cultural heritage assessment.

There are no federally designated heritage properties within the Southwestern Corridor, nor are there any properties known to be designated or listed on a municipal heritage register. No other cemeteries or properties/landscapes of heritage interest were identified during this high-level review.

**Table 2: Identified Heritage Properties Within the Southwestern Corridor**

| Federally Designated Heritage Properties            |  |  |
|---|--|--|
| none  |  |  |
| Municipal Heritage Register – Designated Properties |  |  |
| none  |  |  |
| Municipal Heritage Register – Listed Properties     |  |  |
| none  |  |  |

## 2.3 Northeastern Corridor

The Northeastern Corridor is approximately 5.5 km in total length and extends north from York Road along Wyman Road and subsequently zigzags northeast along Lower Slash Road to meet Highway 49. An additional branch of this corridor, known as Homeland Drive, extends from Lower Slash Road and curves west ending in

<sup>18</sup> Parish of Tyendinaga n.d.

<sup>19</sup> Parish of Tyendinaga n.d.





a small residential cul-de-sac. Preliminary research suggests that one of the earliest schools within the community is located on the southwest corner of the intersection of York and Wyman roads. This building and the property upon which it sits are outside the Study Area. While the exact location of this early school building has yet to be established, it is believed to be in the vicinity of this intersection and further cultural heritage assessment should be considered. Mohawks of the Bay of Quinte also identified the intersection of York and Wyman roads and adjacent properties as an important and longstanding area of cultural significance during a Stage I archaeological assessment site visit conducted by TMHC in May 2022.

Wyman Road features a primarily natural landscape but is also populated by several rural residential parcels. There appears to be two parcels along Wyman Road cleared for agricultural purposes. The Lower Slash Road portion of this corridor includes a density of approximately 50 rural residential parcels, the majority of which have been preliminarily identified as 40 years or older and requiring further cultural heritage assessment. A community-use parcel with a basketball court is also located along this corridor. The Homeland Drive portion of this corridor is composed of rural residential parcels that appear to be of a newer construction and may not pose cultural heritage concerns.

There are no federally designated heritage properties within the Northeastern Corridor, nor are there any properties known to be designated on a municipal heritage register. No other cemeteries or properties/landscapes of heritage interest were identified during this high-level review.

**Table 3: Identified Heritage Properties Within the Northeastern Corridor**

| Federally Designated Heritage Properties            |  |  |
|---|--|--|
| none  |  |  |
| Municipal Heritage Register – Designated Properties |  |  |
| none  |  |  |
| Municipal Heritage Register – Listed Properties     |  |  |
| none  |  |  |

2.4 Screening Recommendations

This cultural heritage screening has identified potential heritage properties along all corridors within the Study Area. While all work is scheduled to take place within the ROWs, the Study Area encompasses a 50 m buffer to account for indirect impacts to potential heritage properties, consistent with MHSTCI expectations for projects of this type.

The completion of a cultural heritage assessment report (CHAR) is therefore recommended for the Study Area. The CHAR will further evaluate potential heritage resources and, if necessary, conduct a preliminary heritage impact assessment. The CHAR will make recommendations about any additional heritage studies that may be necessary as a result of anticipated direct impacts to identified cultural heritage resources.

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## **APPENDIX A: MHSTCI SCREENING CHECKLIST**

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Ministry of Tourism,  
Culture and Sport

Programs & Services Branch  
401 Bay Street, Suite 1700  
Toronto ON M7A 0A7

## Criteria for Evaluating Potential for Built Heritage Resources and Cultural Heritage Landscapes A Checklist for the Non-Specialist

The **purpose of the checklist** is to determine:

- if a property(ies) or project area:
  - is a recognized heritage property
  - may be of cultural heritage value
- it includes all areas that may be impacted by project activities, including – but not limited to:
  - the main project area
  - temporary storage
  - staging and working areas
  - temporary roads and detours

**Processes covered** under this checklist, such as:

- *Planning Act*
- *Environmental Assessment Act*
- *Aggregates Resources Act*
- *Ontario Heritage Act* – Standards and Guidelines for Conservation of Provincial Heritage Properties

### Cultural Heritage Evaluation Report (CHER)

If you are not sure how to answer one or more of the questions on the checklist, you may want to hire a qualified person(s) (see page 5 for definitions) to undertake a cultural heritage evaluation report (CHER).

The CHER will help you:

- identify, evaluate and protect cultural heritage resources on your property or project area
- reduce potential delays and risks to a project

### Other checklists

Please use a separate checklist for your project, if:

- you are seeking a Renewable Energy Approval under Ontario Regulation 359/09 – separate checklist
- your Parent Class EA document has an approved screening criteria (as referenced in Question 1)

Please refer to the Instructions pages for more detailed information and when completing this form.





Project or Property Name

Mohawks of the Bay of Quinte First Nation Community Expansion Project

Project or Property Location (upper and lower or single tier municipality)

Tyendinaga Mohawk Territory and Shannonville: Township of Tyendinaga, County of Hastings

Proponent Name

Dillon Consulting Limited - Tristan Lefler

Proponent Contact Information

TLefler@dillon.ca

### Screening Questions

|  | Yes                      | No                                  |
|--|--------------------------|-------------------------------------|
| 1. Is there a pre-approved screening checklist, methodology or process in place? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

If Yes, please follow the pre-approved screening checklist, methodology or process.

If No, continue to Question 2.

### Part A: Screening for known (or recognized) Cultural Heritage Value

|  | Yes                      | No                                  |
|--|--------------------------|-------------------------------------|
| 2. Has the property (or project area) been evaluated before and found <b>not</b> to be of cultural heritage value? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

If Yes, do **not** complete the rest of the checklist.

The proponent, property owner and/or approval authority will:

- summarize the previous evaluation and
- add this checklist to the project file, with the appropriate documents that demonstrate a cultural heritage evaluation was undertaken

The summary and appropriate documentation may be:

- submitted as part of a report requirement
- maintained by the property owner, proponent or approval authority

If No, continue to Question 3.

|   | Yes                      | No                                  |
|---|--------------------------|-------------------------------------|
| 3. Is the property (or project area):   |                          |                                     |
| a. identified, designated or otherwise protected under the <i>Ontario Heritage Act</i> as being of cultural heritage value? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b. a National Historic Site (or part of)?   | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c. designated under the <i>Heritage Railway Stations Protection Act</i> ?   | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d. designated under the <i>Heritage Lighthouse Protection Act</i> ?   | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e. identified as a Federal Heritage Building by the Federal Heritage Buildings Review Office (FHBRO)?                       | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f. located within a United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Site?          | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

If Yes to any of the above questions, you need to hire a qualified person(s) to undertake:

- a Cultural Heritage Evaluation Report, if a Statement of Cultural Heritage Value has not previously been prepared or the statement needs to be updated

If a Statement of Cultural Heritage Value has been prepared previously and if alterations or development are proposed, you need to hire a qualified person(s) to undertake:

- a Heritage Impact Assessment (HIA) – the report will assess and avoid, eliminate or mitigate impacts

If No, continue to Question 4.

## Part B: Screening for Potential Cultural Heritage Value

|   | Yes                                 | No                                  |
|---|-------------------------------------|-------------------------------------|
| 4. Does the property (or project area) contain a parcel of land that:                         |                                     |                                     |
| a. is the subject of a municipal, provincial or federal commemorative or interpretive plaque? | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| b. has or is adjacent to a known burial site and/or cemetery?                                 | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| c. is in a Canadian Heritage River watershed?   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| d. contains buildings or structures that are 40 or more years old?                            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |

## Part C: Other Considerations

|  | Yes                                 | No                                  |
|--|-------------------------------------|-------------------------------------|
| 5. Is there local or Aboriginal knowledge or accessible documentation suggesting that the property (or project area):                            |                                     |                                     |
| a. is considered a landmark in the local community or contains any structures or sites that are important in defining the character of the area? | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| b. has a special association with a community, person or historical event?   | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| c. contains or is part of a cultural heritage landscape?   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

**If Yes** to one or more of the above questions (Part B and C), there is potential for cultural heritage resources on the property or within the project area.

You need to hire a qualified person(s) to undertake:

- a Cultural Heritage Evaluation Report (CHER)

If the property is determined to be of cultural heritage value and alterations or development is proposed, you need to hire a qualified person(s) to undertake:

- a Heritage Impact Assessment (HIA) – the report will assess and avoid, eliminate or mitigate impacts

**If No** to all of the above questions, there is low potential for built heritage or cultural heritage landscape on the property.

The proponent, property owner and/or approval authority will:

- summarize the conclusion
- add this checklist with the appropriate documentation to the project file

The summary and appropriate documentation may be:

- submitted as part of a report requirement e.g. under the *Environmental Assessment Act*, *Planning Act* processes
- maintained by the property owner, proponent or approval authority



## Instructions

Please have the following available, when requesting information related to the screening questions below:

- a clear map showing the location and boundary of the property or project area
  - large scale and small scale showing nearby township names for context purposes
- the municipal addresses of all properties within the project area
- the lot(s), concession(s), and parcel number(s) of all properties within a project area

For more information, see the Ministry of Tourism, Culture and Sport's Ontario Heritage Toolkit or Standards and Guidelines for Conservation of Provincial Heritage Properties.

In this context, the following definitions apply:

- **qualified person(s)** means individuals – professional engineers, architects, archaeologists, etc. – having relevant, recent experience in the conservation of cultural heritage resources.
- **proponent** means a person, agency, group or organization that carries out or proposes to carry out an undertaking or is the owner or person having charge, management or control of an undertaking.

### 1. Is there a pre-approved screening checklist, methodology or process in place?

An existing checklist, methodology or process may already be in place for identifying potential cultural heritage resources, including:

- one endorsed by a municipality
- an environmental assessment process e.g. screening checklist for municipal bridges
- one that is approved by the Ministry of Tourism, Culture and Sport (MTCS) under the Ontario government's Standards & Guidelines for Conservation of Provincial Heritage Properties [s.B.2.]

## Part A: Screening for known (or recognized) Cultural Heritage Value

### 2. Has the property (or project area) been evaluated before and found not to be of cultural heritage value?

Respond 'yes' to this question, if all of the following are true:

A property can be considered not to be of cultural heritage value if:

- a Cultural Heritage Evaluation Report (CHER) - or equivalent - has been prepared for the property with the advice of a qualified person and it has been determined not to be of cultural heritage value and/or
- the municipal heritage committee has evaluated the property for its cultural heritage value or interest and determined that the property is not of cultural heritage value or interest

A property may need to be re-evaluated, if:

- there is evidence that its heritage attributes may have changed
- new information is available
- the existing Statement of Cultural Heritage Value does not provide the information necessary to manage the property
- the evaluation took place after 2005 and did not use the criteria in Regulations 9/06 and 10/06

**Note:** Ontario government ministries and public bodies [prescribed under Regulation 157/10] may continue to use their existing evaluation processes, until the evaluation process required under section B.2 of the Standards & Guidelines for Conservation of Provincial Heritage Properties has been developed and approved by MTCS.

To determine if your property or project area has been evaluated, contact:

- the approval authority
- the proponent
- the Ministry of Tourism, Culture and Sport

### 3a. Is the property (or project area) identified, designated or otherwise protected under the *Ontario Heritage Act* as being of cultural heritage value e.g.:

- designated under the *Ontario Heritage Act*
  - individual designation (Part IV)
  - part of a heritage conservation district (Part V)



#### Individual Designation – Part IV

A property that is designated:

- by a municipal by-law as being of cultural heritage value or interest [s.29 of the *Ontario Heritage Act*]
- by order of the Minister of Tourism, Culture and Sport as being of cultural heritage value or interest of provincial significance [s.34.5]. **Note:** To date, no properties have been designated by the Minister.

#### Heritage Conservation District – Part V

A property or project area that is located within an area designated by a municipal by-law as a heritage conservation district [s. 41 of the *Ontario Heritage Act*].

For more information on Parts IV and V, contact:

- municipal clerk
- Ontario Heritage Trust
- local land registry office (for a title search)

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#### ii. subject of an agreement, covenant or easement entered into under Parts II or IV of the *Ontario Heritage Act*

An agreement, covenant or easement is usually between the owner of a property and a conservation body or level of government. It is usually registered on title.

The primary purpose of the agreement is to:

- preserve, conserve, and maintain a cultural heritage resource
- prevent its destruction, demolition or loss

For more information, contact:

- Ontario Heritage Trust - for an agreement, covenant or easement [clause 10 (1) (c) of the *Ontario Heritage Act*]
- municipal clerk – for a property that is the subject of an easement or a covenant [s.37 of the *Ontario Heritage Act*]
- local land registry office (for a title search)

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#### iii. listed on a register of heritage properties maintained by the municipality

Municipal registers are the official lists - or record - of cultural heritage properties identified as being important to the community.

Registers include:

- all properties that are designated under the *Ontario Heritage Act* (Part IV or V)
- properties that have not been formally designated, but have been identified as having cultural heritage value or interest to the community

For more information, contact:

- municipal clerk
- municipal heritage planning staff
- municipal heritage committee

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#### iv. subject to a notice of:

- intention to designate (under Part IV of the *Ontario Heritage Act*)
- a Heritage Conservation District study area bylaw (under Part V of the *Ontario Heritage Act*)

A property that is subject to a **notice of intention to designate** as a property of cultural heritage value or interest and the notice is in accordance with:

- section 29 of the *Ontario Heritage Act*
- section 34.6 of the *Ontario Heritage Act*. **Note:** To date, the only applicable property is Meldrum Bay Inn, Manitoulin Island. [s.34.6]

An area designated by a municipal by-law made under section 40.1 of the *Ontario Heritage Act* as a **heritage conservation district study area**.

For more information, contact:

- municipal clerk – for a property that is the subject of notice of intention [s. 29 and s. 40.1]
- Ontario Heritage Trust





- v. included in the Ministry of Tourism, Culture and Sport's list of provincial heritage properties

Provincial heritage properties are properties the Government of Ontario owns or controls that have cultural heritage value or interest.

The Ministry of Tourism, Culture and Sport (MTCS) maintains a list of all provincial heritage properties based on information provided by ministries and prescribed public bodies. As they are identified, MTCS adds properties to the list of provincial heritage properties.

For more information, contact the MTCS Registrar at [registrar@ontario.ca](mailto:registrar@ontario.ca).

### **3b. Is the property (or project area) a National Historic Site (or part of)?**

National Historic Sites are properties or districts of national historic significance that are designated by the Federal Minister of the Environment, under the *Canada National Parks Act*, based on the advice of the Historic Sites and Monuments Board of Canada.

For more information, see the National Historic Sites website.

### **3c. Is the property (or project area) designated under the *Heritage Railway Stations Protection Act*?**

The *Heritage Railway Stations Protection Act* protects heritage railway stations that are owned by a railway company under federal jurisdiction. Designated railway stations that pass from federal ownership may continue to have cultural heritage value.

For more information, see the Directory of Designated Heritage Railway Stations.

### **3d. Is the property (or project area) designated under the *Heritage Lighthouse Protection Act*?**

The *Heritage Lighthouse Protection Act* helps preserve historically significant Canadian lighthouses. The Act sets up a public nomination process and includes heritage building conservation standards for lighthouses which are officially designated.

For more information, see the Heritage Lighthouses of Canada website.

### **3e. Is the property (or project area) identified as a Federal Heritage Building by the Federal Heritage Buildings Review Office?**

The role of the Federal Heritage Buildings Review Office (FHBRO) is to help the federal government protect the heritage buildings it owns. The policy applies to all federal government departments that administer real property, but not to federal Crown Corporations.

For more information, contact the Federal Heritage Buildings Review Office.

See a directory of all federal heritage designations.

### **3f. Is the property (or project area) located within a United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Site?**

A UNESCO World Heritage Site is a place listed by UNESCO as having outstanding universal value to humanity under the Convention Concerning the Protection of the World Cultural and Natural Heritage. In order to retain the status of a World Heritage Site, each site must maintain its character defining features.

Currently, the Rideau Canal is the only World Heritage Site in Ontario.

For more information, see Parks Canada – World Heritage Site website.

## **Part B: Screening for potential Cultural Heritage Value**

### **4a. Does the property (or project area) contain a parcel of land that has a municipal, provincial or federal commemorative or interpretive plaque?**

Heritage resources are often recognized with formal plaques or markers.

Plaques are prepared by:

- municipalities
- provincial ministries or agencies
- federal ministries or agencies
- local non-government or non-profit organizations



For more information, contact:

- municipal heritage committees or local heritage organizations – for information on the location of plaques in their community
- Ontario Historical Society's Heritage directory – for a list of historical societies and heritage organizations
- Ontario Heritage Trust – for a list of plaques commemorating Ontario's history
- Historic Sites and Monuments Board of Canada – for a list of plaques commemorating Canada's history

**4b. Does the property (or project area) contain a parcel of land that has or is adjacent to a known burial site and/or cemetery?**

For more information on known cemeteries and/or burial sites, see:

- Cemeteries Regulations, Ontario Ministry of Consumer Services – for a database of registered cemeteries
- Ontario Genealogical Society (OGS) – to locate records of Ontario cemeteries, both currently and no longer in existence; cairns, family plots and burial registers
- Canadian County Atlas Digital Project – to locate early cemeteries

In this context, adjacent means contiguous or as otherwise defined in a municipal official plan.

**4c. Does the property (or project area) contain a parcel of land that is in a Canadian Heritage River watershed?**

The Canadian Heritage River System is a national river conservation program that promotes, protects and enhances the best examples of Canada's river heritage.

Canadian Heritage Rivers must have, and maintain, outstanding natural, cultural and/or recreational values, and a high level of public support.

For more information, contact the Canadian Heritage River System.

If you have questions regarding the boundaries of a watershed, please contact:

- your conservation authority
- municipal staff

**4d. Does the property (or project area) contain a parcel of land that contains buildings or structures that are 40 or more years old?**

A 40 year 'rule of thumb' is typically used to indicate the potential of a site to be of cultural heritage value. The approximate age of buildings and/or structures may be estimated based on:

- history of the development of the area
- fire insurance maps
- architectural style
- building methods

Property owners may have information on the age of any buildings or structures on their property. The municipality, local land registry office or library may also have background information on the property.

**Note:** 40+ year old buildings or structure do not necessarily hold cultural heritage value or interest; their age simply indicates a higher potential.

A building or structure can include:

- residential structure
- farm building or outbuilding
- industrial, commercial, or institutional building
- remnant or ruin
- engineering work such as a bridge, canal, dams, etc.

For more information on researching the age of buildings or properties, see the Ontario Heritage Tool Kit Guide Heritage Property Evaluation.



## Part C: Other Considerations

### 5a. Is there local or Aboriginal knowledge or accessible documentation suggesting that the property (or project area) is considered a landmark in the local community or contains any structures or sites that are important to defining the character of the area?

Local or Aboriginal knowledge may reveal that the project location is situated on a parcel of land that has potential landmarks or defining structures and sites, for instance:

- buildings or landscape features accessible to the public or readily noticeable and widely known
- complexes of buildings
- monuments
- ruins

### 5b. Is there local or Aboriginal knowledge or accessible documentation suggesting that the property (or project area) has a special association with a community, person or historical event?

Local or Aboriginal knowledge may reveal that the project location is situated on a parcel of land that has a special association with a community, person or event of historic interest, for instance:

- Aboriginal sacred site
- traditional-use area
- battlefield
- birthplace of an individual of importance to the community

### 5c. Is there local or Aboriginal knowledge or accessible documentation suggesting that the property (or project area) contains or is part of a cultural heritage landscape?

Landscapes (which may include a combination of archaeological resources, built heritage resources and landscape elements) may be of cultural heritage value or interest to a community.

For example, an Aboriginal trail, historic road or rail corridor may have been established as a key transportation or trade route and may have been important to the early settlement of an area. Parks, designed gardens or unique landforms such as waterfalls, rock faces, caverns, or mounds are areas that may have connections to a particular event, group or belief.

For more information on Questions 5.a., 5.b. and 5.c., contact:

- Elders in Aboriginal Communities or community researchers who may have information on potential cultural heritage resources. Please note that Aboriginal traditional knowledge may be considered sensitive.
- municipal heritage committees or local heritage organizations
- Ontario Historical Society's "Heritage Directory" - for a list of historical societies and heritage organizations in the province

An internet search may find helpful resources, including:

- historical maps
- historical walking tours
- municipal heritage management plans
- cultural heritage landscape studies
- municipal cultural plans

Information specific to trails may be obtained through Ontario Trails.



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## **APPENDIX B: PROJECT AREA MAP**

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# AERIAL PHOTOGRAPHY

New York State, Earthstar Geographics



2,000 m

Prepared by AST 2022-05-26

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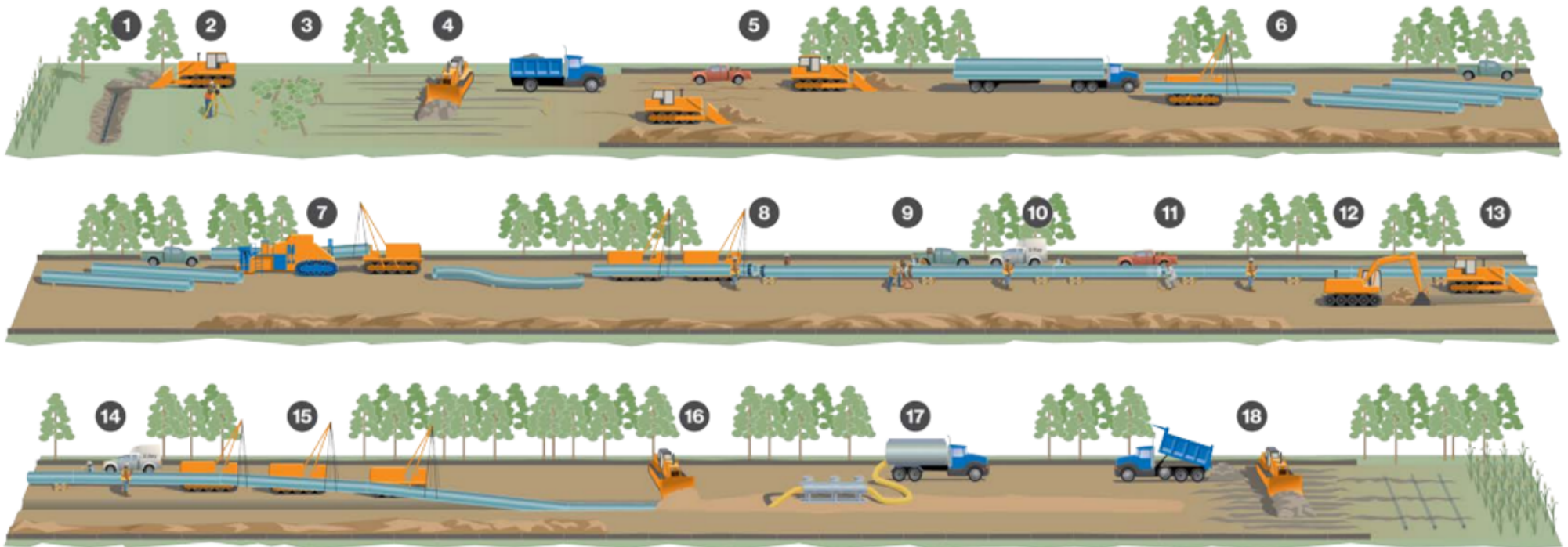
- WESTERN CORRIDOR
- SOUTHWESTERN CORRIDOR
- NORTHEASTERN CORRIDOR

## Appendix C

### ***Typical Pipeline Construction Sequence***



## Constructing an Enbridge Gas Pipeline



1. Pre-construction tiling  
2. Surveying and staking  
3. Clearing

4. Right-of-way topsoil stripping  
5. Front-end grading  
6. Stringing pipe

7. Field bending pipe  
8. Lining-up pipe  
9. Welding process

10. X-ray or ultrasonic inspection, weld repair  
11. Field coating  
12. Digging the trench

13. Padding trench bottom  
14. Final inspection and coating repair  
15. Lowering pipe

16. Backfilling  
17. Hydrostatic testing  
18. Site restoration and post-construction tiling

## Appendix D

### *Contact List*



| Surname  | First Name    | Organization                             | Department                               | Title/Role                     | Address                           | City/Town, Province       | Postal Code | Telephone                                   | E-Mail   |
|--|---------------|--|--|--------------------------------|-----------------------------------|---------------------------|-------------|---|--|
| Indigenous Communities                         |               |  |  |                                |                                   |                           |             |   |  |
| Maracle  | R. Donald     | Mohawks of the Bay of Quinte             | --                                       | Chief                          | 24 Meadow Drive                   | Tyendinaga Mohawk         | K0K 1X0     | 613-396-3424 ex 106                         | <a href="mailto:rdonm@mbq-tmt.org">rdonm@mbq-tmt.org</a>   |
| Murphy   | Megan         | Mohawks of the Bay of Quinte             | --                                       | Environmental Services         | 24 Meadow Drive                   | Tyendinaga Mohawk         | K0K 1X0     | 613-885-8480                                | <a href="mailto:environment@mbq-tmt.org">environment@mbq-tmt.org</a>                               |
| Maracle  | Lisa          | Mohawks of the Bay of Quinte             | --                                       | Director of Community Services | 24 Meadow Drive                   | Tyendinaga Mohawk         | K0K 1X0     | 613-242-1035                                | <a href="mailto:lisam@mbq-tmt.org">lisam@mbq-tmt.org</a>   |
| Kring  | Todd          | Mohawks of the Bay of Quinte             | --                                       | Director of Community          | 24 Meadow Drive                   | Tyendinaga Mohawk         | K0K 1X0     | 613-396-3424 ex 134                         | <a href="mailto:toddk@mbq-tmt.org">toddk@mbq-tmt.org</a>   |
| Kring  | Tom           | Mohawks of the Bay of Quinte             | --                                       | Director of Housing and MBQ    | 24 Meadow Drive                   | Tyendinaga Mohawk         | K0K 1X0     | 613-396-3424 ex 148                         | <a href="mailto:housingdirector@mbq-tmt.org">housingdirector@mbq-tmt.org</a>                       |
| Souliere                                       | David         | Mohawks of the Bay of Quinte             | --                                       | Chief Administrative Officer   | 24 Meadow Drive                   | Tyendinaga Mohawk         | K0K 1X0     | 613-396-3424 ex 126                         | <a href="mailto:cao@mbq-tmt.org">cao@mbq-tmt.org</a>   |
| Brant  | Peter         | Mohawks of the Bay of Quinte             | --                                       | Capital Projects Coordinator   | 24 Meadow Drive                   | Tyendinaga Mohawk         | K0K 1X0     | 613-396-3424 ex 141                         | <a href="mailto:peterb@mbq-tmt.org">peterb@mbq-tmt.org</a>   |
| Federal/Provincial Elected Officials           |               |  |  |                                |                                   |                           |             |   |  |
| Kramp-Neuman                                   | Shelby        | Government of Canada                     | Hastings—Lennox and Addington            | Member of Parliament           | 4 Dundas Street West              | Napanee, ON               | K7R 1Z4     | <a href="tel:613-354-6886">613-354-6886</a> | <a href="mailto:shelby.kramp-neuman@parl.gc.ca">shelby.kramp-neuman@parl.gc.ca</a>                 |
| Kramp  | Daryl         | Government of Ontario                    | Hastings—Lennox and Addington            | Member of Provincial           | 8 Dundas Street West              | Napanee, ON               | K7R 1Z4     | 613-308-9625                                | <a href="mailto:daryl.kramp@pc.ola.org">daryl.kramp@pc.ola.org</a>                                 |
| Federal Agencies                               |               |  |  |                                |                                   |                           |             |   |  |
| Chiu   | Ricky Wai Kei | Indigenous Services Canada               | Lands and Economic Development,          | Junior Environmental Officer   | 655 Bay Street                    | Toronto, ON               | M5G 2K4     | 647-327-7603                                | <a href="mailto:rickywaikei.chiu@sac-isc.gc.ca">rickywaikei.chiu@sac-isc.gc.ca</a>                 |
| Kayseas  | Kristen       | Indigenous Services Canada               | Lands and Economic Development,          | Lands Manager                  | 101-100 Anemki Drive              | Fort William First Nation | P7J 1A5     | 807-357-8015                                | <a href="mailto:kristen.kayseas@sac-isc.gc.ca">kristen.kayseas@sac-isc.gc.ca</a>                   |
| --   | --            | Fisheries and Oceans Canada              | Fish and Fish Habitat Protection         | --                             | 867 Lakeshore Road                | Burlington, ON            | L7S 1A1     | 1-855-852-8320                              | <a href="mailto:FisheriesProtection@dfo-mpo.gc.ca">FisheriesProtection@dfo-mpo.gc.ca</a>           |
| Plant  | Wes           | Environment and Climate Change           | Environmental Assessment Section         | Manager                        | 4905 Dufferin Street              | Downsview, ON             | M3H 5T4     | 416-739-4272                                | <a href="mailto:wesley.plant@ec.gc.ca">wesley.plant@ec.gc.ca</a>                                   |
| --   | --            | Transport Canada                         | --                                       | --                             | 330 Sparks Street                 | Ottawa, ON                | K1A 0N5     | 613-990-2309                                | <a href="mailto:EnviroOnt@tc.gc.ca">EnviroOnt@tc.gc.ca</a>   |
| Ontario Pipeline Coordinating Committee (OPCC) |               |  |  |                                |                                   |                           |             |   |  |
| Crnojacki                                      | Zora          | Ontario Pipeline Coordinating            | Ontario Energy Board (OEB)               | OPCC Chair                     | P.O. Box 2319, 2300 Yonge Street, | Toronto, ON               | M4P 1E4     | 416-440-8104                                | <a href="mailto:Zora.Crnjacki@oeb.ca">Zora.Crnjacki@oeb.ca</a>                                     |
| Geerts   | Helma         | Ontario Pipeline Coordinating            | Ministry of Agriculture and Food,        | Land Use Policy & Stewardship, | 1 Stone Road West, 3rd Floor SE   | Guelph, ON                | N1G 4Y2     | 519-546-7423                                | <a href="mailto:Helma.Geerts@ontario.ca">Helma.Geerts@ontario.ca</a>                               |
| Potter   | Katy          | Ontario Pipeline Coordinating            | Ministry of Environment, Conservation    | Supervisor (Acting)            | 135 St Clair Avenue West, 7th     | Toronto, ON               | M4V 1P5     | 416-804-2793                                | <a href="mailto:katy.potter@ontario.ca">katy.potter@ontario.ca</a>                                 |
| Manouchehri                                    | Kourosh       | Ontario Pipeline Coordinating            | Technical Standards and Safety           | Engineer                       | 345 Carlingview Drive             | Toronto, ON               | M9W 6N9     | 416-734-3539                                | <a href="mailto:kmanouchehri@tssa.org">kmanouchehri@tssa.org</a>                                   |
| Harris   | Maya          | Ontario Pipeline Coordinating            | Ministry of Municipal Affairs and        | Manager, Community             | 777 Bay Street, 13th Floor        | Toronto, ON               | M5G 2E5     | 416-585-6063                                | <a href="mailto:maya.harris@ontario.ca">maya.harris@ontario.ca</a>                                 |
| Schulte-Hostedde                               | Bridget       | Ontario Pipeline Coordinating            | Ministry of Municipal Affairs and        | Regional Director (Sudbury,    | Suite 401, 159 Cedar St (Sudbury) | Sudbury, ON               | P3E 6A5     | 705-564-6858                                | <a href="mailto:bridget.schulte-hostedde@ontario.ca">bridget.schulte-hostedde@ontario.ca</a>       |
| Elms   | Michael       | Ontario Pipeline Coordinating            | Ministry of Municipal Affairs and        | Manager, Community Planning    | 8 Estate Lane, Rockwood House     | Kingston, ON              | K7M 9A8     | 613-545-2132                                | <a href="mailto:michael.elms@ontario.ca">michael.elms@ontario.ca</a>                               |
| Wilkinson                                      | Jonathon      | Ontario Pipeline Coordinating            | Ministry of Energy                       | Senior Advisor (Acting)        | 77 Grenville Street, 6th Floor    | Toronto, ON               | M7A 1B3     | 705-313-3658                                | <a href="mailto:jonathon.wilkinson@ontario.ca">jonathon.wilkinson@ontario.ca</a>                   |
| Barboza  | Karla         | Ontario Pipeline Coordinating            | Ministry of Heritage, Sport, Tourism and | Team Lead, Heritage Planning   | 400 University Avenue, 5th Floor  | Toronto, ON               | M7A 2R9     | 416-660-1027                                | <a href="mailto:karla.barboza@ontario.ca">karla.barboza@ontario.ca</a>                             |
| Johnston                                       | Keith         | Ontario Pipeline Coordinating            | Ministry of Northern Development,        | Environmental Planning Team    | 99 Wellesley Street West          | Toronto, ON               | M7A 1W3     | 705-313-6960                                | <a href="mailto:keith.johnston@ontario.ca">keith.johnston@ontario.ca</a>                           |
| Ostrowka                                       | Cory          | Ontario Pipeline Coordinating            | Infrastructure Ontario                   | Environmental Specialist       | 1 Dundas Street West, Suite 2000  | Toronto, ON               | M5G 1Z3     | 416-212-6976                                | <a href="mailto:cory.ostrowka@infrastructureontario.ca">cory.ostrowka@infrastructureontario.ca</a> |
| DiFabio  | Tony          | Ontario Pipeline Coordinating            | Ministry of Transportation (MTO)         | Team Lead, Operations          | 301 St. Paul Street West          | St Catharines             | L2R 7R4     | 365-336-2136                                | <a href="mailto:Tony.DiFabio@ontario.ca">Tony.DiFabio@ontario.ca</a>                               |
| Provincial Agencies                            |               |  |  |                                |                                   |                           |             |   |  |
| --   | --            | Hydro One Networks Inc. (HONI)           | --                                       | --                             | --                                | --                        | --          | --  | <a href="mailto:SecondaryLandUse@HydroOne.com">SecondaryLandUse@HydroOne.com</a>                   |
| Greene   | Robert        | Ministry of the Solicitor General        | --                                       | Director                       | 25 Grosvenor Street, 13th Floor   | Toronto, ON               | M7A 1Y6     | 416-277-2370                                | <a href="mailto:robert.greene@ontario.ca">robert.greene@ontario.ca</a>                             |
| Pastori  | Andrea        | Ministry of Energy                       | Strategic Policy and Analytics Branch    | Cabinet Liaison and Strategic  | 77 Grenville Street, 6th Floor    | Toronto, ON               | M7A 1B3     | 416-274-2126                                | <a href="mailto:andrea.pastori@ontario.ca">andrea.pastori@ontario.ca</a>                           |
| Gibson   | Amy           | Ministry of Energy                       | Indigenous Energy Policy                 | Manager                        | 77 Grenville Street, 6th Floor    | Toronto, ON               | M7A 1B3     | 416-476-5132                                | <a href="mailto:amy.gibson@ontario.ca">amy.gibson@ontario.ca</a>                                   |
| Warren   | Catherine     | Ministry of Northern Development,        | Peterborough District - Natural          | District Planner               | South Tower, 1st Floor            | Peterborough, ON          | K9J 8M5     | 705-772-9012                                | <a href="mailto:catherine.warren@ontario.ca">catherine.warren@ontario.ca</a>                       |
| --   | --            | Ministry of Agriculture, Food & Rural    | General Email (Initial Contact)          | --                             | --                                | --                        | --          | --  | <a href="mailto:omafra.eanotices@ontario.ca">omafra.eanotices@ontario.ca</a>                       |
| Beatty   | Jocelyn       | Ministry of Agriculture, Food & Rural    | Central-Eastern Ontario and              | Rural Planner                  | 6484 Wellington Road 7, Unit 10   | Elora ON                  | N0B 1S0     | 519-546-7612                                | <a href="mailto:jocelyn.beatty@ontario.ca">jocelyn.beatty@ontario.ca</a>                           |
| Boyd   | Erick         | Ministry of Municipal Affairs and        | Western Municipal Services Office        | Manager, Community Planning    | 659 Exeter Road, 2nd Floor        | London, ON                | N6E 1L3     | 519-873-4025                                | <a href="mailto:erick.boyd@ontario.ca">erick.boyd@ontario.ca</a>                                   |
| Gitkow   | Alexandre     | Ministry of Transportation (MTO)         | Kingston Area Office                     | Corridor Management Officer    | --                                | --                        | --          | 613-544-2220 ex 4126                        | <a href="mailto:Alexandre.Gitkow@ontario.ca">Alexandre.Gitkow@ontario.ca</a>                       |
| Mallon   | Jack          | Ministry of Heritage, Sport, Tourism and | Heritage Planning Unit                   | Heritage Planner               | 400 University Avenue, 5th Floor  | Toronto, ON               | M7A 2R10    | 437-522-6582                                | <a href="mailto:jack.mallon@ontario.ca">jack.mallon@ontario.ca</a>                                 |
| Chisholm                                       | Cathy         | Ministry of Environment, Conservation    | Belleville MECP Area Office              | Supervisor                     | 345 College Street East           | Belleville, ON            | K8N 5S7     | 613-242-5049                                | <a href="mailto:cathy.chisholm@ontario.ca">cathy.chisholm@ontario.ca</a>                           |
| Dagilis  | Trevor        | Ministry of Environment, Conservation    | Kingston District Office                 | Manager                        | Unit 3, 1259 Gardiners Road       | Kingston, ON              | K7P 3J6     | 613-548-6906                                | <a href="mailto:trevor.dagilis@ontario.ca">trevor.dagilis@ontario.ca</a>                           |
| Sacilotto                                      | Roberto       | Ministry of Environment, Conservation    | Kingston District Office                 | Supervisor                     | Unit 3, 1259 Gardiners Road       | Kingston, ON              | K7P 3J7     | 613-540-6894                                | <a href="mailto:roberto.sacilotto@ontario.ca">roberto.sacilotto@ontario.ca</a>                     |
| Paul   | Sarah         | Ministry of Environment, Conservation    | Environmental Assessment and             | Assistant Deputy Minister      | 135 St Clair Avenue West, 14th    | Toronto, ON               | M4V 1P5     | 416-314-9530                                | <a href="mailto:sarah.paul@ontario.ca">sarah.paul@ontario.ca</a>                                   |
| Gram   | Sandra        | Ministry of Environment, Conservation    | Environmental Assessment and             | Senior Program, Policy and     | 135 St Clair Avenue West, 14th    | Toronto, ON               | M4V 1P6     | 416-318-7515                                | <a href="mailto:sandra.gram@ontario.ca">sandra.gram@ontario.ca</a>                                 |
| --   | --            | Ministry of Environment, Conservation    | Species at Risk Branch                   | --                             | --                                | --                        | --          | --  | <a href="mailto:SAROntario@ontario.ca">SAROntario@ontario.ca</a>                                   |
| Ecclestone                                     | Susan         | Ministry of Environment, Conservation    | Species at Risk Branch                   | Director                       | 40 St Clair Avenue West, Foster   | Toronto, ON               | M4V 1M2     | 416-274-8864                                | <a href="mailto:susan.ecclestone@ontario.ca">susan.ecclestone@ontario.ca</a>                       |
| Heeney   | Paul          | Ministry of Environment, Conservation    | Species at Risk Branch                   | Acting Director                | --                                | --                        | --          | 613-202-1889                                | <a href="mailto:Paul.heeney@ontario.ca">Paul.heeney@ontario.ca</a>                                 |
| --   | --            | Ministry of Environment, Conservation    | Species at Risk Branch                   | Branch Coordinator             | --                                | --                        | --          | --  | <a href="mailto:sarbcoordinator@ontario.ca">sarbcoordinator@ontario.ca</a>                         |
| Corrigal                                       | Kirsten       | Ministry of Environment, Conservation    | Conservation and Source Protection       | Director                       | 40 St Clair Avenue West, Foster   | Toronto, ON               | M4V 1M2     | 705-987-5144                                | <a href="mailto:kirsten.corrigal@ontario.ca">kirsten.corrigal@ontario.ca</a>                       |
| Carney   | Sam           | Quinte Conservation                      | Planning and Regulations                 | Planning Technician            | 2061 Old Highway #2               | Belleville, ON            | K8N 4Z2     | 613-968-3434                                | <a href="mailto:SCarney@quinteconservation.ca">SCarney@quinteconservation.ca</a>                   |
| Municipal Elected Officials                    |               |  |  |                                |                                   |                           |             |   |  |
| Phillips                                       | Rick          | Hastings County                          | County Council                           | Warden                         | 235 Pinnacle Street               | Belleville, ON            | K8N 3A9     | 613-966-1319 ex 3203                        | <a href="mailto:warden@hastingscounty.com">warden@hastingscounty.com</a>                           |
| Hannafin                                       | Adam          | Township of Tyendinaga                   | Township Council                         | Deputy Reeve                   | 859 Melrose Road, RR#1            | Shannonville, ON          | K0K 3A0     | --  | --   |

| Surname            | First Name | Organization                             | Department                        | Title/Role                   | Address                        | City/Town, Province | Postal Code | Telephone             | E-Mail                               |
|--------------------|------------|--|-----------------------------------|------------------------------|--------------------------------|---------------------|-------------|-----------------------|--------------------------------------|
| Kennelly           | Claire     | Township of Tyendinaga                   | Township Council                  | Councillor                   | 859 Melrose Road, RR#1         | Shannonville, ON    | K0K 3A0     | --                    | --                                   |
| McFarlane          | Don        | Township of Tyendinaga                   | Township Council                  | Councillor                   | 859 Melrose Road, RR#1         | Shannonville, ON    | K0K 3A0     | --                    | --                                   |
| Lang               | Heather    | Township of Tyendinaga                   | Township Council                  | Councillor                   | 859 Melrose Road, RR#1         | Shannonville, ON    | K0K 3A0     | --                    | --                                   |
| Municipal Agencies |            |  |                                   |                              |                                |                     |             |                       |                                      |
| Pine               | Jim        | Hastings County                          | County Administration             | Chief Administrative Officer | 235 Pinnacle Street            | Belleville, ON      | K8N 3A9     | 613-966-1319 ex 3204  | pinej@hastingscounty.com             |
| Harrow             | Justin     | Hastings County                          | Planning and Land Development     | Director                     | 235 Pinnacle Street            | Belleville, ON      | K8N 3A9     | 613-966-1319 ex 4007  | harrowj@hastingscounty.com           |
| Preston            | Carla      | Township of Tyendinaga                   | Township Administration           | Chief Administrative Officer | 859 Melrose Road, RR#1         | Shannonville, ON    | K0K 3A0     | 613-396-1944          | cao@tyendinagatownship.com           |
| Murphy             | Yvonne     | Township of Tyendinaga                   | Planning and Development          | Clerk                        | 859 Melrose Road, RR#1         | Shannonville, ON    | K0K 3A0     | 613-396-1944          | clerk@tyendinagatownship.com         |
| Oliver             | James      | Township of Tyendinaga                   | Fire Department                   | Fire Chief                   | 440 Weese Road, RR #1          | Shannonville, ON    | K0K 3A0     | 613-396-1660          | firechief@tyendinagatownship.com     |
| Maracle            | Scott      | Mohawk Fire Department                   | --                                | Fire Chief                   | 1821 York Road                 | Tyendinaga Mohawk   | K0K 1X0     | 613-968-7985          | mohawkfire@mbq-tmt.org               |
| Interest Groups    |            |  |                                   |                              |                                |                     |             |                       |                                      |
| Maracle-Westgate   | Jennifer   | Quinte Mohawk School                     | --                                | Principal                    | 1624 York Road                 | Deseronto, ON       | K0K 1X0     | 613-966-6984          | jennifera.maracle-westgate@canada.ca |
| MacIver            | Katherine  | Hastings and Prince Edward County        | Hastings and Prince Edward County | Director                     | 56 Ann Street                  | Belleville, ON      | K8N 3L3     | 613-966-1170 ex 62201 | directors.office@hpedsb.on.ca        |
| --                 | --         | Hastings and Prince Edward County        | Hastings and Prince Edward County | General Information          | 56 Ann Street                  | Belleville, ON      | K8N 3L3     | 613-966-1170          | information@hpedsb.on.ca             |
| --                 | --         | Hastings and Prince Edward County        | Tyendinaga Public School          | Administration               | 650 Shannonville Road, RR#1    | Shannonville, ON    | K0K 3A0     | 613-962-4447          | tyendinaga@hpedsb.on.ca              |
| Brant              | Suzanne    | First Nations Technical Institute (FNTI) | --                                | President                    | 3 Old York Road                | Deseronto, ON       | K0K 1X0     | 1-800-267-0637 ex 167 | suzanne@fnti.net                     |
| Brant              | Brandy     | Kanhiote Library                         | --                                | Chief Executive Office       | 1658 York Road                 | Deseronto, ON       | K0K 1X0     | 613-967-6264          | kanhiotelibrary@gmail.com            |
| Hill               | Mike       | Mohawk Bus Lines                         | --                                | Manager                      | 368 Airport Road               | Deseronto, ON       | K0K 1X0     | 613-396-2000          | mbi@mbq-tmt.org                      |
| Nokes              | Ian        | Ontario Federation of Agriculture        | --                                | Policy Analyst               | 100 Stone Road West, Suite 206 | Guelph, ON          | N1G 5L3     | 519-821-8883 ex 253   | ian.nokes@ofa.on.ca                  |



## Appendix E

### ***Notice of Study Commencement and Virtual Information Session***

# PROPOSED MOHAWKS OF THE BAY OF QUINTE AND SHANNONVILLE COMMUNITY EXPANSION PROJECT

## NOTICE OF STUDY COMMENCEMENT AND VIRTUAL INFORMATION SESSION

ENBRIDGE GAS INC.

### The Study

Enbridge Gas Inc. (Enbridge Gas) has retained Dillon Consulting Limited to undertake an environmental study for the proposed Mohawks of the Bay of Quinte and Shannonville Community Expansion Project located within the Tyendinaga Mohawk Territory and Shannonville, Ontario.

Enbridge Gas has identified a preliminary preferred route that will tie-in to an existing 4-inch polyethylene pipeline near the intersection of Wyman Road and York Road in the Tyendinaga Mohawk Territory. In addition, a station rebuild is required to accommodate additional customers onto the distribution system and will be constructed at the intersection of York Road and Highway 49, in the northwest corner (see map).

The preliminary preferred route has been developed for purposes of an assessment of potential environmental and socio-economic impacts and does not represent the final project scope/design that will provide access to natural gas to end-use customers.

The project is planned to be installed mainly within existing road rights-of-way with additional temporary working space potentially required for lay-down, storage and excess soils management.

Once the study is complete, Enbridge Gas will apply to the Ontario Energy Board (OEB) for approval to construct the project. If approved, construction may begin in spring 2023.

### The Process

The study is being conducted in accordance with the OEB's *Environmental Guidelines for the Location, Construction, and Operation of Hydrocarbon Pipelines and Facilities in Ontario*. The study will review the need and justification for the project, describe the natural and socio-economic environment, evaluate the project from a social and environmental perspective, outline safety measures, and describe appropriate measures for impact mitigation and monitoring.



### Invitation to the Community

Stakeholder and Indigenous consultation is a key component of this study. Members of the general public, landowners, government agencies, current customers, Indigenous communities, and other interested parties are invited to participate in the study. We are hosting a Virtual Information Session to provide you with an opportunity to review the project and provide input.

**Virtual Information Session Website:** [www.MBQvirtualinfosession.ca](http://www.MBQvirtualinfosession.ca)

**Active Dates:** Monday, May 16, 2022 to Sunday, May 29, 2022

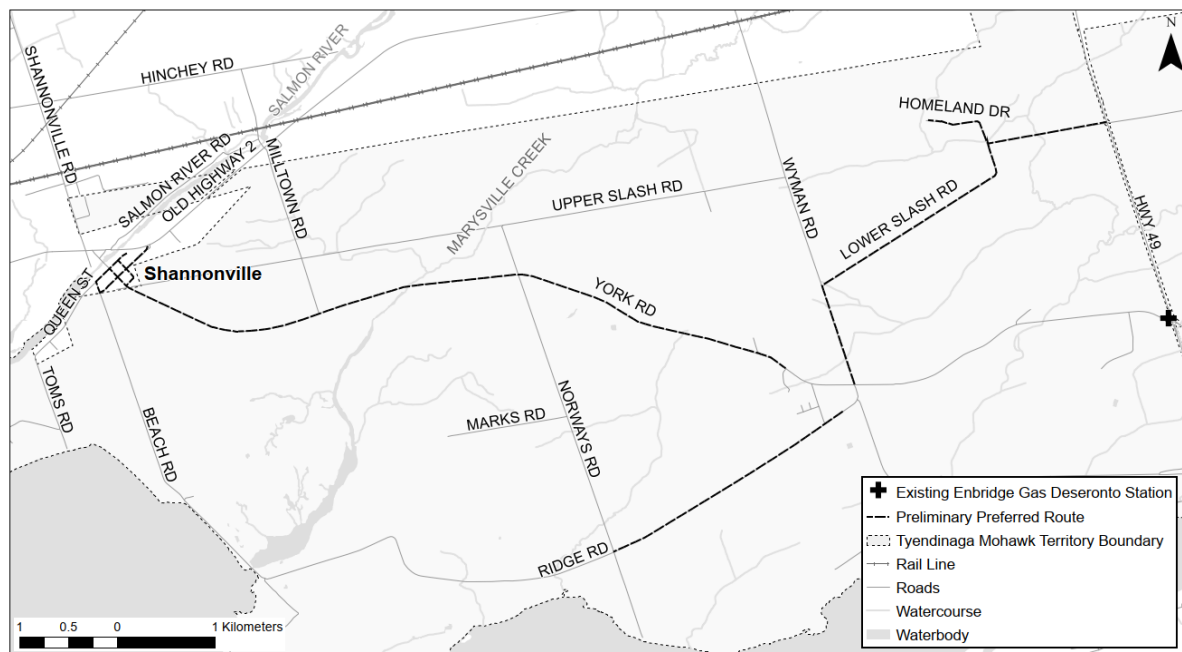
Your input will be used to confirm the preferred route and create mitigation plans to be implemented during construction. If you are interested in participating, or would like to provide comments, please visit the Virtual Information Session website or contact the project representative using the provided project contact information. The last day to submit comments for consideration in the environmental study is **June 15, 2022**.

**Enbridge Gas Project Website:** [www.enbridgegas.com/MBQCommunityEA](http://www.enbridgegas.com/MBQCommunityEA)

**Tristan Lefler**  
Environmental Assessment  
Project Manager  
Dillon Consulting Limited  
Suite 200 – 51 Breithaupt St.  
Kitchener, ON N2H 5G5

**Alissa Lee**  
Environmental Assessment &  
Consultation Lead  
Dillon Consulting Limited  
Suite 101 - 177 Colonnade Rd.  
South, Ottawa, ON K2E 7J4

**Project Contact Info:**  
[MBQcommunityEA@dillon.ca](mailto:MBQcommunityEA@dillon.ca)  
613-745-2213 ext. 3024





## Appendix F

### *Stakeholder Engagement Logs*



ENBRIDGE GAS INC.

# Mohawks of the Bay of Quinte Community Expansion Project

Appendix F: Stakeholder Engagement Logs



## Agency Correspondence

| Line Item                                     | Date of Consultation | Name of Agency and/or Contact  | Description of Consultation Activity  | Date of Response  | Response and Issue Resolution (if applicable)  |
|---|----------------------|--|---|-------------------|--|
| <i>FEDERAL AGENCIES AND ELECTED OFFICIALS</i> |                      |  |   |                   |  |
| 1.1   | May 3, 2022          | Member of Parliament<br>Hastings – Lennox and Addington<br><i>Contact: Shelby Kramp-Neuman</i>   | Enbridge representative provided the Notice of Commencement via email.  | N/A               | N/A  |
| 2.1   | February 22, 2022    | Crown–Indigenous Relations and Northern Affairs Canada (CIRNAC)<br><i>Contacts: Environmental Assessment Office and the Honourable (Hon.) Mark Miller (Minister of Crown-Indigenous Relations)</i> | Dillon representative sent an email requesting appropriate contact person within CIRNAC to discuss <i>Impact Assessment Act</i> requirements for a project on Indian Reserve lands in Ontario.  | N/A               | N/A  |
| 2.2   | February 28, 2022    | CIRNAC<br><i>Contacts: Environmental Assessment Office, Hon. Marc Miller, Public Enquiries Contact Centre</i>  | Dillon representative followed up on February 22 email requesting the appropriate CIRNAC contact to discuss <i>Impact Assessment Act</i> requirements for a project on Indian Reserve lands in Ontario.   | February 28, 2022 | A representative from the Public Enquiries Contact Centre at CIRNAC responded stating that the Dillon representative's message was redirected to the appropriate department. |
| 2.3   | March 8, 2022        | CIRNAC<br><i>Contact: Public Enquiries Contact Centre</i>  | Dillon representative followed up with representative from the Public Enquiries Contact Centre at CIRNAC stating they had not yet heard back from anyone and asked if there was a phone number or contact person that they could reach out to directly.   | March 8, 2022     | A representative from the Public Enquiries Contact Centre at CIRNAC responded with the email address to contact the environmental assessment team.                           |
| 2.4   | March 8, 2022        | CIRNAC<br><i>Contact: Environmental Assessment Office</i>  | Dillon representative reached out the Environmental Assessment Office again requesting the appropriate contact person within CIRNAC to discuss <i>Impact Assessment Act</i> requirements for a project on Indian Reserve lands in Ontario.  | N/A               | N/A  |
| 3.1   | March 21, 2022       | Impact Assessment Agency of Canada (IAAC)<br><i>Contacts: Ontario Regional Office and Anjala Puvananathan</i>  | Dillon representative sent an email stating that they are looking to discuss <i>Impact Assessment Act</i> requirements for a project on Indian Reserve lands in Ontario. Dillon representative noted that the project is not a designated project and does not otherwise trigger the <i>Impact Assessment Act</i> .<br>Dillon representative noted that they had reached out to CIRNAC, assuming they would be the responsible authority, but had not heard back despite multiple attempts to reach someone.  | N/A               | N/A  |
| 3.2   | March 29, 2022       | IAAC<br><i>Contact: Patricia McKeage</i>   | Dillon representative received a phone call from IAAC representative in response to their March 21 email requesting a contact person to discuss <i>Impact Assessment Act</i> requirements for the Project. The IAAC representative noted that the IAAC has no authority over the Project since it is not a "designated project" under the <i>Physical Activities Regulations</i> . IAAC representative stated that Dillon should contact ISC rather than CIRNAC and provided the name of a contact at ISC along with the phone number of the ISC Toronto Regional Office. | N/A               | N/A  |

| Line Item | Date of Consultation | Name of Agency and/or Contact   | Description of Consultation Activity  | Date of Response | Response and Issue Resolution (if applicable)   |
|-----------|----------------------|---|---|------------------|---|
| 4.1       | March 30, 2022       | Indigenous Services Canada (ISC)<br><i>Contact: Isabelle Levesque</i>                                   | Dillon representative called and left a voicemail for the ISC representative to discuss the Project.  | N/A              | N/A   |
| 4.2       | April 6, 2022        | ISC<br><i>Contact: Isabelle Levesque</i>  | Dillon representative emailed ISC representative to follow up on the voicemail they had left on March 30. Dillon representative noted that they are looking to identify the responsible federal authority for a project that triggers Section 82 of the <i>Impact Assessment Act</i> , as it is located on federal lands (Tyendinaga Mohawk Territory). Dillon representative noted that the project is proceeding through the Ontario Energy Board regulatory process and they would like to confirm federal approvals in order to keep the project schedule on track. | April 6, 2022    | ISC representative responded stating they were having issues with their work phone and apologized for missing Dillon representative's call on March 30. ISC representative stated they could meet on April 7 or 8 via video conference and asked Dillon representative to provide their availability so they can send out a meeting invite. |
| 4.3       | April 6, 2022        | ISC<br><i>Contacts: Isabelle Levesque and Christina Rakobowchuk</i>                                     | Dillon representative responded to ISC representative with times that they would be available for a video conference on April 7.  | April 6, 2022    | ISC representative sent out a Microsoft Teams meeting invite for April 7 at 2 pm.   |
| 4.4       | April 7, 2022        | ISC<br><i>Contact: Isabelle Levesque and Christina Rakobowchuk</i>                                      | Dillon representatives met with ISC representatives via video conference. An overview of the project was provided and ISC representatives stated they would direct Dillon representatives to the appropriate ISC Environmental Officer for further information.   | N/A              | N/A   |
| 4.5       | April 8, 2022        | ISC<br><i>Contact: Isabelle Levesque</i>  | ISC representative reached out to Dillon representatives noting it was nice meeting on April 7 and stated that they contacted their regional office to get a contact name for an Environmental Officer. ISC representative stated that they would reconnect once they hear back from the regional office.   | April 8, 2022    | Dillon representative thanked ISC representative for the update.  |
| 4.6       | April 8, 2022        | ISC<br><i>Contacts: Isabelle Levesque, Christina Rakobowchuk, Cynthia Brown, and Ricky Wai Kei Chiu</i> | ISC representative provided contact information for two ISC Environmental Officers for the Ontario Region.  | April 8, 2022    | Dillon representative thanked ISC representative for the Environment Officers' contact information and inquired with the ISC Environmental Officers (also on the email) if they would be available next week for a call to go over the Project.   |
| 4.7       | April 11, 2022       | ISC<br><i>Contact: Ricky Wai Kei Chiu</i>   | ISC representative thanked Dillon representative for reaching out and noted that ISC may be a Federal Authority to complete the Section 82 determination under the <i>Impact Assessment Act</i> , if they are issuing a permit or funding for the project on reserves. ISC representative stated that they are working to gather the availability of their counterparts at the Land Unit and Infrastructure Group and will provide potential meeting times soon.  | April 11, 2022   | Dillon representative thanked ISC representative.   |
| 4.8       | April 13, 2022       | ISC<br><i>Contacts: Ricky Wai Kei Chiu, Julieta Werner, Kristen Kayseas, Cynthia Brown</i>              | ISC representative sent Dillon representatives a Microsoft Teams meeting invite for April 19 at 1:30 pm and asked if the Dillon representatives would be available for a meeting at that time.  | April 13, 2022   | Dillon representative confirmed the suggested time would work for them and accepted the meeting invite.   |



| Line Item | Date of Consultation | Name of Agency and/or Contact   | Description of Consultation Activity   | Date of Response | Response and Issue Resolution (if applicable)   |
|-----------|----------------------|---|--|------------------|---|
| 4.9       | April 19, 2022       | ISC<br><i>Contacts: Ricky Wai Kei Chiu, Cynthia Brown, Kristen Kayseas, Julieta Werner, Selina Aivaliotis, and Roger Dockstader</i>                     | Dillon representatives met with ISC representatives via video conference. Dillon representatives provided an overview of the Project and a discussion was had regarding the applicability of the <i>Impact Assessment Act</i> and what steps Enbridge Gas and Dillon would need to take to meet federal environmental assessment requirements.<br>ISC representative from Land Unit advised that in preparation for the meeting, they had found an existing <i>Indian Act</i> permit issued to Union Gas for a natural gas pipeline on the Tyendinaga Mohawk Territory and suggested Enbridge Gas do some internal research to determine whether the existing permit could be amended.<br>ISC representative noted that as a first step in the federal review process they would need Enbridge Gas to submit an Environmental Review Process Project Description Form and that ISC could provide the form after the meeting for reference. | April 19, 2022   | ISC representative from Land Unit followed up after the meeting to provide, for reference, the existing Development Permit that had been granted to Union Gas under the <i>Indian Act</i> in 2016.  |
| 4.10      | April 19, 2022       | ISC<br><i>Contacts: Ricky Wai Kei Chiu and Kristen Kayseas</i>  | ISC representative sent an email thanking Dillon representatives for meeting that day and provided the Environmental Review Process Project Description Form. ISC representative noted that there would be a newer version of the form coming out and they would pass that along, when it becomes available.   | April 19, 2022   | Dillon representative thanked ISC representative and noted they would be in touch as the Project work progresses.   |
| 4.11      | April 20, 2022       | ISC<br><i>Contact: Kelley Blanchette on behalf of Hon. Patty Hadju (Minister of Indigenous Services Canada)</i>   | Representative from the office of the Minister of ISC emailed Dillon representative to acknowledge receipt of their email correspondence dated February 28, 2022, requesting information regarding the requirements under the <i>Impact Assessment Act</i> for on-reserve projects in Ontario. The Minister's representative apologized for the delay in responding and thanked Dillon representative for writing. The Minister's representative noted that they were aware Dillon representatives had met with ISC officials on April 7 and that the ISC representatives had followed up with regional contacts to explain the <i>Impact Assessment Act</i> procedures. The Minister's representative wished Dillon representative success with their upcoming project.   | N/A              | N/A   |
| 4.12      | April 21, 2022       | ISC<br><i>Contacts: Ricky Wai Kei Chiu, Cynthia Brown, Kristen Kayseas, Julieta Werner, Selina Aivaliotis, Roger Dockstader, and Rebecca Leighfield</i> | Enbridge Gas representative, after discussing matters internally, stated that legal council does not believe the existing Development Permit needs to be amended, however, consent of both the Minister and the Tyendinaga Mohawk Council will be needed to construct, extend or relocate any works for the purpose of distribution as per the existing permit. The Enbridge Gas representative provided an attachment showing consent of the Tyendinaga Mohawk Council and inquired how to obtain the consent of the Minister. Enbridge Gas representative also asked if anyone could advise and confirm if a Project Description form still needed to be submitted or if the process could be considered complete since a new permit is not required.  | April 21, 2022   | ISC representative confirmed that a Project Description form along with a Section 82 determination under the <i>Impact Assessment Act</i> would still be required. This being a result of consent still being required from the Minister, and ISC still considered to be a Federal Authority in allowing the Project to be carried out. ISC representative noted that their colleague from the Land Unit would respond to inquiries related to the permit and the Minister's consent. |

| Line Item | Date of Consultation | Name of Agency and/or Contact   | Description of Consultation Activity   | Date of Response | Response and Issue Resolution (if applicable)   |
|-----------|----------------------|---|--|------------------|---|
| 4.13      | April 21, 2022       | ISC<br><i>Contacts: Ricky Wai Kei Chiu, Cynthia Brown, Kristen Kayseas, Julieta Werner, Selina Aivaliotis, Roger Dockstader, and Rebecca Leighfield</i> | Enbridge Gas representative thanked ISC representative for their response and noted they would wait to hear from the Land Unit representative.                         | April 21, 2022   | <p>ISC Land Unit representative responded, stating that Ministerial approval of construction, extension or relocation is defined in article 26 of the existing Development Permit. Per article 26(b), Union Gas is to deliver separate notices to both Tyendinaga Mohawk Council and the Minister. Each notice should contain the proposed construction, extension or relocation of any works for the purposes accompanied by a plan detailing the location and nature of the proposed construction, extension or relocation. When ISC is reviewing these types of requests, they are also ensuring that there is compliance with all applicable laws, including and not limited to the <i>Impact Assessment Act</i>. ISC also has to ensure that the proposed lines will not encroach on Certificate of Possession (CP) land and, if they do, that the CP holder's consent has been given.</p> <p>ISC Land Unit representative stated that when Enbridge Gas shares the plan detailing the location and nature of the proposed construction, extension or relocation, they ensure that it clearly shows the current lines vs. the proposed lines. They also noted that the Mohawk Council Resolution is almost 5 years old, so they will need confirmation that the Tyendinaga Mohawk Council is in agreement with the Band Council Resolution (BCR).</p> <p>Once ISC receives written notice as outlined in article 26(a), the Minister (or person with delegated authority) will make a determination of the request in writing.</p> |
| 4.14      | May 2, 2022          | ISC<br><i>Contacts: Ricky Wai Kei Chiu and Kristen Kayseas</i>  | Dillon representative sent Notice of Commencement via email.   | N/A              | N/A   |
| 4.15      | June 13, 2022        | ISC<br><i>Contacts: Ricky Wai Kei Chiu and Kristen Kayseas</i>  | ISC representative followed up with Dillon representative to provide revised and most up-to-date version of the Environmental Review Process Project Description Form. | June 13, 2022    | Dillon representative thanked ISC representative for the new form and noted they would be sure to use the new form when they do their submission.   |





| Line Item  | Date of Consultation | Name of Agency and/or Contact  | Description of Consultation Activity   | Date of Response | Response and Issue Resolution (if applicable)   |
|--|----------------------|--|--|------------------|---|
| 5.1  | May 2, 2022          | Transport Canada<br><i>Contact: Environmental Assessment Program, Ontario Region</i>                                 | Dillon representative sent Project letter and Notice of Commencement via email.  | May 16, 2022     | <p>Transport Canada stated that they do not require receipt of all individual or Class EA related notifications. They are requesting project proponents self-assess if the project:</p> <ol style="list-style-type: none"> <li>1. Will interact with a federal property and/or waterway by reviewing the Directory of Federal Real Property, available at <a href="http://www.tbs-sct.gc.ca/dfrp-rbif/">www.tbs-sct.gc.ca/dfrp-rbif/</a>; and</li> <li>2. Will require approval and/or authorization under any Acts administered by Transport Canada available at <a href="http://www.tc.gc.ca/eng/acts-regulations/menu.htm">http://www.tc.gc.ca/eng/acts-regulations/menu.htm</a>.</li> </ol> <p>If the aforementioned does not apply, the Environmental Assessment program should not be included in any further correspondence and future notifications will not receive a response. If there is a role under the program, correspondence should be forwarded electronically to: <a href="mailto:EnviroOnt@tc.gc.ca">EnviroOnt@tc.gc.ca</a> with a brief description of Transport Canada's expected role.</p> <p>Transport Canada also provided a summary of the most common Acts that have applied to projects in an Environmental Assessment context.</p> |
| 6.1  | May 2, 2022          | Environment and Climate Change Canada<br><i>Contact: Wes Plant</i>   | Dillon representative sent Project letter and Notice of Commencement via email.  | N/A              | N/A   |
| 7.1  | May 2, 2022          | Fisheries and Oceans Canada (DFO)<br><i>Contact: Fish and Fish Habitat Protection Program</i>                        | Dillon representative sent Project letter and Notice of Commencement via email.  | May 2, 2022      | Automatic reply stating that message was received and that a response would be provided as soon as possible.  |
| 7.2  | May 2, 2022          | DFO<br><i>Contact: Kyle Mataya</i>   | DFO representative responded stating that the Department reviews projects that are conducted in or near waterbodies that support fish along with project proposals that impact Species at Risk. DFO representative stated that Dillon representative should visit the DFO website (link provided in email) for further information to determine if the Project requires a Request for Review Form to be submitted. | N/A              | N/A   |
| <b>PROVINCIAL AGENCIES AND ELECTED OFFICIALS</b> |                      |  |  |                  |   |
| 8.1  | May 2, 2022          | Member of Provincial Parliament<br>Hastings – Lennox and Addington<br><i>Contacts: Daryl Kramp, Denise Grey</i>      | Enbridge representative provided the Notice of Commencement via email.   | N/A              | N/A   |
| 9.1  | May 2, 2022          | Ministry of Municipal Affairs and Housing (MMAH)<br><i>Contact: Erick Boyd</i>                                       | Dillon representative sent Project letter and Notice of Commencement via email.  | N/A              | N/A   |
| 10.1   | May 2, 2022          | Ministry of Northern Development, Mines, Natural Resources and Forestry (NDMNRF)<br><i>Contact: Catherine Warren</i> | Dillon representative sent Project letter and Notice of Commencement via email.  | N/A              | N/A   |

| Line Item | Date of Consultation | Name of Agency and/or Contact   | Description of Consultation Activity  | Date of Response | Response and Issue Resolution (if applicable)  |
|-----------|----------------------|---|---|------------------|--|
| 11.1      | May 2, 2022          | Ministry of Energy (MOE)<br><i>Contact: Andrea Pastori</i>  | Dillon representative sent Project letter and Notice of Commencement via email. | N/A              | N/A  |
| 12.1      | May 2, 2022          | Ministry of Environment, Conservation and Parks (MECP)<br><i>Contacts: Cathy Chisholm (Belleville Area Office); Trevor Dagilis and Roberto Sacilotto (Kingston District Office); Sarah Paul and Sandra Gram (Environmental Assessment &amp; Permissions Division); Kirsten Corrigan and Jennifer Moulton (Conservation &amp; Source Protection Branch); Paul Heeney (SAR Branch), SAR Branch Coordinator, and SAR Ontario (Permitting &amp; Compliance)</i> | Dillon representative sent Project letter and Notice of Commencement via email. | May 6, 2022      | MECP representative from Conservation and Source Protection Branch provided information on drinking water and natural gas pipelines for consideration in the Environmental Report.   |
| 13.1      | May 2, 2022          | Ministry of the Solicitor General<br><i>Contact: Robert Greene</i>  | Dillon representative sent Project letter and Notice of Commencement via email. | N/A              | N/A  |
| 14.1      | May 2, 2022          | Ministry of Agriculture, Food and Rural Affairs (OMAFRA)<br><i>Contacts: EA Notices, Jocelyn Beatty</i>   | Dillon representative sent Project letter and Notice of Commencement via email. | N/A              | N/A  |
| 15.1      | May 2, 2022          | Ministry of Heritage, Sport, Tourism and Culture Industries (MHSTCI)<br><i>Contact: Jack Mallon</i>   | Dillon representative sent Project letter and Notice of Commencement via email. | June 6, 2022     | MHSTCI representative provided a letter of advice regarding the proposed Project.  |
| 15.2      | June 7, 2022         | MHSTCI<br><i>Contacts: Jack Mallon, Karla Barboza, and Zora Crnojacki (OEB)</i>   | Dillon representative thanked MHSTCI representative for the letter of advice.   | N/A              | N/A  |
| 16.1      | May 2, 2022          | Ministry of Transportation (MTO)<br><i>Contact: Alexandre Gitkow</i>  | Dillon representative sent Project letter and Notice of Commencement via email. | May 10, 2022     | <p>MTO representative provided a letter of comment regarding the Project. The letter noted that the proposed Project falls mostly outside MTO jurisdiction and/or property, with the exception of the following two areas that will require permits:</p> <ul style="list-style-type: none"> <li>• The area at the intersection of York Road and Highway 49, in the northwest corner, where Enbridge Gas plans to connect and rebuild the station;</li> <li>• At the corner of Highway 49 and Lower Slash Road where it looks like Enbridge Gas will connect to an existing pipe that runs parallel to the Highway.</li> </ul> <p>The letter concluded that if the project scope or route change, that MTO would like the chance to review and comment again.</p> |



| Line Item   | Date of Consultation | Name of Agency and/or Contact  | Description of Consultation Activity   | Date of Response | Response and Issue Resolution (if applicable)   |
|---|----------------------|--|--|------------------|---|
| 16.2  | May 12, 2022         | MTO<br><i>Contacts: Alexandre Gitkow, Kate Green, Prabin Sharma, Muhammed Waseem, Darren Cizmar, Brenda Johnston, Amanda Rodek</i> | Dillon representative thanked MTO representative for their letter and comments on the Project. Dillon representative noted that Enbridge Gas understands the need for MTO permits for Project work around Highway 49 and that someone from Enbridge Gas will be in touch once the detailed designs are developed to obtain the necessary permits for Project construction in these areas.  | N/A              | N/A   |
| 17.1  | May 2, 2022          | Quinte Conservation<br><i>Contact: Sam Carney</i>  | Dillon representative sent Project letter and Notice of Commencement via email.  | N/A              | N/A   |
| 18.1  | May 2, 2022          | Hydro One Networks Inc.<br><i>Contact: Secondary Land Use Program</i>  | Dillon representative sent Project letter and Notice of Commencement via email.  | N/A              | N/A   |
| <b>ONTARIO PIPELINE COORDINATING COMMITTEE (OPCC)</b> |                      |  |  |                  |   |
| 19.1  | May 2, 2022          | OPCC –OEB Representative<br><i>Contact: Zora Cmojacki</i>  | Dillon representative sent Project letter and Notice of Commencement via email.  | N/A              | N/A   |
| 20.1  | May 2, 2022          | OPCC – OMAFRA Representative<br><i>Contact: Helma Geerts</i>   | Dillon representative sent Project letter and Notice of Commencement via email.  | N/A              | N/A   |
| 21.1  | May 2, 2022          | OPCC – MECP Representative<br><i>Contacts: Katy Potter, Jon Orpana</i>   | Dillon representative sent Project letter and Notice of Commencement via email.  | May 2, 2022      | OPCC MECP representative (Katy Potter) forwarded Dillon representative's email to a different MECP representative (Jon Orpana) who responded to the notice requesting shape files so that their GIS Officer could put together a series of maps for the preliminary preferred route. MECP representative noted that they use the maps to conduct an internal preliminary review for the District Office, SAR Branch, and Source Protection staff. |
| 21.2  | May 2, 2022          | OPCC – MECP Representative<br><i>Contact: Jon Orpana</i>   | MECP representative called Dillon representative inquiring about the regulatory process of the Project, given its location on federal lands, and asked if any part of the Project was outside the Tyendinaga Mohawk Territory. Dillon representative told MECP representative that the OEB process still applies and there are portions of the Project in Shannonville, outside the federal lands of the Reserve. Dillon representative noted that shape files would be provided soon. | May 2, 2022      | Dillon representative emailed MECP representative thanking them for reaching out and provided the shape files for the Project pipeline routing and station location.  |
| 21.3  | May 2, 2022          | OPCC – MECP Representative<br><i>Contact: Jon Orpana</i>   | MECP representative thanked Dillon representative for their quick reply.   | N/A              | N/A   |
| 22.1  | May 2, 2022          | OPCC – Technical Standards and Safety Authority (TSSA) Representative<br><i>Contact: Kourosh Manouchehri</i>                       | Dillon representative sent Project letter and Notice of Commencement via email.  | N/A              | N/A   |
| 23.1  | May 2, 2022          | OPCC – MMAH Representative<br>Central Municipal Services Office<br><i>Contact: Maya Harris</i>                                     | Dillon representative sent Project letter and Notice of Commencement via email.  | N/A              | N/A   |

| Line Item                                       | Date of Consultation | Name of Agency and/or Contact   | Description of Consultation Activity  | Date of Response | Response and Issue Resolution (if applicable)  |
|---|----------------------|---|---|------------------|--|
| 24.1  | May 2, 2022          | OPCC – MMAH Representative<br>Municipal Services Office – North<br><i>Contact: Bridget Schulte-Hostedde</i>   | Dillon representative sent Project letter and Notice of Commencement via email.   | N/A              | N/A  |
| 25.1  | May 2, 2022          | OPCC – MMAH Representative<br>Eastern Municipal Services Office<br><i>Contact: Mike Elms</i>  | Dillon representative sent Project letter and Notice of Commencement via email.   | N/A              | N/A  |
| 26.1  | May 2, 2022          | OPCC – MOE Representative<br><i>Contact: Jonathon Wilkinson</i>   | Dillon representative sent Project letter and Notice of Commencement via email.   | May 2, 2022      | Auto-reply message stating the MOE representative is no longer with the Ministry and to contact the Indigenous Energy Policy Manager (Amy Gibson). |
| 26.2  | May 2, 2022          | OPCC – MOE Representative<br><i>Contact: Amy Gibson</i>   | Dillon representative sent Project letter and Notice of Commencement via email.   | N/A              | N/A  |
| 27.1  | May 2, 2022          | OPCC – MHSTCI Representative<br><i>Contact: Karla Barboza</i>   | Dillon representative sent Project letter and Notice of Commencement via email.   | N/A              | N/A  |
| 28.1  | May 2, 2022          | OPCC – NDMNRF Representative<br><i>Contact: Keith Johnston</i>  | Dillon representative sent Project letter and Notice of Commencement via email.   | N/A              | N/A  |
| 29.1  | May 2, 2022          | OPCC – Infrastructure Ontario Representative<br><i>Contact: Cory Ostrowka</i>   | Dillon representative sent Project letter and Notice of Commencement via email.   | N/A              | N/A  |
| 30.1  | May 2, 2022          | OPCC – MTO Representative<br><i>Contacts: Tony DiFabio, Amanda Rodek</i>  | Dillon representative sent Project letter and Notice of Commencement via email.   | May 24, 2022     | MTO representative responded with letter from MTO East Region (Alexandre Gitkow) dated May 10, 2022.   |
| 30.2  | May 26, 2022         | OPCC – MTO Representative<br><i>Contact: Amanda Rodek</i>   | Dillon representative thanked MTO representative for their response on behalf of MTO OPCC representative Tony DiFabio, noting they had received the letter from MTO East Region on May 10.  | N/A              | N/A  |
| <b>MUNICIPAL AGENCIES AND ELECTED OFFICIALS</b> |                      |   |   |                  |  |
| 31.1  | May 2, 2022          | Hastings County and Township of Tyendinaga<br><i>Contacts: Rick Phillips (Hastings County Warden/Township of Tyendinaga Reeve), Carla Preston (Tyendinaga Township CAO), and Township Council</i> | Enbridge representative met with Hastings County Warden/Township of Tyendinaga Reeve (Rick Phillips), as well as the CAO (Carla Preston) and Council members of the Township of Tyendinaga at the delegation on Monday, May 2 and provided information on the proposed Project. | N/A              | N/A  |
| 31.2  | May 4, 2022          | Hastings County and Township of Tyendinaga<br><i>Contacts: Rick Phillips (Hastings County Warden/Township of Tyendinaga Reeve), Carla Preston (Tyendinaga Township CAO), and Township Council</i> | Enbridge representative followed up with the Hastings County and Township of Tyendinaga municipal officials thanking them for the opportunity to participate in the delegation on May 2 and provided the Project letter and Notice of Commencement as an attachment.            | N/A              | N/A  |
| 32.1  | May 2, 2022          | Hastings County – Chief Administrative Officer (CAO)<br><i>Contact: Jim Pine</i>  | Dillon representative sent Project letter and Notice of Commencement via email.   | N/A              | N/A  |



| Line Item | Date of Consultation | Name of Agency and/or Contact  | Description of Consultation Activity  | Date of Response | Response and Issue Resolution (if applicable)   |
|-----------|----------------------|--|---|------------------|---|
| 33.1      | May 2, 2022          | Hastings County – Planning and Land Development<br><i>Contact: Justin Harrow</i>                 | Dillon representative sent Project letter and Notice of Commencement via email.   | N/A              | N/A   |
| 34.1      | May 3, 2022          | Hastings County – Facilities and Capital Infrastructure Management<br><i>Contact: Jim Duffin</i> | Hastings County Director of Facilities emailed the Project inbox acknowledging receipt of the Notice of Commencement and stated that the County has no concerns with the proposed route. The representative noted that open cuts across County Roads will not be permitted. | May 4, 2022      | Dillon representative thanked Hastings County representative for their comments on behalf of the County and acknowledged the requirement for crossing County Roads. |
| 35.1      | May 2, 2022          | Township of Tyendinaga –CAO<br><i>Contact: Carla Preston</i>                                     | Dillon representative sent Project letter and Notice of Commencement via email.   | N/A              | N/A   |
| 36.1      | May 2, 2022          | Township of Tyendinaga – Planning and Development<br><i>Contact: Yvonne Murphy</i>               | Dillon representative sent Project letter and Notice of Commencement via email.   | N/A              | N/A   |
| 37.1      | May 2, 2022          | Township of Tyendinaga – Fire Department<br><i>Contact: James Oliver</i>                         | Dillon representative sent Project letter and Notice of Commencement via email.   | N/A              | N/A   |
| 38.1      | May 2, 2022          | Mohawk Fire Department<br><i>Contact: Scott Maracle</i>  | Dillon representative sent Project letter and Notice of Commencement via email.   | N/A              | N/A   |



# Interest Group Correspondence

| Line Item | Date of Consultation | Name of Group and/or Contact   | Description of Consultation Activity                         | Date of Response | Response and Issue Resolution (if applicable) |
|-----------|----------------------|--|--|------------------|---|
| 39.1      | May 2, 2022          | Quinte Mohawk School<br><i>Contact: Jennifer Maracle-Westgate</i>  | Dillon representative sent Notice of Commencement via email. | N/A              | N/A   |
| 40.1      | May 2, 2022          | Hastings and Prince Edward County School Board<br><i>Contacts: Katherine MacIver (Director) and Tyendinaga Public School</i> | Dillon representative sent Notice of Commencement via email. | N/A              | N/A   |
| 41.1      | May 2, 2022          | First Nations Technical Institute<br><i>Contact: Suzanne Brant</i>   | Dillon representative sent Notice of Commencement via email. | N/A              | N/A   |
| 42.1      | May 2, 2022          | Kanhiote Library<br><i>Contact: Brandy Brant</i>   | Dillon representative sent Notice of Commencement via email. | N/A              | N/A   |
| 43.1      | May 2, 2022          | Mohawk Bus Lines<br><i>Contact: Mike Hill</i>  | Dillon representative sent Notice of Commencement via email. | N/A              | N/A   |
| 44.1      | May 2, 2022          | Ontario Federation of Agriculture<br><i>Contact: Ian Nokes</i>   | Dillon representative sent Notice of Commencement via email. | N/A              | N/A   |





## Public Correspondence

| Line Item | Date of Consultation | Name of Contact  | Description of Consultation Activity  | Date of Response | Response and Issue Resolution (if applicable)  |
|-----------|----------------------|--|---|------------------|--|
| 45.1      | May 19, 2022         | ██████████<br>Local Resident - Township of Tyendinaga                              | Resident in Project area called Dillon representative to inquire if people he had seen surveying near his property were associated with Enbridge Gas and the proposed Project. Dillon representative responded that it was unlikely associated with Enbridge Gas, since the Resident's property is outside the planned pipeline construction area. Dillon representative suggested that the Resident check with the Township to determine if it was related to Township work and that they would also look into it internally with Enbridge Gas.  | May 19, 2022     | Enbridge Gas representative called and left a voicemail for the Resident to discuss their concerns.  |
| 45.2      | May 20, 2022         | ██████████<br>Local Resident - Township of Tyendinaga                              | Dillon representative followed up with an email to the Resident, thanking them for their call on May 19 and letting them know that they had passed their concerns along to the Enbridge Gas environmental advisor for the Project. Dillon representative noted that the Enbridge Gas representative had told them they had called the Resident and left a voicemail. Dillon representative asked if the Resident had been able to speak to someone at the Township and noted that Enbridge Gas typically doesn't look into these things on their end until the municipality has been contacted first. | May 20, 2022     | Enbridge Gas representative responded to Dillon representative's email with an update noting that they had ended up speaking to the Resident on May 19 and were on their way to determining if Enbridge Gas was involved in any work near the Resident's property.   |
| 45.3      | May 20, 2022         | ██████████<br>Local Resident - Township of Tyendinaga                              | Resident responded stating that they had been able to determine that it was not Enbridge Gas working near their property.   | N/A              | N/A  |
| 46.1      | May 20, 2022         | ██████████<br>Local Resident & Band Member - Tyendinaga Mohawk Territory           | Resident submitted a comment form on the Virtual Information Session website, identifying themselves as a band member. Resident noted that they own property near the pipeline route and that Enbridge Gas needs to expand the pipeline across the river to deliver services to the countless businesses and residents along Highway 2. Resident noted that they are supportive of the Project.   | N/A              | <i>Note: Resident did not provide contact information for follow-up.</i>   |
| 47.1      | May 22, 2022         | ██████████<br>Member of the Public (outside Study Area)                            | The individual submitted a comment form on the Virtual Information Session website stating that they do not live near the Project route but that they would like to see natural gas infrastructure expanded to their area. They noted they were supportive of the Project and consider access to natural gas a human rights issue.  | June 9, 2022     | Dillon representative followed up via email to acknowledge the individual's comments and thank them for participating in the Virtual Information Session. Dillon representative noted that the individual can stay up-to-date on the Project via the Enbridge Gas Project website and provided a link.   |
| 48.1      | May 29, 2022         | ████████████████████<br>Local Resident & Band Member - Tyendinaga Mohawk Territory | Resident submitted a comment form on the Virtual Information Session website, identifying themselves as a Treaty 3 1/2 Mohawk. Resident stated they have no opinion of the Project at this time and noted that the Virtual Information Session did not provide sufficient information on the Project and the OEB and Environmental Assessment process.  | June 9, 2022     | Dillon representative followed up via email to acknowledge the Resident's comments and thank them for participating in the Virtual Information Session. Dillon representative inquired whether there was any further information they could provide in regards to the Project and OEB/Environmental Assessment Process. Dillon representative noted that the Resident can stay up-to-date on the Project via the Enbridge Gas Project website and provided a link. |
| 49.1      | June 1, 2022         | ██████████<br>Local Resident - Tyendinaga Mohawk Territory                         | Dillon representative followed up with Resident who had attended the in-person Open House on May 30 to provide a PDF copy of the storyboard panels that were on display.  | N/A              | N/A  |

| Line Item | Date of Consultation | Name of Contact                              | Description of Consultation Activity  | Date of Response | Response and Issue Resolution (if applicable) |
|-----------|----------------------|--|---|------------------|---|
| 50.1      | June 21, 2022        | Local Resident - Tyendinaga Mohawk Territory | Dillon representative followed up with Resident who had attended the in-person Open House on May 30, thanking them for their input on the Project and provided a response to a question they had posed about the applicability of Enbridge Gas' energy efficiency rebates on the Tyendinaga Mohawk Territory. | N/A              | N/A   |
| 51.1      | June 21, 2022        | Local Resident - Tyendinaga Mohawk Territory | Dillon representative followed up with Resident who had attended the in-person Open House on May 30, thanking them for their participation and provided responses to questions they had posed about their eligibility for gas service at their residence and the Enbridge Gas rates.                          | N/A              | N/A   |





# Appendix G

## *Agency Letters*



May 2, 2022

**RE: Enbridge Gas Inc.  
Proposed Mohawks of the Bay of Quinte (Tyendinaga First Nation) and  
Shannonville Community System Expansion Project  
Notice of Study Commencement and Virtual Information Session**

To whom it may concern,

Enbridge Gas Inc. (Enbridge Gas) has retained Dillon Consulting Limited to undertake an environmental study for the proposed Mohawks of the Bay of Quinte and Shannonville Community System Expansion Project located within the Tyendinaga Mohawk Territory and Shannonville, Ontario.

Enbridge Gas has identified a preliminary preferred route that will tie-in to an existing 4-inch polyethylene pipeline near the intersection of Wyman Road and York Road in the Tyendinaga Mohawk Territory. The preliminary preferred route has been developed for purposes of an assessment of potential environmental and socio-economic impacts and does not represent the final project scope/design that will provide access to natural gas to end-use customers.

The project is planned to be installed mainly within the existing municipal right-of-way with additional temporary working space potentially required for lay-down, storage and excess soils management. In addition, a station rebuild is required to accommodate additional customers onto the distribution system and will be constructed at the intersection of York Road and Highway 49, in the northwest corner.

The study is being conducted in accordance with the Ontario Energy Board (OEB) *Environmental Guidelines for the Location, Construction, and Operation of Hydrocarbon Pipelines and Facilities in Ontario, 7th Edition*. Once the study is complete, Enbridge Gas will apply to the OEB for approval to construct the project. If approved, construction may begin in spring 2023.

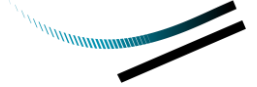
Stakeholder involvement will play a key role in the project. In order to undertake a successful consultation program, we have developed a mailing list of government agencies (federal, provincial, and municipal), Indigenous communities, and potential interest groups that may have an interest in the study. Enbridge Gas will also be hosting a virtual information session as part of the study. Details about this session are provided in the attached Notice of Commencement.

As part of the initial phase of the study, we are collecting information on socio economic, natural environment, and archaeological or heritage resource features along

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Kitchener, Ontario  
Canada  
N2H 5G5  
Telephone  
519.571.9833  
Fax  
519.571.7424

Dillon Consulting  
Limited





the potential route. Examples of data being collected include information on archaeological and heritage resources, community facilities and infrastructure, terrestrial and aquatic vegetation and wildlife, as well as water, sewage, industrial, and commercial utilities.

**We are interested in hearing from you** with any comments that you or your organization may have regarding this project. We are also requesting any information relating to natural and/or human environments along the potential routes that may fall within your mandate.

Please send this information to my attention at the above address or by email to [MBQcommunityEA@dillon.ca](mailto:MBQcommunityEA@dillon.ca) by **June 15, 2022**. If you require any further information at this time, please do not hesitate to contact me.

If there is a more appropriate contact at your organization who should receive this letter, please kindly forward the letter at your discretion and notify us as we will update our stakeholder consultation list.

Sincerely,

**DILLON CONSULTING LIMITED**

Tristan Lefler, M.Sc.  
Environmental Assessment Project Manager  
Tel: 519-571-9833 ext. 3138

Attachment: Notice of Study Commencement and Virtual Information Session

# PROPOSED MOHAWKS OF THE BAY OF QUINTE (TYENDINAGA FIRST NATION) AND SHANNONVILLE COMMUNITY SYSTEM EXPANSION PROJECT

## NOTICE OF STUDY COMMENCEMENT AND VIRTUAL INFORMATION SESSION ENBRIDGE GAS INC.

### **The Study**

Enbridge Gas Inc. (Enbridge Gas) has retained Dillon Consulting Limited to undertake an environmental study for the proposed Mohawks of the Bay of Quinte (MBQ) and Shannonville Community System Expansion Project located within the Tyendinaga Mohawk Territory and Shannonville, Ontario.

Enbridge Gas has identified a preliminary preferred route that will tie-in to an existing 4-inch polyethylene pipeline near the intersection of Wyman Road and York Road in the Tyendinaga Mohawk Territory. The preliminary preferred route has been developed for purposes of an assessment of potential environmental and socio-economic impacts and does not represent the final project scope/design that will provide access to natural gas to end-use customers.

The project is planned to be installed mainly within the existing municipal right-of-way with additional temporary working space potentially required for lay-down, storage and excess soils management. In addition, a station rebuild is required to accommodate additional customers onto the distribution system and will be constructed at the intersection of York Road and Highway 49, in the northwest corner (see map).

Once the study is complete, Enbridge Gas will apply to the Ontario Energy Board (OEB) for approval to construct the project. If approved, construction may begin in spring 2023.

### **The Process**

The study is being conducted in accordance with the OEB's *Environmental Guidelines for the Location, Construction, and Operation of Hydrocarbon Pipelines and Facilities in Ontario*. The study will review the need and justification for the project, describe the natural and socio-economic environment, evaluate the project from a social and environmental perspective, outline safety measures, and describe appropriate measures for impact mitigation and monitoring.

### **Invitation to the Community**

Stakeholder and Indigenous consultation is a key component of this study. Members of the general public, landowners, government agencies, current customers, Indigenous communities, and other interested parties are invited to participate in the study. We are hosting a Virtual Information Session to provide you with an opportunity to review the project and provide input.

**Virtual Information Session Website:** [www.MBQvirtualinfosession.ca](http://www.MBQvirtualinfosession.ca)

**Active Dates:** Monday, May 16, 2022 to Sunday, May 29, 2022

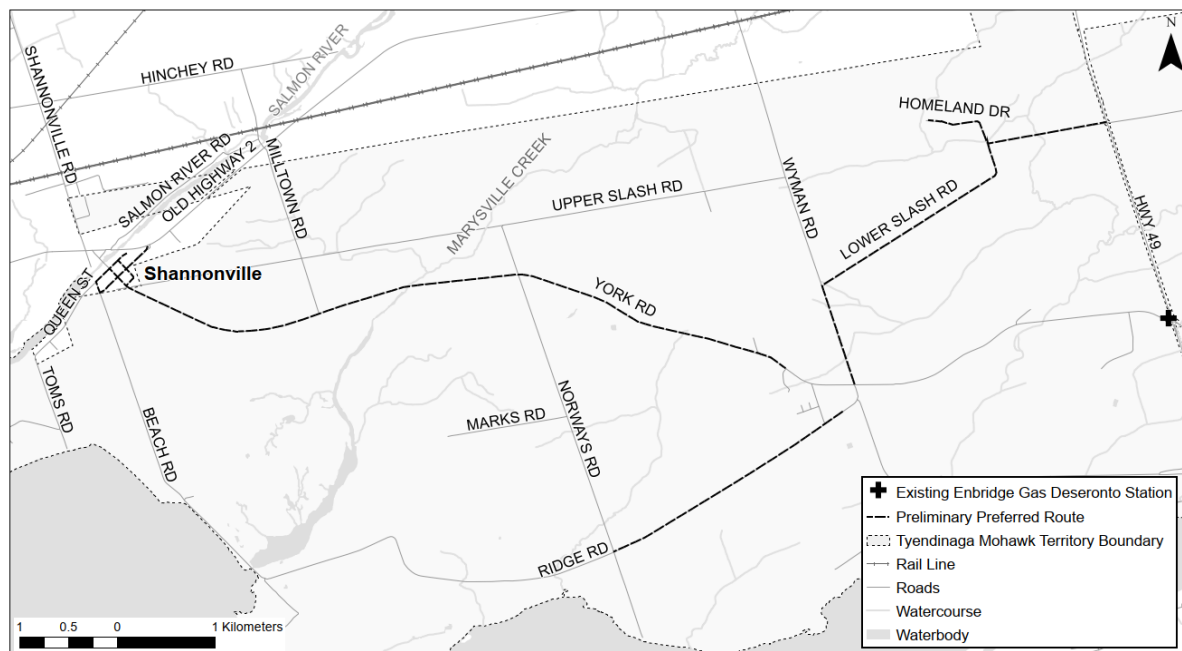
Your input will be used to confirm the preferred route and create mitigation plans to be implemented during construction. If you are interested in participating, or would like to provide comments, please visit the Virtual Information Session website or contact the project representative using the provided project contact information. The last day to submit comments for consideration in the environmental study is **June 15, 2022**.

**Enbridge Gas Project Website:** [www.enbridgegas.com/MBQCommunityEA](http://www.enbridgegas.com/MBQCommunityEA)

**Tristan Lefler**  
Environmental Assessment  
Project Manager  
Dillon Consulting Limited  
Suite 200 – 51 Breithaupt St.  
Kitchener, ON N2H 5G5

**Alissa Lee**  
Environmental Assessment &  
Consultation Lead  
Dillon Consulting Limited  
Suite 101 - 177 Colonnade Rd.  
South, Ottawa, ON K2E 7J4

**Project Contact Info:**  
[MBQcommunityEA@dillon.ca](mailto:MBQcommunityEA@dillon.ca)  
613-745-2213 ext. 3024







May 2, 2022

**RE: Enbridge Gas Inc.  
Proposed Mohawks of the Bay of Quinte (Tyendinaga First Nation) and  
Shannonville Community System Expansion Project  
Notice of Study Commencement and Virtual Information Session**

Dear Mr. McCoy,

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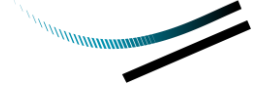
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Stakeholder involvement will play a key role in the project. In order to undertake a successful consultation program, we have developed a mailing list of government agencies (federal, provincial, and municipal), Indigenous communities, and potential interest groups that may have an interest in the study. Enbridge Gas will also be hosting a virtual information session as part of the study. Details about this session are provided in the attached Notice of Commencement.

As part of the initial phase of the study, we are collecting information on socio-economic, natural environment, and archaeological or heritage resource features

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along the potential route. Examples of data being collected include information on archaeological and heritage resources, community facilities and infrastructure, terrestrial and aquatic vegetation and wildlife, as well as water, sewage, industrial, and commercial utilities.

**We are interested in hearing from you** with any comments that you or your organization may have regarding this project. We are also requesting any information relating to natural and/or human environments along the potential routes that may fall within your mandate and, in particular, whether the following are within, or in the vicinity of, the potential routes:

- environmentally sensitive areas;
- floodplains; and,
- distinctive natural features that would warrant protection.

Please send this information to my attention at the above address or by email to [MBQcommunityEA@dillon.ca](mailto:MBQcommunityEA@dillon.ca) by **June 15, 2022**. If you require any further information at this time, please do not hesitate to contact me.

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Sincerely,

**DILLON CONSULTING LIMITED**

Tristan Lefler, M.Sc.  
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Tel: 519-571-9833 ext. 3138

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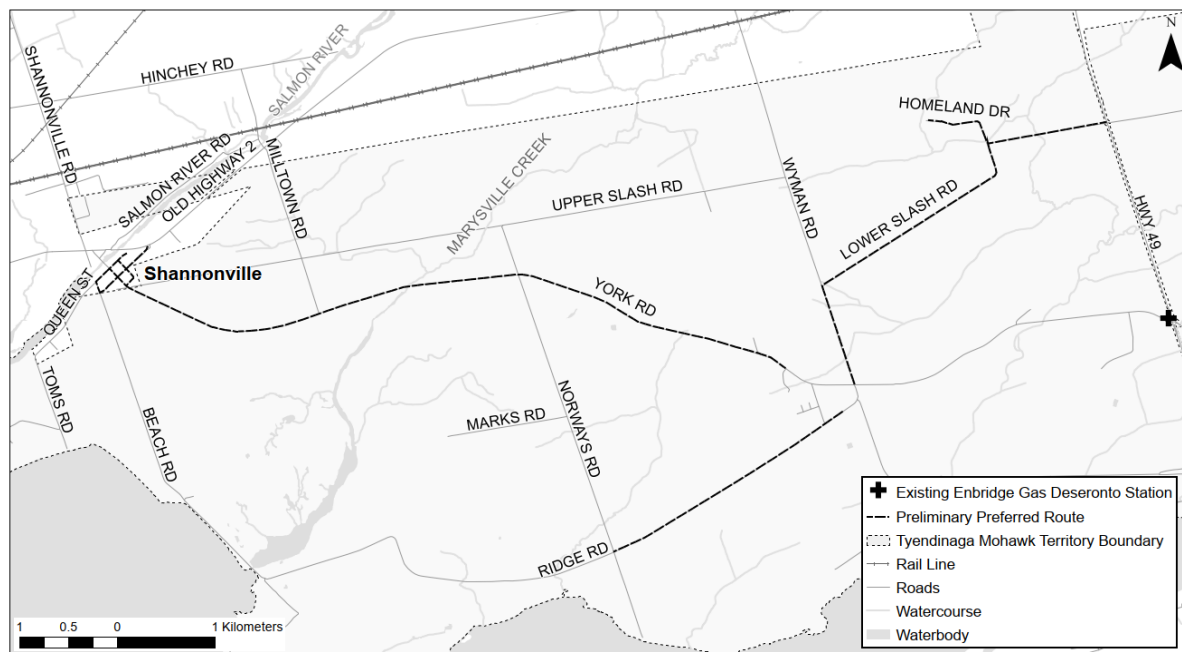
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**Tristan Lefler**  
Environmental Assessment  
Project Manager  
Dillon Consulting Limited  
Suite 200 – 51 Breithaupt St.  
Kitchener, ON N2H 5G5

**Alissa Lee**  
Environmental Assessment &  
Consultation Lead  
Dillon Consulting Limited  
Suite 101 - 177 Colonnade Rd.  
South, Ottawa, ON K2E 7J4

**Project Contact Info:**  
[MBQcommunityEA@dillon.ca](mailto:MBQcommunityEA@dillon.ca)  
613-745-2213 ext. 3024





May 2, 2022

**RE: Enbridge Gas Inc.  
Proposed Mohawks of the Bay of Quinte (Tyendinaga First Nation) and  
Shannonville Community System Expansion Project  
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Dear Ms. Warren,

Enbridge Gas Inc. (Enbridge Gas) has retained Dillon Consulting Limited to undertake an environmental study for the proposed Mohawks of the Bay of Quinte and Shannonville Community System Expansion Project located within the Tyendinaga Mohawk Territory and Shannonville, Ontario.

Enbridge Gas has identified a preliminary preferred route that will tie-in to an existing 4-inch polyethylene pipeline near the intersection of Wyman Road and York Road in the Tyendinaga Mohawk Territory. The preliminary preferred route has been developed for purposes of an assessment of potential environmental and socio-economic impacts and does not represent the final project scope/design that will provide access to natural gas to end-use customers.

The project is planned to be installed mainly within the existing municipal right-of-way with additional temporary working space potentially required for lay-down, storage and excess soils management. In addition, a station rebuild is required to accommodate additional customers onto the distribution system and will be constructed at the intersection of York Road and Highway 49, in the northwest corner.

The study is being conducted in accordance with the Ontario Energy Board (OEB) *Environmental Guidelines for the Location, Construction, and Operation of Hydrocarbon Pipelines and Facilities in Ontario, 7th Edition*. Once the study is complete, Enbridge Gas will apply to the OEB for approval to construct the project. If approved, construction may begin in spring 2023.

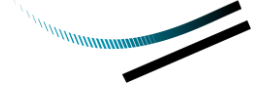
Stakeholder involvement will play a key role in the project. In order to undertake a successful consultation program, we have developed a mailing list of government agencies (federal, provincial, and municipal), Indigenous communities, and potential interest groups that may have an interest in the study. Enbridge Gas will also be hosting a virtual information session as part of the study. Details about this session are provided in the attached Notice of Commencement.

As part of the initial phase of the study, we are collecting information on socio economic, natural environment, and archaeological or heritage resource features along

51 Breithaupt Street  
Suite 200  
Kitchener, Ontario  
Canada  
N2H 5G5  
Telephone  
519.571.9833  
Fax  
519.571.7424

Dillon Consulting  
Limited





the potential route. Examples of data being collected include information on archaeological and heritage resources, community facilities and infrastructure, terrestrial and aquatic vegetation and wildlife, as well as water, sewage, industrial, and commercial utilities.

**We are interested in hearing from you** with any comments that you or your organization may have regarding this project. We are also requesting any information relating to natural and/or human environments along the potential routes that may fall within your mandate and, in particular, whether any of the following are within, or in the vicinity of, the potential routes:

- wetlands;
- woodlands;
- environmentally sensitive areas;
- rare (S1-S3) species occurrences;
- designated areas of wildlife habitat;
- areas of natural and scientific interest; and,
- any distinctive natural features that would warrant protection.

Please send this information to my attention at the above address or by email to [MBQcommunityEA@dillon.ca](mailto:MBQcommunityEA@dillon.ca) by **June 15, 2022**. If you require any further information at this time, please do not hesitate to contact me.

If there is a more appropriate contact at your organization who should receive this letter, please kindly forward the letter at your discretion and notify us as we will update our stakeholder consultation list.

Sincerely,

**DILLON CONSULTING LIMITED**

Tristan Lefler, M.Sc.  
Environmental Assessment Project Manager  
Tel: 519-571-9833 ext. 3138

Attachment: Notice of Study Commencement and Virtual Information Session

# PROPOSED MOHAWKS OF THE BAY OF QUINTE (TYENDINAGA FIRST NATION) AND SHANNONVILLE COMMUNITY SYSTEM EXPANSION PROJECT

## NOTICE OF STUDY COMMENCEMENT AND VIRTUAL INFORMATION SESSION ENBRIDGE GAS INC.

### **The Study**

Enbridge Gas Inc. (Enbridge Gas) has retained Dillon Consulting Limited to undertake an environmental study for the proposed Mohawks of the Bay of Quinte (MBQ) and Shannonville Community System Expansion Project located within the Tyendinaga Mohawk Territory and Shannonville, Ontario.

Enbridge Gas has identified a preliminary preferred route that will tie-in to an existing 4-inch polyethylene pipeline near the intersection of Wyman Road and York Road in the Tyendinaga Mohawk Territory. The preliminary preferred route has been developed for purposes of an assessment of potential environmental and socio-economic impacts and does not represent the final project scope/design that will provide access to natural gas to end-use customers.

The project is planned to be installed mainly within the existing municipal right-of-way with additional temporary working space potentially required for lay-down, storage and excess soils management. In addition, a station rebuild is required to accommodate additional customers onto the distribution system and will be constructed at the intersection of York Road and Highway 49, in the northwest corner (see map).

Once the study is complete, Enbridge Gas will apply to the Ontario Energy Board (OEB) for approval to construct the project. If approved, construction may begin in spring 2023.

### **The Process**

The study is being conducted in accordance with the OEB's *Environmental Guidelines for the Location, Construction, and Operation of Hydrocarbon Pipelines and Facilities in Ontario*. The study will review the need and justification for the project, describe the natural and socio-economic environment, evaluate the project from a social and environmental perspective, outline safety measures, and describe appropriate measures for impact mitigation and monitoring.

### **Invitation to the Community**

Stakeholder and Indigenous consultation is a key component of this study. Members of the general public, landowners, government agencies, current customers, Indigenous communities, and other interested parties are invited to participate in the study. We are hosting a Virtual Information Session to provide you with an opportunity to review the project and provide input.

**Virtual Information Session Website:** [www.MBQvirtualinfosession.ca](http://www.MBQvirtualinfosession.ca)

**Active Dates:** Monday, May 16, 2022 to Sunday, May 29, 2022

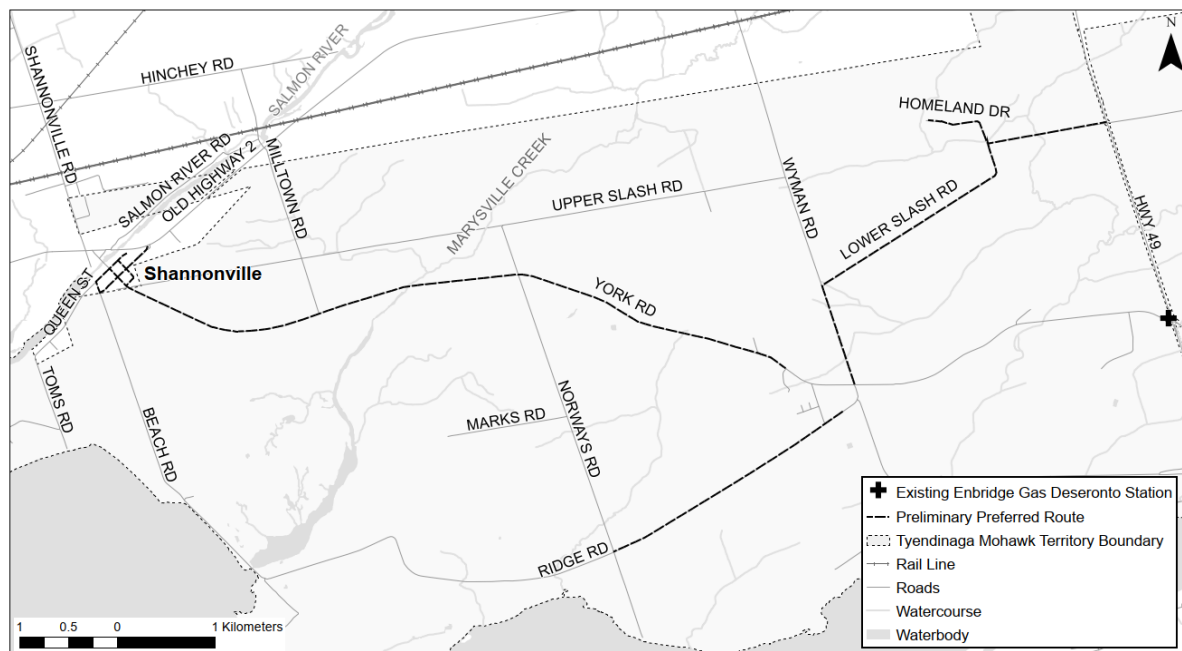
Your input will be used to confirm the preferred route and create mitigation plans to be implemented during construction. If you are interested in participating, or would like to provide comments, please visit the Virtual Information Session website or contact the project representative using the provided project contact information. The last day to submit comments for consideration in the environmental study is **June 15, 2022**.

**Enbridge Gas Project Website:** [www.enbridgegas.com/MBQCommunityEA](http://www.enbridgegas.com/MBQCommunityEA)

**Tristan Lefler**  
Environmental Assessment  
Project Manager  
Dillon Consulting Limited  
Suite 200 – 51 Breithaupt St.  
Kitchener, ON N2H 5G5

**Alissa Lee**  
Environmental Assessment &  
Consultation Lead  
Dillon Consulting Limited  
Suite 101 - 177 Colonnade Rd.  
South, Ottawa, ON K2E 7J4

**Project Contact Info:**  
[MBQcommunityEA@dillon.ca](mailto:MBQcommunityEA@dillon.ca)  
613-745-2213 ext. 3024





## Appendix H

### ***Virtual Information Session Presentation and Video Transcript***

# Proposed Mohawks of the Bay of Quinte and Shannonville Community Expansion Project

Virtual Information Session

May 16, 2022 – May 29, 2022





# Welcome!

This Virtual Information Session will be live for 2 weeks from Monday, May 16, 2022 – Sunday, May 29, 2022.



You can provide your input on the project by completing the questionnaire available on the Virtual Information Session website at [www.MBQvirtualinfosession.ca](http://www.MBQvirtualinfosession.ca). Please submit your comments by **June 15, 2022**.



After Sunday, May 29, 2022, this presentation, accompanying video transcript, and the questionnaire will be available for download on the Enbridge Gas website at [www.enbridgegas.com/MBQCommunityEA](http://www.enbridgegas.com/MBQCommunityEA).

# Enbridge Gas Commitment

Enbridge Gas provides safe and reliable delivery of natural gas to more than 3.8 million residential, commercial, and industrial customers across Ontario.



Enbridge Gas will carefully consider all input. They are committed to involving community members and will provide up-to-date information in an open, honest, and respectful manner.



Enbridge Gas is committed to environmental stewardship and conducts all of its operations in an environmentally responsible manner.





# Enbridge Gas Environment, Health and Safety Policies



Enbridge Gas is committed to protecting the health and safety of all individuals affected by our activities.

Enbridge Gas will provide a safe and healthy working environment and will not compromise the health and safety of any individual.

Our goal is to have no workplace incidents and to mitigate, to the extent feasible, impacts on the environment. To achieve this goal, Enbridge Gas will work with our stakeholders, peers, and others to promote responsible environmental practices and continuous improvement.



Enbridge Gas is committed to environmental protection and stewardship, and we recognize that pollution prevention, biodiversity, and resource conservation are key to a sustainable environment.

All employees are responsible and accountable for contributing to a safe working environment, for fostering safe working attitudes, and for operating in an environmentally responsible manner.

# Land Acknowledgement

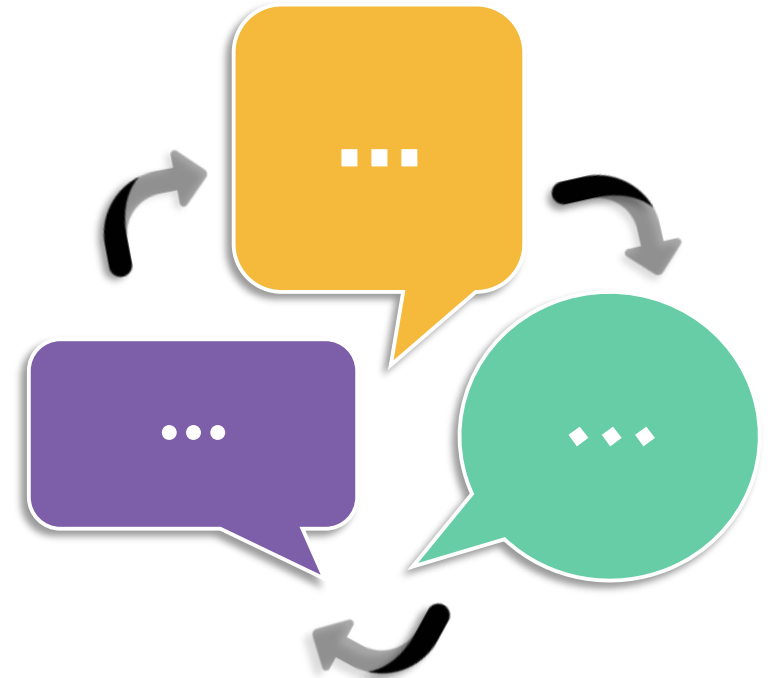


The project is located on the traditional lands of the Anishinaabeg (Ah-nish-in-a-beg), Haudenosaunee (Ho-den-no-show-nee), and Huron-Wendat peoples on lands connected with the Crawford Purchase of 1783 and the Simcoe Deed (Treaty 3½). Most recently, the land is home to the Mohawks of the Bay of Quinte within the Tyendinaga Mohawk Territory. This land continues to be home to diverse Indigenous peoples (e.g., First Nations and Métis) whom we recognize as contemporary stewards of the land and vital contributors of our society.



# Purpose of the Virtual Information Session

- ✓ Provide information on the project purpose and illustrate the proposed pipeline route
- ✓ Provide a safe alternative to an in-person meeting
- ✓ Inform landowners, Indigenous communities, municipalities, stakeholders, and regulatory authorities about the project and gather feedback about the assessment of the pipeline route
- ✓ Give everyone the chance to participate during the process of completing the Environmental Report, which will be included in the Ontario Energy Board application
- ✓ Provide an opportunity to identify any unknown constraints and review draft plans to mitigate impacts to the local community and the environment
- ✓ Create a space for you to ask questions and/or provide comments to Enbridge Gas or Dillon Consulting



# Consultation Approach



We are committed to a comprehensive consultation process and want to hear from you about this project.

Our consultation approach is:

- ✓ **Inclusive** – reaching out to all who may be interested or affected and providing opportunities to become informed and get involved.
- ✓ **Transparent** – providing access to information and clear explanations for decisions.
- ✓ **Accountable** – explaining how your input will be used in the decision-making process.

As an important part of the consultation process, we will work with all stakeholders to identify and resolve potential project-related issues.



# Enbridge Inc. Indigenous Peoples Policy

Enbridge Gas follows the Enbridge Inc. (Enbridge) Indigenous Peoples Policy.

Enbridge recognizes the diversity of Indigenous Peoples who live where they work and operate. They understand from history the destructive impacts on the social and economic wellbeing of Indigenous Peoples. Enbridge recognizes and realizes the importance of reconciliation between Indigenous communities and the broader society. Positive relationships with Indigenous Peoples, based on mutual respect and focused on achieving common goals, will create positive outcomes from Indigenous communities.

Enbridge commits to pursue sustainable relationships with Indigenous Nations and groups in proximity to where Enbridge conducts business. To achieve this, Enbridge will govern itself by the following principles.

Enbridge **recognizes** the legal and constitutional rights of Indigenous Peoples, and the importance of the relationships between Indigenous Peoples and their traditional lands and resources. They commit to working with Indigenous communities in a manner that recognizes and respects those legal and constitutional rights and the traditional lands and resources to which they apply. Enbridge commits to ensuring that Enbridge projects and operations are carried out in an environmentally responsible manner.

Enbridge **engages** in forthright and sincere consultation with Indigenous Peoples about their projects and operations through processes that seek to achieve early and meaningful engagement. Indigenous engagement helps define projects that may occur on lands traditionally occupied by Indigenous Peoples.

Enbridge **fosters** an understanding of the history and culture of Indigenous Peoples among their employees and contractors, in order to create better relationships between Enbridge and Indigenous communities.

The commitment is a shared responsibility involving Enbridge and its affiliates, employees and contractors. They will conduct business in a manner that reflects the above principles. Enbridge will provide ongoing leadership and resources to effectively implement the above principles, including the development of implementation strategies and specific action plans. Enbridge commits to periodically review this policy so that it remains relevant and respects Indigenous culture and varied traditions.



Enbridge **understands** the importance of the United Nations Declaration of the Rights of Indigenous Peoples in the context of existing Canadian law and the commitments that the government has made to protecting the rights of Indigenous Peoples.

Enbridge **commits** to working with Indigenous Peoples to achieve benefits for them resulting from Enbridge's projects and operations, including opportunities in training and education, employment, procurement, business development, and community development.

# Project Overview

Enbridge Gas has identified a preliminary preferred route that will tie-in to an existing 4-inch polyethylene pipeline near the intersection of Wyman Road and York Road in the Tyendinaga Mohawk Territory.

The distribution portion of the Project includes approximately 17 km of polyethylene pipeline ranging in diameter from 2 to 4 inches.

A station rebuild is required to accommodate additional customers onto the distribution system and will be constructed at the intersection of York Road and Highway 49, in the northwest corner.



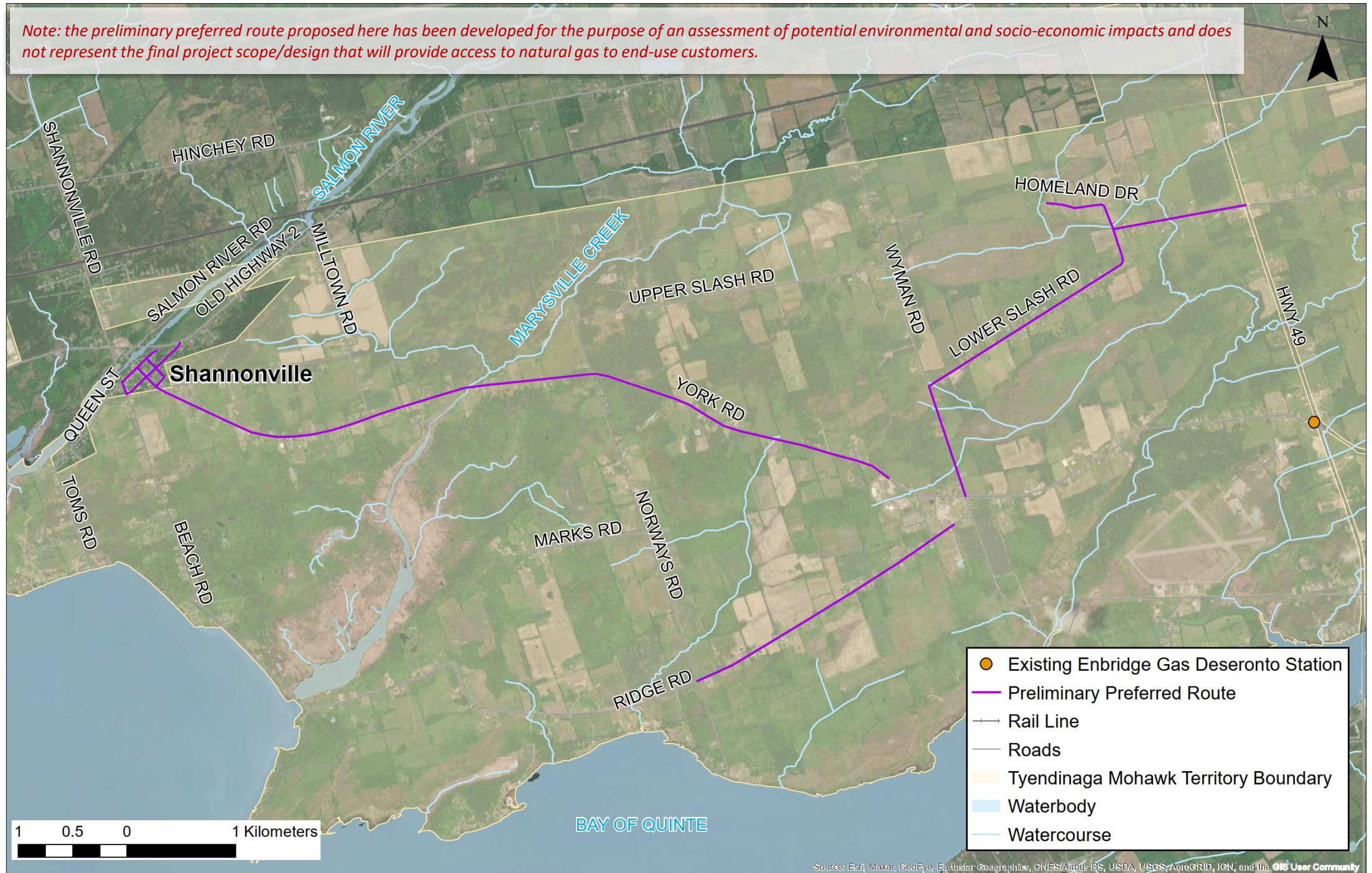
The pipeline will be installed mainly within the existing road allowance with additional temporary working space potentially required for lay-down, storage and excess soils management.



*See the project overview map on the next slide...*



Note: the preliminary preferred route proposed here has been developed for the purpose of an assessment of potential environmental and socio-economic impacts and does not represent the final project scope/design that will provide access to natural gas to end-use customers.



# Regulatory Framework

For the project to proceed, approval from the Ontario Energy Board (OEB) is required. The OEB requires that Enbridge Gas complete an environmental assessment and route selection study.



## Role of the Ontario Energy Board:

- ✓ Reviews the Environmental Report (including details of consultation) as part of the application, known as the “Leave-to-Construct” Application.
- ✓ Once the Leave-to-Construct Application is submitted to the OEB, any party with an interest in the project may apply to the OEB to become intervenors or interested parties.
- ✓ Provides a public forum during the review of the Leave-to-Construct Application for people to participate in the decision-making process.
- ✓ Determines whether a proposed pipeline is in the public interest.



# Environmental Study Process

As part of the planning process, Enbridge Gas has retained Dillon Consulting to undertake an Environmental Study for the project. The Study will fulfill the requirements of the OEB's *Environmental Guidelines for the Location, Construction, and Operation of Hydrocarbon Pipelines and Facilities in Ontario, 7th Edition*.

The Study will be conducted during the earliest phase of the planning process. As part of the Study, Enbridge Gas and Dillon Consulting will:

- ✓ Undertake engagement to understand the views of interested and potentially affected parties
- ✓ Consult and engage with Indigenous communities to understand interests and potential impacts
- ✓ Identify potential impacts of the project
- ✓ Develop environmental mitigation and protective measures to avoid or reduce potential impacts
- ✓ Develop an appropriate environmental inspection, monitoring, and follow-up program



# Determining the Preliminary Preferred Route

To determine the location and extent of the preliminary preferred route, Enbridge Gas considered constraints in the Study Area such as natural environment features, slope, topography, socio-economic features, including cultural heritage features, and landscapes. To mitigate impacts and constraints to these features, opportunities to follow existing linear infrastructure were identified.

The preliminary preferred route, as shown on the project map, follows the existing road allowances and avoids, to the extent possible, environmental and socio-economic features.

Community Expansion projects are based on information submitted by the communities requesting the service as well as Enbridge Gas best practices, such as utilizing existing municipal rights-of-way and information procured through the Environmental Assessment and Consultation process. Based on the information currently available, there are no alternative routes for the Project that would accomplish this goal.





# Consultation and Engagement



Consultation and engagement are key components of the Study.

At the outset of the project, Enbridge Gas submits a Project Description to the Ministry of Energy; upon review, the Ministry of Energy determines potential impacts on Aboriginal or treaty rights and identifies Indigenous communities that Enbridge Gas must consult with during the course of the project (from planning through to construction completion).

The consultation and engagement program that is developed during the Study helps identify and address concerns and issues raised by Indigenous communities and stakeholders, provides information on the project, and allows for participation in the project review and development process.

Input collected during the consultation and engagement program will be used to help finalize the pipeline route and mitigation plans for the project.

# Natural Environment Considerations

A natural environment field survey of the Project Footprint\* is scheduled for May 2022.

\* The Project Footprint is defined as a 30 m buffer on each side of the existing road allowance along the proposed pipeline route.



Based on a preliminary desktop review of aerial imagery, the Project Footprint consists of the following land classifications outside of the existing road allowance:

- Agricultural fields (annual row and perennial cover crops)
- Meadow
- Forest
- Various wetland types (e.g., swamps, marshes)



# Natural Environment Considerations

Species at Risk (SAR) known to occur in the Project area include, but are not limited to, the following:



© Michael Oldham

Blanding's  
Turtle  
(*Emydoidea  
blandingii*)

Eastern  
Meadowlark  
(*Sturnella  
magna*)



© Doris Brookens



© Barbara Frei

Bobolink  
(*Dolichonyx  
oryzivorus*)

# Natural Environment Considerations

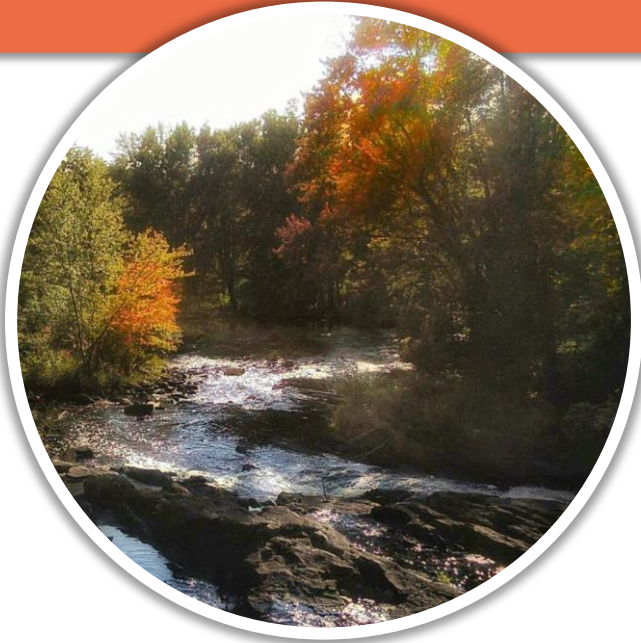
## Potential Effects:

- Temporary loss or alteration of vegetation during construction.
- Temporary alteration of wildlife habitat and/or disruption of wildlife movement during construction.
- Temporary alteration of SAR habitat and/or disruption of SAR movement during construction.



## Example Mitigation Measures:

- Minimize the width of the construction area to reduce the amount of vegetation affected.
- Flag or fence off environmentally sensitive areas prior to construction.
- Document wildlife and SAR encounters and notify appropriate regulatory authorities, where required.
- Provide SAR identification sheets to workers that outline habitat, identifying characteristics and mitigation measures.





# Socio-Economic Considerations



- Located in the most southeasterly corner of Hastings County, the Township of Tyendinaga is a rural community that promotes active living and is known for ball diamonds, recreational grounds, trails and programming.
- While mainly agricultural, the area is known as an attractive location for sport fishermen and outdoors people due to its numerous rivers, streams, wetlands, and woodlands.

- The Project is located on the Tyendinaga Mohawk Territory and in the Hamlet of Shannonville, within the Township of Tyendinaga.
- The land within the Tyendinaga Mohawk Territory began as the “Mohawk Tract”, comprised of approx. 92,700 acres on the Bay of Quinte. A deed to this land, known as the Simcoe Deed or Treaty 3½, was executed on April 1, 1793 by Lieutenant Governor John Graves Simcoe. Within a span of 23 years (1820-1843), two-thirds of the treaty land base under the Simcoe Deed was lost as the government made provisions to accommodate settler families. Today, the Mohawks of the Bay of Quinte have approximately 18,000 acres remaining of the original treaty land base and the current membership numbers over 8,000.

# Socio-Economic Considerations

## Potential Effects:

- Temporary increase in nuisance noise during construction.
- Temporary traffic disruptions during construction.
- Temporary increase in wastes during construction.

## Example Mitigation Measures:

- Construction activities will be carried out in compliance with municipal noise by-laws with respect to noise and construction equipment usage. Applicable noise by-law exemptions will be sought if construction activities cannot be avoided on Statutory Holidays, Sundays or at night.
- Traffic access will be maintained, where possible, during construction. Good management and best practices will be implemented during construction to minimize traffic disruption. If required, temporary detour routes will be provided to reduce potential impacts to commuters.
- Solid waste will be collected and disposed of appropriately in accordance with applicable regulations at a licensed waste facility.





# Archaeology and Cultural Heritage Considerations



- A Stage 1 archaeological assessment and visual inspection of the project area is scheduled for May 2022 to determine which portions of the proposed pipeline route and the adjacent lands retain archaeological potential. Any areas that retain archaeological potential and are planned to be impacted by the project will be recommended for a Stage 2 archaeological assessment to confirm whether there are any sites of Cultural Heritage Value or Interest that must be protected or mitigated.
- The Cultural Heritage Screening found potential heritage properties and features along the pipeline route. Once the preferred route is confirmed, a Cultural Heritage Assessment Report is recommended to further evaluate heritage resources.

# Archaeology and Cultural Heritage Considerations

## Potential Effects:

- Disturbance of previously undiscovered archaeological resources during construction.
- Disturbance of cultural heritage resources during construction.

## Example Mitigation Measures:

- Follow recommendations from the Stage 1 and Stage 2 Archaeological Assessments.
- Implement recommendations in the Cultural Heritage Assessment Report and/or Heritage Impact Assessment to be completed prior to construction.





# Pipeline Design, Construction and Safety

## *Pipeline Design*



The proposed pipeline is designed to meet and/or exceed the regulations of the Canadian Standards Association (Z662 Oil and Gas Pipeline Systems) and the applicable regulations of the Technical Standards & Safety Authority (TSSA).

## *Pipeline Construction*



Our construction work is temporary and transitory – once the pipe is laid, the area is restored to as close to pre-construction condition as possible.

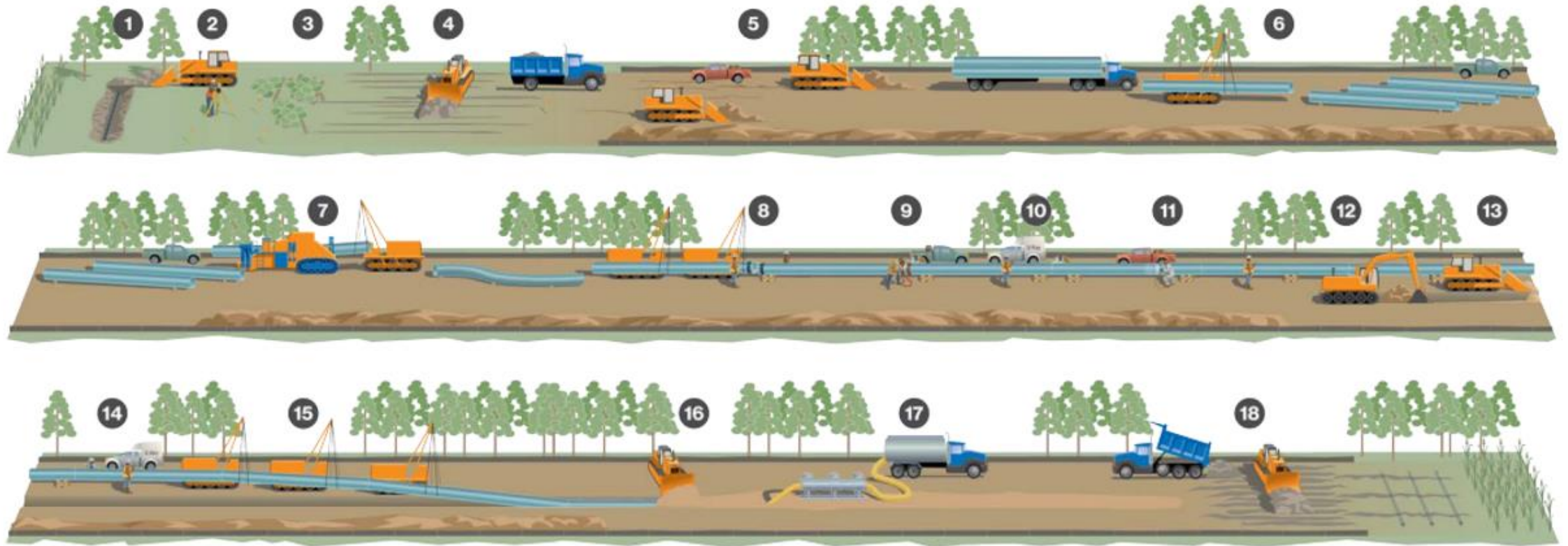
## *Pipeline Safety and Integrity*



Enbridge Gas takes many steps to safely and reliably operate their network of natural gas pipelines, such as:

- ✓ Designing, constructing, and testing our pipelines to meet or exceed requirements set by industry standards and regulatory authorities.
- ✓ Ensuring that any work is respectful of community activities, regulations and bylaws.
- ✓ Continuously monitoring the entire network.
- ✓ Performing regular field surveys to detect leaks and confirm corrosion prevention methods are working as intended.

# General Construction Overview



1. Pre-construction tiling
2. Surveying and staking
3. Clearing

4. Right-of-way topsoil stripping
5. Front-end grading
6. Stringing pipe

7. Field bending pipe
8. Lining-up pipe
9. Welding process

10. X-ray or ultrasonic inspection, weld repair
11. Field coating
12. Digging the trench

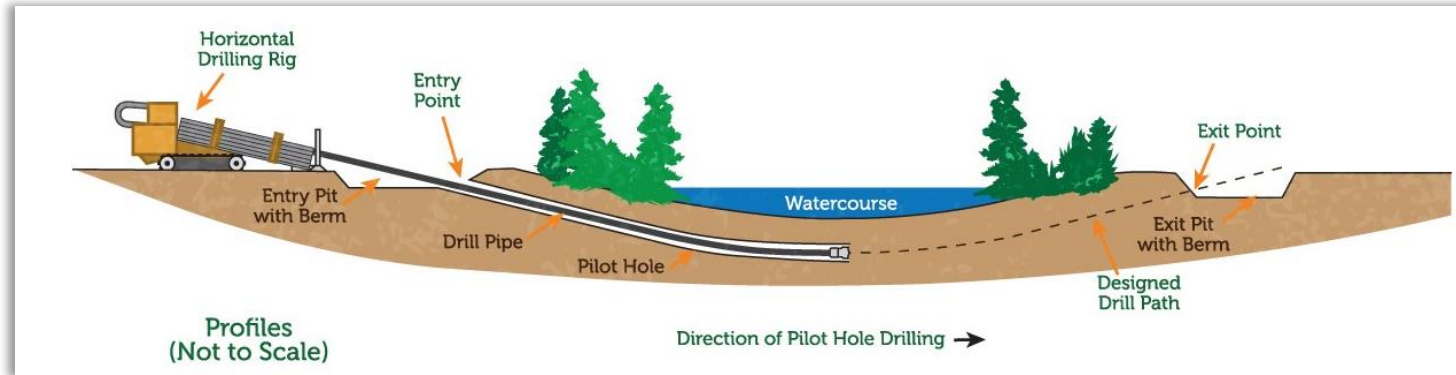
13. Padding trench bottom
14. Final inspection and coating repair
15. Lowering pipe

16. Backfilling
17. Hydrostatic testing
18. Site restoration and post-construction tiling

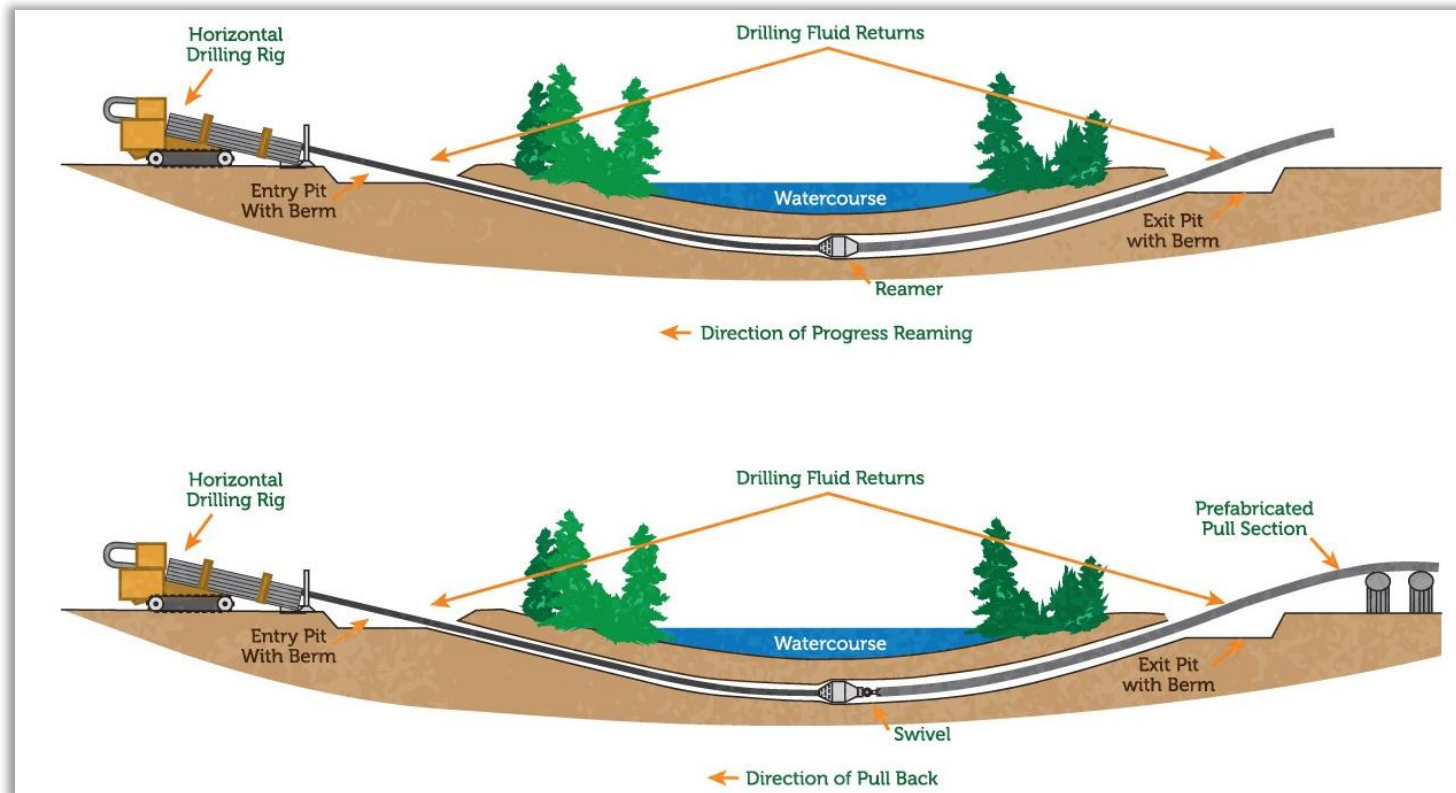


# Horizontal Directional Drilling Overview

## Stage 1: Pilot Hole Directional Drilling



## Stage 2: Reaming and Pulling Back



# Example of Pipeline Installation in Road Allowance





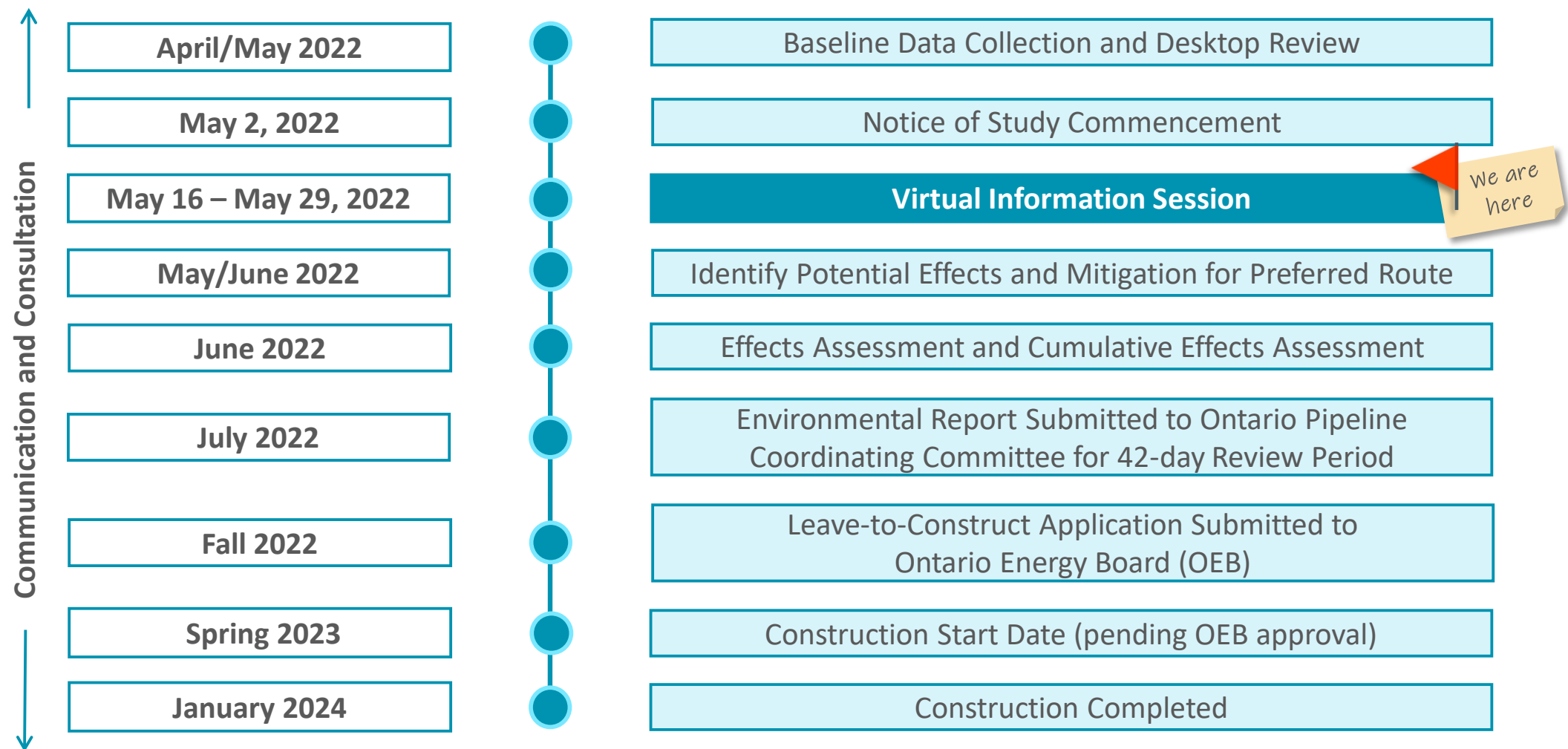
# Mitigation and Monitoring

Enbridge Gas is committed to working with the community on construction planning, mitigation, and post-construction monitoring. Post-construction monitoring will be conducted so that impacted areas are restored to as close to pre-construction conditions as possible.



Enbridge Gas recognizes that the construction of the pipeline may result in short-term adverse impacts and they commit to applying mitigation measures to reduce these impacts and work with the affected communities and landowners so that issues are resolved in a timely manner.

# Environmental Assessment Process and Project Schedule





# Continuous Stakeholder Engagement

Enbridge Gas is committed to open dialogue throughout the environmental assessment and the OEB Leave-to-Construct Application process. Stakeholders will have the opportunity to remain engaged in the process after the environmental assessment is completed, through:

- ✓ Participation in the OEB hearing as an intervenor or interested party (details can be found at [www.oeb.ca](http://www.oeb.ca))
- ✓ Contacting project team members (project contact information provided on next slide)
- ✓ Visiting the Enbridge Gas project website at [www.enbridgegas.com/MBQCommunityEA](http://www.enbridgegas.com/MBQCommunityEA)



# Thank you for participating in our Virtual Information Session!



We want to hear from you! Please complete the Project questionnaire on the Virtual Information Session website at

[www.MBQvirtualinfosession.ca](http://www.MBQvirtualinfosession.ca)



After Sunday, May 29, 2022, this presentation, accompanying video transcript, and the questionnaire will be available for download on the Enbridge Gas website at

[www.enbridgegas.com/MBQCommunityEA](http://www.enbridgegas.com/MBQCommunityEA)



Please submit your feedback by **June 15, 2022** so it can be considered in the Environmental Report that will be submitted to the Ontario Energy Board.

## Project Contact Information:



[MBQcommunityEA@dillon.ca](mailto:MBQcommunityEA@dillon.ca)



613-745-2213, ext. 3024

# Staying Informed



Mohawks of the Bay of Quinte and Shannonville Community Expansion Project – Virtual Information Session Presentation Transcript

| Slide No. | Slide Title  | Transcript  |
|-----------|--|---|
| 1         | N/A –Title Slide                                     | <p>Hello and welcome to the Virtual Information Session for the Enbridge Gas Mohawks of the Bay of Quinte and Shannonville Community Expansion Project!</p> <p>At any time, you can press pause or stop this presentation. You will also have the opportunity to download the transcript to this video on our Virtual Information Session website, or on the Enbridge Gas project website. Links are provided on the next slide and at the end of the presentation.</p>   |
| 2         | Welcome  | <p>This Virtual Information Session will be live for 2 weeks, beginning Monday, May 16th and ending Sunday, May 29th.</p> <p>Dillon Consulting has been hired to conduct an environmental study to assess the potential environmental and socio-economic effects that may result from the proposed project. This presentation will provide you with information about the proposed project, potential pipeline routes and Ontario Energy Board process, and will outline how you can stay informed and participate.</p> <p>You can provide your input on the project by completing the questionnaire available on the Virtual Information Session website at <a href="http://www.MBQvirtualinfosession.ca">www.MBQvirtualinfosession.ca</a>. Please submit your comments by June 15th.</p> <p>After Sunday, May 29th, this presentation, the accompanying video transcript, and the questionnaire will be available for download on the Enbridge Gas website at <a href="http://www.enbridgegas.com/MBQCommunityEA">www.enbridgegas.com/MBQCommunityEA</a>.</p> |
| 3         | Enbridge Gas Commitment                              | <p>Enbridge Gas provides safe and reliable delivery of natural gas to more than 3.8 million residential, commercial, and industrial customers across Ontario.</p> <p>Enbridge Gas will carefully consider all input on the project and is committed to involving local communities and affected stakeholders throughout the regulatory process. Enbridge Gas commits to providing up-to-date information in an open, honest, and respectful manner.</p> <p>Enbridge Gas is committed to environmental stewardship and conducts all of its operations in an environmentally responsible manner.</p>  |
| 4         | Enbridge Gas Environment, Health and Safety Policies | <p>Enbridge Gas is committed to protecting the health and safety of all individuals affected by our activities and will provide a safe and healthy working environment. Our goal is to have no workplace incidents and to mitigate, to the extent feasible, impacts on the environment. To achieve this goal, Enbridge Gas will work with stakeholders, peers, and others to promote responsible environmental practices and continuous improvement.</p> <p>Enbridge Gas is committed to environmental protection and stewardship, and we recognize that pollution prevention, biodiversity, and resource conservation are key to a sustainable environment. All employees are responsible and accountable for contributing to a safe working environment, for fostering safe working attitudes, and for operating in an environmentally responsible manner.</p>  |
| 5         | Land Acknowledgement                                 | <p>The project is located on the traditional lands of the Anishinaabeg (Ah-nish-in-a-beg), Haudenosaunee (Ho-den-no-show-nee), and Huron-Wendat peoples on lands connected with the Crawford Purchase of 1783 and the Simcoe Deed (Treaty 3½). Most recently, the land is home to the Mohawks of the Bay of Quinte within the Tyendinaga Mohawk Territory. This land continues to be home to diverse Indigenous peoples (for example, First Nations and Métis) whom we recognize as contemporary stewards of the land and vital contributors of our society.</p>  |

| Slide No. | Slide Title                                | Transcript   |
|-----------|--|--|
| 6         | Purpose of the Virtual Information Session | <p>The purpose of this Virtual Information Session is to:</p> <ul style="list-style-type: none"><li>• Provide information on the project purpose and illustrate the proposed pipeline route</li><li>• Provide a safe alternative to an in-person meeting</li><li>• Inform landowners, Indigenous communities, municipalities, stakeholders, and regulatory authorities about the project and gather feedback about the assessment of the pipeline route</li><li>• Give everyone the chance to participate during the process of completing the Environmental Report, which will be included in the Ontario Energy Board application</li><li>• Provide an opportunity to identify any unknown constraints and review draft plans to mitigate impacts to the local community and the environment</li><li>• Create a space for you to ask questions and/or provide comments to Enbridge Gas or Dillon Consulting</li></ul>  |
| 7         | Consultation Approach                      | <p>We are committed to a comprehensive consultation process and want to hear from you. Our consultation approach is:</p> <ul style="list-style-type: none"><li>• Inclusive – by reaching out to all who may be interested or affected and providing opportunities to become informed and get involved.</li><li>• Transparent – by providing access to information and clear explanations for decisions.</li><li>• Accountable – we do this by explaining how your input will be used in the decision-making process.</li></ul> <p>As an important part of the consultation process, we will work with all stakeholders to identify and resolve potential Project-related concerns.</p>   |
| 8         | Enbridge Inc. Indigenous Peoples Policy    | <p>Enbridge Gas follows the Enbridge Inc. Indigenous Peoples Policy.</p> <p>Enbridge recognizes the diversity of Indigenous Peoples who live where they work and operate. They understand from history the destructive impacts on the social and economic wellbeing of Indigenous Peoples. Enbridge recognizes and realizes the importance of reconciliation between Indigenous communities and the broader society. Positive relationships with Indigenous Peoples, based on mutual respect and focused on achieving common goals, will create positive outcomes from Indigenous communities. Enbridge commits to pursue sustainable relationships with Indigenous Nations and groups in proximity to where Enbridge conducts business. To achieve this, Enbridge will govern itself by the principles listed on this slide. You may pause this video if you wish to review this slide further.</p>   |
| 9         | Project Overview                           | <p>Enbridge Gas has identified a preliminary preferred route that will tie-in to an existing 4-inch polyethylene pipeline near the intersection of Wyman Road and York Road in the Tyendinaga Mohawk Territory. The distribution portion of the Project includes approximately 17 km of polyethylene pipeline ranging in diameter from 2 to 4 inches. A station rebuild is required to accommodate additional customers onto the distribution system and will be constructed at the intersection of York Road and Highway 49, in the northwest corner.</p> <p>The pipeline will be installed mainly within the existing road allowance with additional temporary working space potentially required for lay-down, storage and excess soils management.</p>   |
| 10        | N/A –Map                                   | <p>This figure provides an overview of the project. The preliminary preferred route proposed here has been developed for the purpose of an assessment of potential environmental and socio-economic impacts and does not represent the final project scope or design that will provide access to natural gas to end-use customers.</p> <p>You may pause this video at any time if you need additional time to review the map. An interactive version of the map is also provided on the Virtual Information Session website (<a href="http://www.MBQvirtualinfosession.ca">www.MBQvirtualinfosession.ca</a>).</p>  |
| 11        | Regulatory Framework                       | <p>For the project to proceed, approval from the Ontario Energy Board is required. The Ontario Energy Board requires that Enbridge Gas complete an Environmental Report, which consists of an environmental assessment and route selection study. This report will also be submitted to the Ontario Pipeline Coordinating Committee for review and comment.</p> <p>The Ontario Energy Board will review the Environmental Report for the Project (including details of consultation) as part of what is known as a “Leave-to-Construct” Application. Once Enbridge Gas submits a Leave-to-Construct Application to the Ontario Energy Board, any party with an interest in the Project may apply to the Board to become intervenors or interested parties in order to participate in the decision-making process. Following their review of the Leave-to-Construct Application, the Ontario Energy Board will make a determination about whether the proposed Project is in the public interest.</p> |



| Slide No. | Slide Title                                       | Transcript  |
|-----------|---|---|
| 12        | Environmental Study Process                       | <p>As part of the planning process, Enbridge Gas has retained Dillon Consulting to undertake an Environmental Study for the Project. The Study will fulfill the requirements of the Ontario Energy Board’s <i>Environmental Guidelines for the Location, Construction, and Operation of Hydrocarbon Pipelines and Facilities in Ontario</i>.</p> <p>The Study will be conducted during the earliest phase of the planning process. As part of the Study, Enbridge Gas and Dillon Consulting will:</p> <ul style="list-style-type: none"><li>• Undertake engagement to understand the views of interested and potentially affected parties</li><li>• Consult and engage with Indigenous communities to understand interests and potential impacts</li><li>• Identify potential impacts of the project</li><li>• Develop environmental mitigation and protective measures to avoid or reduce potential impacts</li><li>• Develop an appropriate environmental inspection, monitoring, and follow-up program</li></ul>               |
| 13        | Determining the Preliminary Preferred Route       | <p>To determine the location and extent of the preliminary preferred route, Enbridge Gas considered constraints in the Study Area such as natural environment features, slope, topography, socio-economic features, including cultural heritage features, and landscapes. To mitigate impacts and constraints to these features, opportunities to follow existing linear infrastructure were identified. The preliminary preferred route, as shown on the project map, follows the existing road allowances and avoids, to the extent possible, environmental and socio-economic features.</p> <p>Community Expansion projects are based on information submitted by the communities requesting the service as well as Enbridge Gas best practices, such as utilizing existing municipal rights-of-way and information procured through the Environmental Assessment and Consultation process. Based on the information currently available, there are no alternative routes for the Project that would accomplish this goal.</p> |
| 14        | Consultation and Engagement                       | <p>Consultation and engagement are key components of the Study.</p> <p>At the outset of the project, Enbridge Gas submits a Project Description to the Ministry of Energy; upon review, the Ministry of Energy determines potential impacts on Aboriginal or treaty rights and identifies Indigenous communities that Enbridge Gas must consult with during the course of the project (from planning through to construction completion).</p> <p>The consultation and engagement program that is developed during the Study helps identify and address concerns and issues raised by Indigenous communities and stakeholders, provides information on the project, and allows for participation in the project review and development process.</p> <p>Input collected during the consultation and engagement program will be used to help finalize the pipeline route and mitigation plans for the project.</p>   |
| 15        | Natural Environment Considerations (slide 1 of 3) | <p>A natural environment field survey of the Project Footprint is scheduled for May 2022. The Project Footprint is defined as a 30 m buffer on each side of the road allowance along the proposed pipeline route.</p> <p>Based on a preliminary desktop review of aerial imagery, the Project Footprint consists of the following land classifications outside of the road allowance:</p> <ul style="list-style-type: none"><li>• Agricultural fields (annual row and perennial cover crops)</li><li>• Meadow</li><li>• Forest</li><li>• Various wetland types</li></ul>  |
| 16        | Natural Environment Considerations (slide 2 of 3) | <p>Blanding’s Turtle, Eastern Meadowlark and Bobolink are examples of species at risk that are known to occur in the project area. Dillon Consulting will conduct a site visit in May 2022 to confirm the potential for species at risk to occur along the proposed pipeline route.</p>   |
| 17        | Natural Environment Considerations (slide 3 of 3) | <p>This slide lists examples of potential effects on the natural environment and the types of mitigation measures that may be considered in the environmental assessment.</p> <p>The project will be constructed within the road allowance, therefore limiting the potential for adverse effects on the natural environment. Temporary workspace, where required, will be sited to avoid sensitive environmental features.</p>  |

| Slide No. | Slide Title   | Transcript  |
|-----------|---|---|
| 18        | Socio-Economic Considerations (slide 1 of 2)                    | <p>The Project is located on the Tyendinaga Mohawk Territory and in the Hamlet of Shannonville, within the Township of Tyendinaga.</p> <p>The land within the Tyendinaga Mohawk Territory began as the “Mohawk Tract”, comprised of approximately 92,700 acres on the Bay of Quinte. A deed to this land, known as the Simcoe Deed or Treaty 3½, was executed on April 1, 1793 by Lieutenant Governor John Graves Simcoe. Within a span of 23 years (1820-1843) two-thirds of the treaty land base under the Simcoe Deed was lost as the government made provisions to accommodate settler families. Today, the Mohawks of the Bay of Quinte have approximately 18,000 acres remaining of the original treaty land base and the current membership numbers over 8,000.</p> <p>Located in the most southeasterly corner of Hastings County, the Township of Tyendinaga is a rural community that promotes active living and is known for ball diamonds, recreational grounds, trails and programming. While mainly agricultural, the area is known as an attractive location for sport fishermen and outdoors people due to its numerous rivers, streams, wetlands, and woodlands.</p> |
| 19        | Socio-Economic Considerations (slide 2 of 2)                    | <p>This slide lists examples of potential effects on the socio-economic environment and the types of mitigation measures that may be considered in the environmental assessment.</p> <p>The project will largely be constructed in rural areas where residences and businesses are widely spaced and congestion is not a major concern. Measures will be implemented during construction to reduce noise, control dust, and maintain traffic flow on affected roads.</p>  |
| 20        | Archaeology and Cultural Heritage Considerations (slide 1 of 2) | <p>A Stage 1 archaeological assessment and visual inspection of the project area is scheduled for May 2022 to determine which portions of the proposed pipeline route and the adjacent lands retain archaeological potential. Any areas that retain archaeological potential and are planned to be impacted by the project will be recommended for a Stage 2 archaeological assessment to confirm whether there are any sites of Cultural Heritage Value or Interest that must be protected or mitigated.</p> <p>The Cultural Heritage Screening found potential heritage properties and features along the pipeline route. Once the preferred route is confirmed, a Cultural Heritage Assessment Report is recommended to further evaluate heritage resources.</p>   |
| 21        | Archaeology and Cultural Heritage Considerations (slide 2 of 2) | <p>This slide lists examples of potential effects on archaeology and cultural heritage resources and the types of mitigation measures that may be considered in the environmental assessment.</p> <p>The project will be constructed within the road allowance where there is typically low archaeological potential due to existing deep disturbances. A Stage 2 archaeological assessment will be completed where project works will occur on lands identified in the Stage 1 assessment as retaining archaeological potential.</p>   |
| 22        | Pipeline Design, Construction, and Safety                       | <p>Enbridge Gas has been bringing safe, reliable natural gas to homes and businesses for more than 170 years. Safety is a top priority for Enbridge Gas and the pipeline will be built in compliance with all provincial safety requirements for pipeline design and operation. Enbridge Gas has an extensive pipeline integrity management program to ensure that once installed, their pipelines remain in safe operating condition. This includes regular monitoring of the inside and outside of transmission pipelines for corrosion, leaks, or any other potential damage.</p> <p>The high-grade pipeline material that will be used for the Project is designed to meet or exceed the regulations of the Canadian Standards Association and the applicable regulations of the Technical Standards and Safety Authority. Pipeline construction work is temporary and transitory. Once the pipe is laid, the area is restored to as close to pre-construction condition as possible. Enbridge Gas takes many steps to ensure safe, reliable operations of their network of natural gas pipelines.</p>  |
| 23        | General Construction Overview                                   | <p>This slide shows a figure depicting a typical pipeline construction sequence in a rural setting. Steps 1-5 (Site Preparation) may not necessarily apply to this project, since the pipeline is going to be installed within the existing road allowance; however, it still provides a useful illustration of the general steps in the pipeline construction process. You may wish to pause the video at this time, in order to review the construction phases illustrated here.</p>  |
| 24        | Horizontal Directional Drilling Overview                        | <p>This slide shows a figure depicting the typical method for horizontal directional drilling – often abbreviated to “HDD”. HDD is a method of trenchless pipeline installation which is primarily used to avoid impacts to environmentally sensitive areas such as watercourses and wetlands. HDD is also used to cross busy roadways or intersections, drainages, and any properties or areas identified by stakeholders as being sensitive to disturbance. HDD is just one of several trenchless crossing methods that can be used on pipeline projects.</p>   |
| 25        | Example of Pipeline Installation in Road Allowance              | <p>The photos on this slide show a typical pipeline construction sequence in a road right-of-way, from stringing, to lowering in, and site restoration.</p>   |



| Slide No. | Slide Title   | Transcript   |
|-----------|---|--|
| 26        | Mitigation and Monitoring                             | Enbridge Gas is committed to working with the community on construction planning, mitigation, and post-construction monitoring. Post-construction monitoring will be conducted so that impacted areas are restored to as close to pre-construction conditions as possible. Enbridge Gas recognizes that the construction of the pipeline may result in short-term adverse impacts and commits to applying mitigation measures to reduce these impacts and work with the affected communities and landowners so that issues are resolved in a timely manner.  |
| 27        | Environmental Assessment Process and Project Schedule | This slide outlines the general timeline and environmental assessment process for the Project, beginning with the collection of baseline data, through to submission of a Leave-to-Construct Application to the Ontario Energy Board and anticipated construction commencement and completion.   |
| 28        | Continuous Stakeholder Engagement                     | Enbridge Gas is committed to open dialogue throughout the environmental assessment and the Ontario Energy Board Leave-to-Construct Application process. Stakeholders will have the opportunity to remain engaged in the process after the Environmental Report is completed through the methods listed on this slide, including: <ul style="list-style-type: none"><li>• Participation in the Ontario Energy Board hearing as an intervenor or interested party – you can find details on the Ontario Energy Board website at <a href="http://www.oeb.ca">www.oeb.ca</a></li><li>• Contacting Enbridge Gas or Dillon Consulting project team members via the contact information provided at the end of this presentation</li><li>• Visiting the Enbridge Gas project website at <a href="http://www.enbridgegas.com/MBQCommunityEA">www.enbridgegas.com/MBQCommunityEA</a></li></ul>  |
| 29        | Staying Informed                                      | <p>Thank you for participating in our Virtual Information Session!</p> <p>We want to hear from you! Please complete the project questionnaire on the Virtual Information Session website at <a href="http://www.MBQvirtualinfosession.ca">www.MBQvirtualinfosession.ca</a> to provide your input and opinion of the Project. If you would prefer, you can also download the comment form and submit your feedback by email at <a href="mailto:MBQcommunityEA@dillon.ca">MBQcommunityEA@dillon.ca</a>.</p> <p>After Sunday, May 29th, this presentation, the accompanying video transcript, and questionnaire will be available for download on the Enbridge Gas website at <a href="http://www.enbridgegas.com/MBQCommunityEA">www.enbridgegas.com/MBQCommunityEA</a>.</p> <p>Please submit your feedback by June 15, 2022 so it can be considered in the Environmental Report that will be submitted to the Ontario Energy Board.</p> <p>For more information, or to submit comments or questions, please use the contact information provided on this slide to contact a member of the project team.</p> |

## Appendix I

### ***Virtual Information Session Comment Form***



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## Virtual Information Session – Comment Form

***We want to hear from you!*** We encourage you to review the Virtual Information Session material and then fill out and submit this comment form by **June 15, 2022**. Your input is welcome and appreciated.

You can also provide your input by email. Please download the comment form from the Virtual Information Session website ([www.MBQvirtualinfosession.ca](http://www.MBQvirtualinfosession.ca)) and submit it by email to [MBQcommunityEA@dillon.ca](mailto:MBQcommunityEA@dillon.ca).

After Sunday, May 29th, this comment form will be available for download from the Enbridge Gas website at [www.enbridgegas.com/MBQCommunityEA](http://www.enbridgegas.com/MBQCommunityEA).

### Contact Information and General Questions

If you would like to be added to the Project's mailing list and receive Project updates, please provide your contact information.

#### 1. Name / Email Address or Mailing Address

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#### 2. How did you hear about the Project? (Select all that apply)

- ☐ Received Notice via Email
- ☐ Received Notice via Standard Mail (Canada Post)
- ☐ Newspaper
- ☐ From a Friend or Neighbour
- ☐ Facebook
- ☐ Twitter
- ☐ Other, please specify:

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**3. Do you own property, live, or work beside any of the following? (Select all that apply):**

- ☐ Shannonville Route (York Rd., Queen St., Beach Rd., Young St., Atsia Ct., Gore St., Howard St.)
- ☐ Mohawks of the Bay of Quinte Community Route (York Rd., Wyman Rd., Lower Slash Rd.,  
Homeland Dr., Ridge Rd.)
- ☐ I do not own property, live, or work along the proposed routes but I am interested in the Project

**4. Please explain your interest in the Project.**

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**5. Which group represents you best? (Please choose one answer)**

- ☐ I am a member of an Indigenous community
- ☐ I am a landowner or resident in the study area
- ☐ I am a member of a community interest group
- ☐ I am a government employee or official
- ☐ Other, please specify:

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**6. What is your view of the proposed Project?**

- ☐ I am supportive
- ☐ I am not supportive
- ☐ No opinion at this time (Go to Question 8)

**7. Please explain your view (supportive or not supportive).**

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- 8. Are there any environmental, socio-economic, or cultural heritage features along the proposed routes that you would like to identify? Please indicate which route or street you are commenting on.**

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- 9. Are there any potential effects (e.g., to you, your property, business, or otherwise) and any mitigation measures that Enbridge Gas should consider and address prior to Project construction? Please indicate which route or street you are commenting on.**

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- 10. Please provide any additional comments, questions, or feedback that you have with regards to the Project. If applicable, please indicate which route or street you are commenting on.**

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## Feedback on the Virtual Information Session

**11. Was sufficient information about the Project provided on the Virtual Information Session website and in the presentation slides?**

☐ Yes (Go to Question 13)

☐ No

**12. Please describe what other information you would have liked to see.**

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**13. Was sufficient information provided on the Ontario Energy Board and Environmental Assessment process?**

☐ Yes (Go to Question 15)

☐ No

☐ Partly

**14. Please tell us what else you would like to know about the Ontario Energy Board and Environmental Assessment process.**

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**15. How did you like the Virtual Information Session format versus having an in-person drop-in style open house? Do you have any suggestions to help us improve on this virtual format?**

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## Thank you for participating in the Virtual Information Session for the Mohawks of the Bay of Quinte and Shannonville Community Expansion Project!

If you require further information about the Project, please contact one of the following individuals:

|  |  |
|--|--|
| <b>Tristan Lefler</b><br><b>Environmental Assessment Project Manager</b><br><b>Dillon Consulting Limited</b><br>Suite 200 – 51 Breithaupt St.<br>Kitchener, ON N2H 5G5 | <b>Alissa Lee</b><br><b>Environmental Assessment &amp; Consultation Lead</b><br><b>Dillon Consulting Limited</b><br>Suite 101 – 177 Colonnade Road South<br>Ottawa, ON K2E 7J4 |
| <a href="mailto:MBQcommunityEA@dillon.ca">MBQcommunityEA@dillon.ca</a><br>613-745-2213 ext. 3024   |  |

You can also stay up-to-date on the Project by visiting the Enbridge Gas website at:

[www.enbridgegas.com/MBQCommunityEA](http://www.enbridgegas.com/MBQCommunityEA)

### **Collection and Use of Personal Information:**

*Any personal information (PI), such as names and addresses, collected by Enbridge Gas Inc. (EGI) on this comment form (or through the Virtual Information Session process) for this project will be used for the purpose of conducting an environmental assessment and related activities, such as creating an environmental assessment report. EGI may also share PI with its consultant(s) for this purpose and will share PI with the Ontario Energy Board (OEB) and other government agencies as required for the project. In accordance with the Ontario Freedom of Information and Protection of Privacy Act, PI provided to the OEB will not be disclosed on the public record or to any third parties. However, comments, questions and other information collected may be disclosed on the public record provided that any PI will be redacted.*

## Appendix J

### *Open House Storyboard Panels*



# Proposed Mohawks of the Bay of Quinte and Shannonville Community Expansion Project

Open House Information Session

Monday, May 30, 2022





# Enbridge Gas Commitment

Enbridge Gas provides safe and reliable delivery of natural gas to more than 3.8 million residential, commercial, and industrial customers across Ontario.



Enbridge Gas will carefully consider all input. They are committed to involving community members and will provide up-to-date information in an open, honest, and respectful manner.



Enbridge Gas is committed to environmental stewardship and conducts all of its operations in an environmentally responsible manner.





# About Today's Open House Information Session

## She:kon, today, we're here to:

- ✓ Share information and answer your questions about the proposed natural gas expansion project.
- ✓ Get your input on the area in question and the proposed pipeline route.
- ✓ Discuss regulatory considerations and the environmental assessment process.
- ✓ Provide an opportunity to identify and discuss any unknown constraints and review draft plans to mitigate impacts to the local community and the environment.
- ✓ Explain the overall project trajectory and proposed schedule.
- ✓ Open a dialogue and create a space for questions or comments on the proposed expansion.



# Consultation Approach



We are committed to a comprehensive consultation process and want to hear from you about this project.

Our consultation approach is:

- ✓ **Inclusive** – reaching out to all who may be interested or affected and providing opportunities to become informed and get involved.
- ✓ **Transparent** – providing access to information and clear explanations for decisions.
- ✓ **Accountable** – explaining how your input will be used in the decision-making process.

As an important part of the consultation process, we will work collaboratively with the community to identify and resolve potential project-related issues.



# Enbridge Inc. Indigenous Peoples Policy

Enbridge Gas follows the Enbridge Inc. (Enbridge) Indigenous Peoples Policy.

Enbridge recognizes the diversity of Indigenous Peoples who live where they work and operate. They understand from history the destructive impacts on the social and economic wellbeing of Indigenous Peoples. Enbridge recognizes and realizes the importance of reconciliation between Indigenous communities and the broader society. Positive relationships with Indigenous Peoples, based on mutual respect and focused on achieving common goals, will create positive outcomes from Indigenous communities.

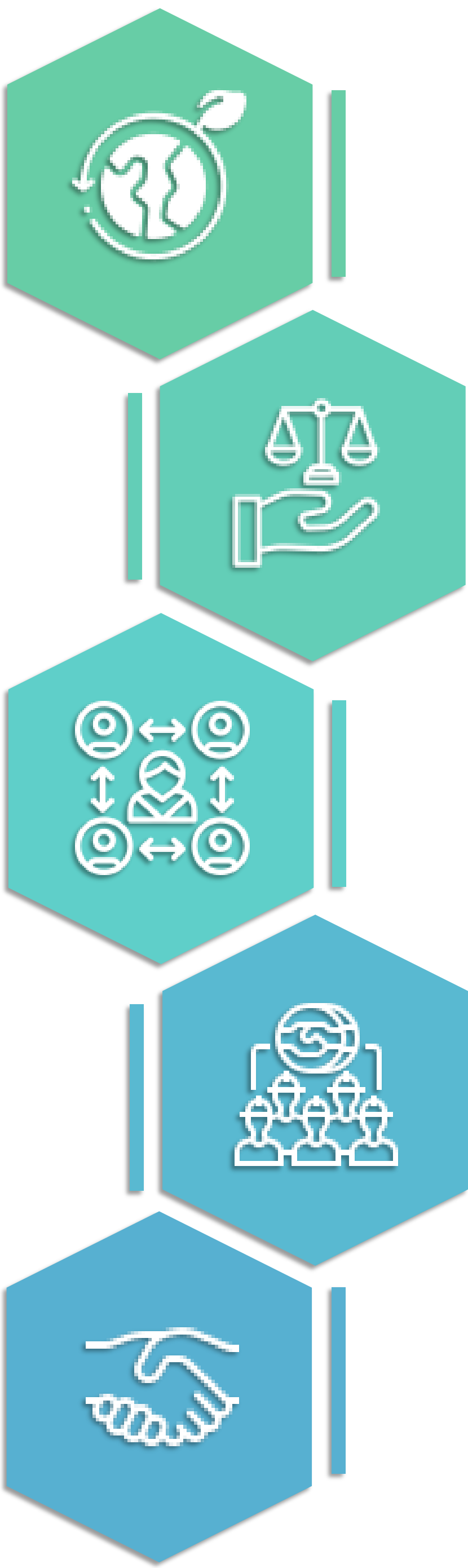
Enbridge commits to pursue sustainable relationships with Indigenous Nations and groups in proximity to where Enbridge conducts business. To achieve this, Enbridge will govern itself by the following principles.

Enbridge **recognizes** the legal and constitutional rights of Indigenous Peoples, and the importance of the relationships between Indigenous Peoples and their traditional lands and resources. They commit to working with Indigenous communities in a manner that recognizes and respects those legal and constitutional rights and the traditional lands and resources to which they apply. Enbridge commits to ensuring that Enbridge projects and operations are carried out in an environmentally responsible manner.

Enbridge **engages** in forthright and sincere consultation with Indigenous Peoples about their projects and operations through processes that seek to achieve early and meaningful engagement. Indigenous engagement helps define projects that may occur on lands traditionally occupied by Indigenous Peoples.

Enbridge **fosters** an understanding of the history and culture of Indigenous Peoples among their employees and contractors, in order to create better relationships between Enbridge and Indigenous communities.

The commitment is a shared responsibility involving Enbridge and its affiliates, employees and contractors. They will conduct business in a manner that reflects the above principles. Enbridge will provide ongoing leadership and resources to effectively implement the above principles, including the development of implementation strategies and specific action plans. Enbridge commits to periodically review this policy so that it remains relevant and respects Indigenous culture and varied traditions.



Enbridge **understands** the importance of the United Nations Declaration of the Rights of Indigenous Peoples in the context of existing Canadian law and the commitments that the government has made to protecting the rights of Indigenous Peoples.

Enbridge **commits** to working with Indigenous Peoples to achieve benefits for them resulting from Enbridge’s projects and operations, including opportunities in training and education, employment, procurement, business development, and community development.



# About the Proposed Project

## *What is being proposed?*

This proposed expansion project will supply natural gas to additional customers in the Territory by:

- ✓ Tying-in the new service area to the existing 4-inch polyethylene pipeline near the intersection of Wyman Road and York Road in the Tyendinaga Mohawk Territory.
- ✓ Expanding the distribution infrastructure by installing approximately 17 km of polyethylene pipeline ranging in diameter from 2 to 4 inches.
- ✓ Rebuilding a station at the intersection of York Road and Highway 49, in the northwest corner to accommodate additional customers onto the distribution system.

The pipeline is slated to be installed mainly within the existing road allowance with additional temporary working space potentially required for lay-down, storage and excess soils management.

## *Why are we proposing this?*

- ✓ In partnership with Indigenous and Non-Indigenous community leadership, Enbridge submitted an application for this expansion to the Government of Ontario's Natural Gas Expansion Program for funding consideration. In June 2021, this proposed project was one of 25 community expansion projects selected for funding.
- ✓ Natural gas results in lower carbon dioxide emissions than both heating with oil or propane.
- ✓ Natural gas is a more affordable and versatile energy options for Tyendinaga homes and businesses.
- ✓ Natural gas rates are regulated by the Ontario Energy Board, promoting consistent and predictable bills.
- ✓ Enbridge Gas' underground infrastructure makes natural gas reliable and eliminates the need to arrange alternative energy deliveries and storage.



# A Proven Track Record

Enbridge Gas now serves 23  
Indigenous communities with plans to  
expand to more.



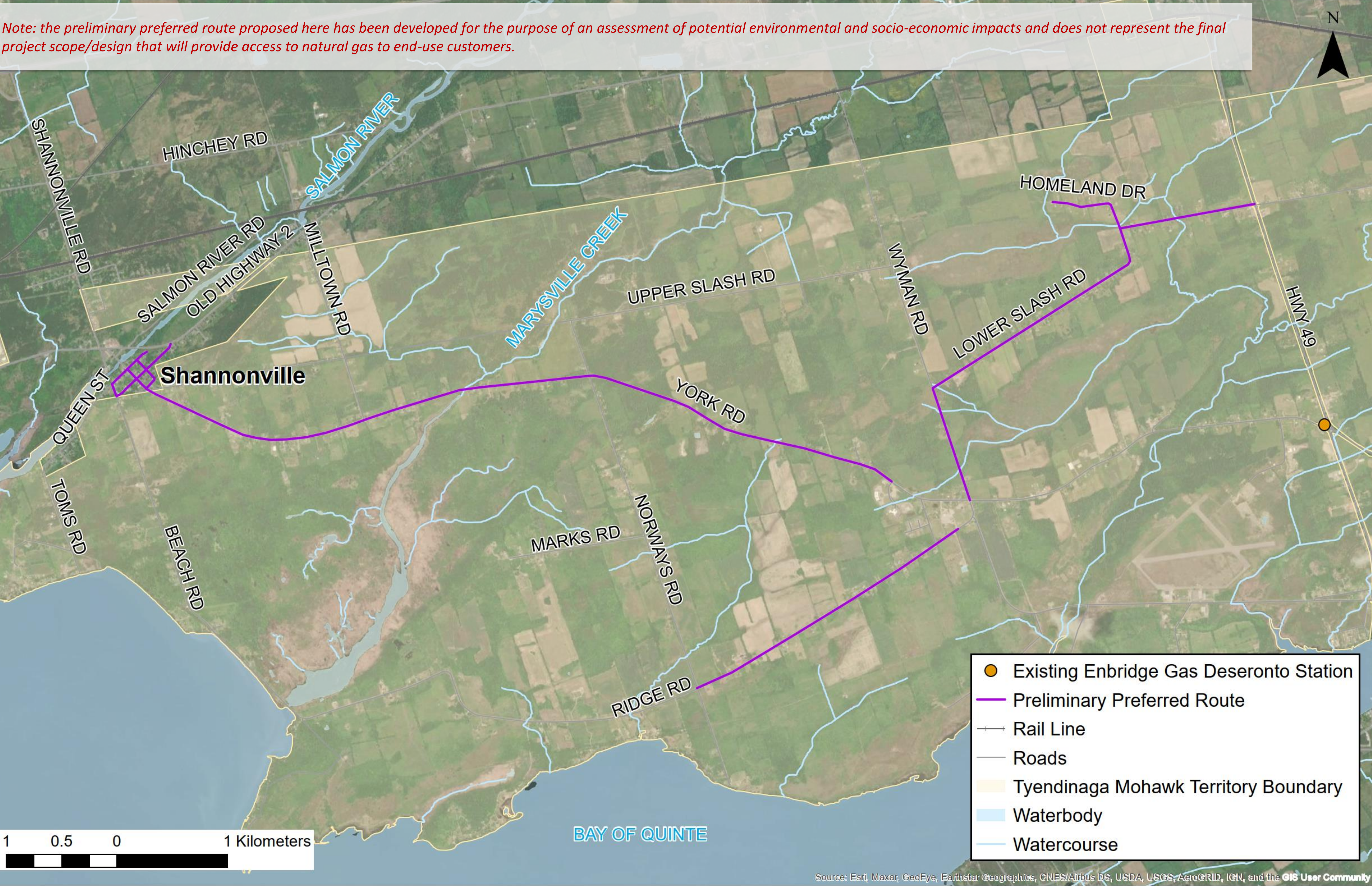
We're committed to respecting the activities,  
regulations and bylaws in your community.

We've successfully completed many similar projects.

We take great care when working in the community to  
minimize impacts, address concerns and achieve the  
highest standards of safety.

Our natural gas distribution system projects strive to  
leave the smallest footprint possible.







# Regulatory Considerations

For the project to proceed, approval from the Ontario Energy Board (OEB) is required. The OEB requires that Enbridge Gas complete an environmental assessment and route selection study.



## Role of the Ontario Energy Board:

- ✓ Reviews the Environmental Report (including details of consultation) as part of the application, known as the “Leave-to-Construct” Application.
- ✓ Once the Leave-to-Construct Application is submitted to the OEB, any party with an interest in the project may apply to the OEB to become intervenors or interested parties.
- ✓ Provides a public forum during the review of the Leave-to-Construct Application for people to participate in the decision-making process.
- ✓ Determines whether a proposed pipeline is in the public interest.

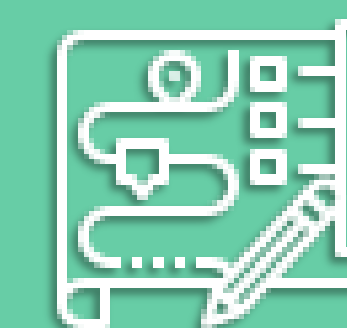
# Environmental Study Process

As part of the project planning process, Enbridge Gas has retained Dillon Consulting to work in partnership with the community to undertake an Environmental Study for the project. The Study will provide for an opportunity to open a dialogue with the community to fully understand interests and potential impacts of the proposed project and will fulfill the requirements of the OEB's *Environmental Guidelines for the Location, Construction, and Operation of Hydrocarbon Pipelines and Facilities in Ontario, 7th Edition*.

Although information sharing and discussions have begun with the community, the formal Study will be conducted during the earliest phase of the planning process.

As part of the Study, Enbridge Gas and Dillon Consulting will work with the community to:

- ✓ Undertake engagement to understand the views of community members
- ✓ Identify potential impacts of the proposed project
- ✓ Develop environmental mitigation and protective measures to avoid or reduce potential impacts
- ✓ Develop an appropriate environmental inspection, monitoring, and follow-up program





# How is the Preliminary Preferred Route Chosen?

**Your input will help inform and confirm the natural gas distribution system route.**



Here's what we consider when planning:

- ✓ **Shared Information** - Information provided by the community and its infrastructure team related to existing rights-of-way, existing/proposed plans for water, wastewater, and transportation work
- ✓ **Environmental Data** - Natural environment features, slope, topography, socio-economic features, including cultural heritage features, and landscapes
- ✓ **Field Studies and Visits** - Driving and walking the study area, with community partners, to collect data and information
- ✓ **Socio-economic Data** - Population and demographic information
- ✓ **Experience** - Previous experience in natural gas system development, including technical and cost impacts

Based on the information currently available, there are no alternative routes for the Project that would align with the above considerations.



# Natural Environment Considerations

A natural environment field survey of the Project Footprint\* was conducted on May 18, 2022 by a Dillon biologist. A community representative was invited to participate but was unable to attend.

\* The Project Footprint is defined as a 30 m buffer on each side of the existing road allowance along the proposed pipeline route.



Based on a preliminary desktop review of aerial imagery, the Project Footprint consists of the following land classifications outside of the existing road allowance:

- Agricultural fields (annual row and perennial cover crops)
- Meadow
- Forest
- Various wetland types (e.g., swamps, marshes)



# Natural Environment Considerations

Species at Risk (SAR) known to occur in the Project area include, but are not limited to, the following:



© Michael Oldham

Blanding's  
Turtle  
(*Emydoidea  
blandingii*)

Eastern  
Meadowlark  
(*Sturnella  
magna*)



© Doris Brookens



© Barbara Frei

Bobolink  
(*Dolichonyx  
oryzivorus*)



# Natural Environment Considerations

## Potential Effects:

- Temporary loss or alteration of vegetation during construction.
- Temporary alteration of wildlife habitat and/or disruption of wildlife movement during construction.
- Temporary alteration of SAR habitat and/or disruption of SAR movement during construction.



## Example Mitigation Measures:

- Minimize the width of the construction area to reduce the amount of vegetation affected.
- Flag or fence off environmentally sensitive areas prior to construction.
- Document wildlife and SAR encounters and notify appropriate regulatory authorities, where required.
- Provide SAR identification sheets to workers that outline habitat, identifying characteristics and mitigation measures.





# Socio-Economic Considerations

## Potential Effects:

- Temporary increase in nuisance noise during construction.
- Temporary traffic disruptions during construction.
- Temporary increase in wastes during construction.



## Example Mitigation Measures:

- Construction activities will be carried out in compliance with municipal noise by-laws with respect to noise and construction equipment usage. Applicable noise by-law exemptions will be sought if construction activities cannot be avoided on Statutory Holidays, Sundays or at night.
- Traffic access will be maintained, where possible, during construction. Good management and best practices will be implemented during construction to minimize traffic disruption. If required, temporary detour routes will be provided to reduce potential impacts to commuters.
- Solid waste will be collected and disposed of appropriately in accordance with applicable regulations at a licensed waste facility.



# Archaeology and Cultural Heritage Considerations

- A Stage 1 archaeological assessment is currently underway for the project. A visual inspection of the project area was conducted on May 11, 2022 with the participation of a community representative.
- The Stage 1 assessment will determine which portions of the proposed pipeline route and the adjacent lands retain archaeological potential. Any areas that retain archaeological potential and are planned to be impacted by the project will be recommended for a Stage 2 archaeological assessment to confirm whether there are any sites of Cultural Heritage Value or Interest that must be protected or mitigated.
- The Cultural Heritage Screening found potential heritage properties and features along the pipeline route. Once the preferred route is confirmed, a Cultural Heritage Assessment Report is recommended to further evaluate heritage resources.





# Archaeology and Cultural Heritage Considerations

## Potential Effects:

- Disturbance of previously undiscovered archaeological resources during construction.
- Disturbance of cultural heritage resources during construction.

## Example Mitigation Measures:

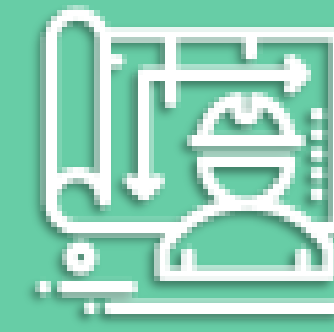
- Follow recommendations from the Stage 1 and Stage 2 Archaeological Assessments.
- Implement recommendations in the Cultural Heritage Assessment Report and/or Heritage Impact Assessment to be completed prior to construction.





# Pipeline Design, Construction and Safety

## *Pipeline Design*



The proposed pipeline is designed to meet and/or exceed the regulations of the Canadian Standards Association (Z662 Oil and Gas Pipeline Systems) and the applicable regulations of the Technical Standards & Safety Authority (TSSA).

## *Pipeline Construction*



Our construction work is temporary and transitory – once the pipe is laid, the area is restored to as close to pre-construction condition as possible.

## *Pipeline Safety and Integrity*

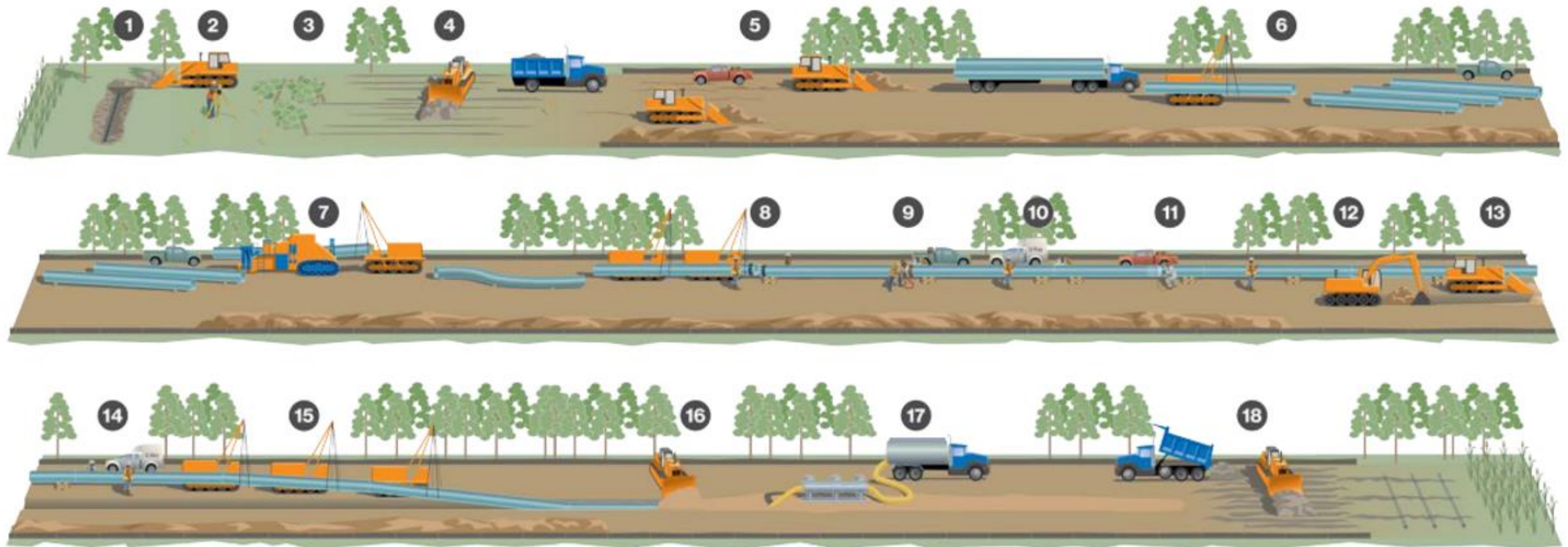


Enbridge Gas takes many steps to safely and reliably operate their network of natural gas pipelines, such as:

- ✓ Designing, constructing, and testing our pipelines to meet or exceed requirements set by industry standards and regulatory authorities.
- ✓ Ensuring that any work is respectful of community activities, regulations and bylaws.
- ✓ Continuously monitoring the entire network.
- ✓ Performing regular field surveys to detect leaks and confirm corrosion prevention methods are working as intended.



# General Construction Overview

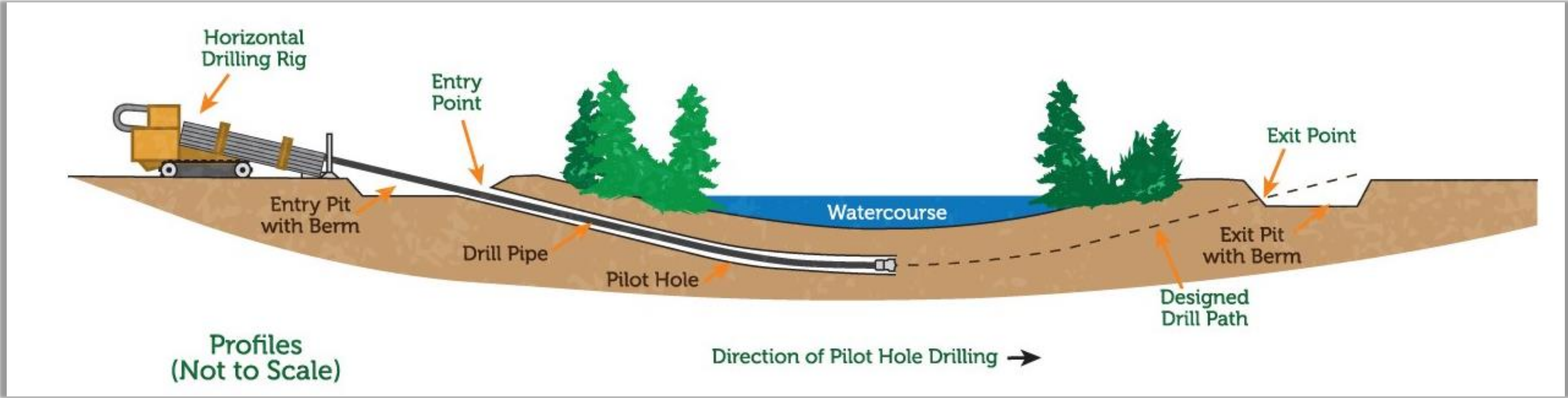


- |                            |                                   |                       |   |   |   |
|----------------------------|-----------------------------------|-----------------------|---|---|---|
| 1. Pre-construction tiling | 4. Right-of-way topsoil stripping | 7. Field bending pipe | 10. X-ray or ultrasonic inspection, weld repair | 13. Padding trench bottom               | 16. Backfilling                                   |
| 2. Surveying and staking   | 5. Front-end grading              | 8. Lining-up pipe     | 11. Field coating                               | 14. Final inspection and coating repair | 17. Hydrostatic testing                           |
| 3. Clearing                | 6. Stringing pipe                 | 9. Welding process    | 12. Digging the trench                          | 15. Lowering pipe                       | 18. Site restoration and post-construction tiling |

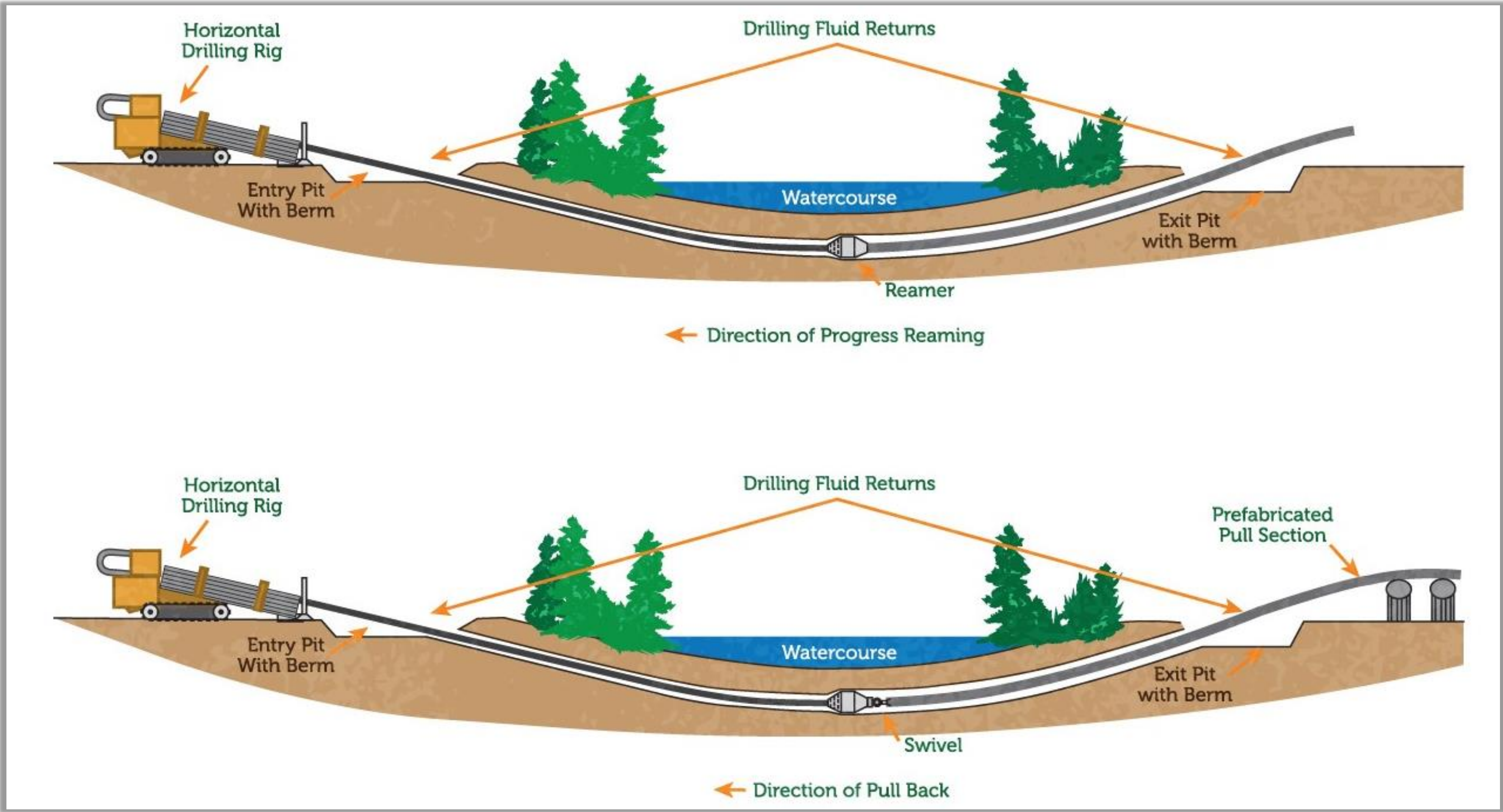


# Horizontal Directional Drilling Overview

Stage 1:  
Pilot Hole  
Directional  
Drilling



Stage 2:  
Reaming and  
Pulling Back



Source: <https://www.transmountain.com/news/2019/digging-deeper-trenchless-crossing-methods-reduce-impact>



# Example of Pipeline Installation in Road Allowance





# Mitigation and Monitoring

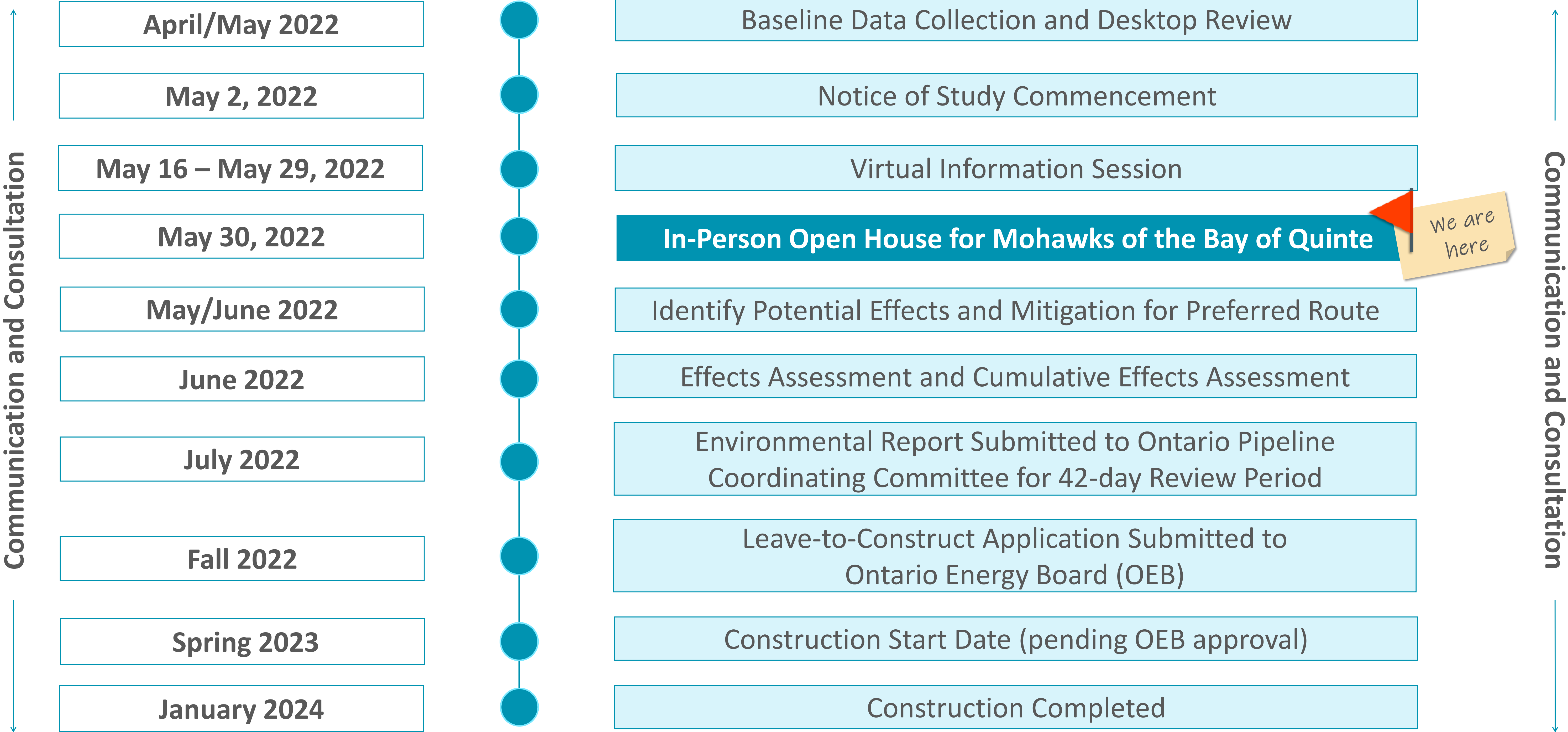
Enbridge Gas is committed to working with the community on construction planning, mitigation, and post-construction monitoring. Post-construction monitoring will be conducted so that impacted areas are restored to as close to pre-construction conditions as possible.



Enbridge Gas recognizes that the construction of the pipeline may result in short-term adverse impacts and they commit to applying mitigation measures to reduce these impacts and work with the affected communities and landowners so that issues are resolved in a timely manner.



# Environmental Assessment Process and Proposed Project Schedule



# Continuous Stakeholder Engagement

Enbridge Gas is committed to open dialogue throughout the environmental assessment and the OEB Leave-to-Construct Application process. Community members will have the opportunity to remain engaged in the process after the environmental assessment is completed, through:

- ✓ Participation in the OEB hearing as an intervenor or interested party (details can be found at [www.oeb.ca](http://www.oeb.ca))
- ✓ Contacting project team members (project contact information provided on next slide)
- ✓ Visiting the Enbridge Gas project website at [www.enbridgegas.com/MBQCommunityEA](http://www.enbridgegas.com/MBQCommunityEA)





# Thank you for participating in our Open House!



We want to hear from you! Please complete the comment form provided here today or contact a project representative via the contact details provided below.



This presentation and the comment form are available for download on the Enbridge Gas website at [www.enbridgegas.com/MBQCommunityEA](http://www.enbridgegas.com/MBQCommunityEA)



Please submit your feedback by **June 15, 2022** so it can be considered in the Environmental Report that will be submitted to the Ontario Energy Board.

## Project Contact Information:



[MBQcommunityEA@dillon.ca](mailto:MBQcommunityEA@dillon.ca)



613-745-2213, ext. 3024

# Staying Informed

## Appendix K

### *Open House Comment Form*



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## Open House Comment Form

***We want to hear from you!*** We encourage you to review the Open House material and then fill out and submit this comment form. Your input is welcome and appreciated.

You can also provide your input by email. Please download the comment form from the Enbridge Gas website ([www.enbridgegas.com/MBQCommunityEA](http://www.enbridgegas.com/MBQCommunityEA)) and submit it by email to [MBQcommunityEA@dillon.ca](mailto:MBQcommunityEA@dillon.ca) by **June 15, 2022**.

### Contact Information and General Questions

If you would like to be added to the Project's mailing list and receive Project updates, please provide your contact information.

#### 1. Name / Email Address or Mailing Address

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#### 2. How did you hear about the Project? (Select all that apply)

- ☐ Received Notice via Email
- ☐ Received Notice via Standard Mail (Canada Post) for Virtual Info Session
- ☐ Newspaper Ads (Belleville Intelligencer, May 3rd & 10th) advertising Virtual Info Session
- ☐ May MBQ Newsletter advertising Virtual Info Session
- ☐ Enbridge Gas Social Media advertising during Virtual Info Session (i.e., Facebook, Twitter)
- ☐ MBQ Website
- ☐ MBQ Social Media
- ☐ From a Friend or Neighbour
- ☐ Other, please specify:

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**3. Do you own property, live, or work beside any of the following? (Select all that apply):**

- ☐ Shannonville Route (York Rd., Queen St., Beach Rd., Young St., Atsia Ct., Gore St., Howard St.)
- ☐ MBQ Community Route (York Rd., Wyman Rd., Lower Slash Rd., Homeland Dr., Ridge Rd.)
- ☐ I do not own property, live, or work along the proposed routes but I am interested in the Project

**4. Please explain your interest in the Project.**

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**5. Which group represents you best? (Please choose one answer)**

- ☐ I am a member of an Indigenous community
- ☐ I am a landowner or resident in the study area
- ☐ I am a member of a community interest group
- ☐ I am a government employee or official
- ☐ Other, please specify:

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**6. What is your view of the proposed Project?**

- ☐ I am supportive
- ☐ I am not supportive
- ☐ No opinion at this time (Go to Question 8)

**7. Please explain your view (supportive or not supportive).**

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- 8. Are there any environmental, socio-economic, or cultural heritage features along the proposed routes that you would like to identify? Please indicate which route or street you are commenting on.**

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- 9. Are there any potential effects (e.g., to you, your property, business, or otherwise) and any mitigation measures that Enbridge Gas should consider and address prior to Project construction? Please indicate which route or street you are commenting on.**

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- 10. Please provide any additional comments, questions, or feedback that you have with regards to the Project. If applicable, please indicate which route or street you are commenting on.**

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## Feedback on the Open House

**11. Was sufficient information about the Project provided at the Open House?**

- ☐ Yes (Go to Question 13)  
☐ No

**12. Please describe what other information you would have liked to see.**

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**13. Was sufficient information provided on the Ontario Energy Board and Environmental Assessment process?**

- ☐ Yes  
☐ No  
☐ Partly

**14. Please tell us what else you would like to know about the Ontario Energy Board and Environmental Assessment process.**

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Thank you for participating in the Open House for the  
Mohawks of the Bay of Quinte and  
Shannonville Community Expansion Project!

If you require further information about the Project, please contact one of the following individuals:

|  |  |
|--|--|
| <b>Tristan Lefler</b><br><b>Environmental Assessment Project Manager</b><br><b>Dillon Consulting Limited</b><br>Suite 200 – 51 Breithaupt St.<br>Kitchener, ON N2H 5G5 | <b>Alissa Lee</b><br><b>Environmental Assessment &amp; Consultation Lead</b><br><b>Dillon Consulting Limited</b><br>Suite 101 – 177 Colonnade Road South<br>Ottawa, ON K2E 7J4 |
| <p><a href="mailto:MBQcommunityEA@dillon.ca">MBQcommunityEA@dillon.ca</a><br/>613-745-2213 ext. 3024</p>   |  |

You can also stay up-to-date on the Project by visiting the Enbridge Gas website at:

[www.enbridgegas.com/MBQCommunityEA](http://www.enbridgegas.com/MBQCommunityEA)

**Collection and Use of Personal Information:**

*Any personal information (PI), such as names and addresses, collected by Enbridge Gas Inc. (EGI) on this comment form (or through the Open House process) for this project will be used for the purpose of conducting an environmental assessment and related activities, such as creating an environmental assessment report. EGI may also share PI with its consultant(s) for this purpose and will share PI with the Ontario Energy Board (OEB) and other government agencies as required for the project. In accordance with the Ontario Freedom of Information and Protection of Privacy Act, PI provided to the OEB will not be disclosed on the public record or to any third parties. However, comments, questions and other information collected may be disclosed on the public record provided that any PI will be redacted.*

## Appendix L

### *Indigenous Consultation Logs*



| Line Item                      | Date of Engagement | Method of Engagement | Summary of Engagement Activity   | Response from Community/Outstanding Issues    |
|--------------------------------|--------------------|----------------------|--|---|
| <b>Alderville First Nation</b> |                    |                      |  |   |
| 1                              | April 18, 2022     | Email                | <p>Email from Enbridge Gas representative to Alderville First Nation representative advising the Mohawks Bay of Quinte First Nation Community Expansion Project was proposing to construct new natural gas pipelines and rebuild an existing station. Enbridge Gas representative provided a letter regarding the Project. The letter advised the Project required the construction of new natural gas pipelines to provide access to gas distribution services to the community of Mohawks Bay of Quinte First Nation and part of Shannonville, Ontario. The letter provided the rationale for Project construction. The letter advised the Project would be constructed in Tyendinaga Mohawk Territory and the Township of Tyendinaga and would begin service in the first quarter of 2024. The letter advised the Project would be located within existing road allowances where possible but noted permanent easement and temporary workspaces may be required. The letter advised Enbridge Gas retained a contractor to undertake and environmental study of the construction and operation of the Project as required by the Ontario Energy Board's Environmental Guidelines for the Location, Construction, and Operation of Hydrocarbon Pipelines and Facilities in Ontario, 7th Edition (2016). The letter provided an overview of potentially required authorizations from Federal bodies, Provincial bodies, Municipalities, Indigenous Groups and landowners. The letter requested feedback, including whether the Project may have adverse impacts on Aboriginal or Treaty rights and how the impacts could be avoided, minimized or mitigated. The letter advised Enbridge Gas was delegated the procedural aspects of consultation by the Ministry of Energy on behalf of Ontario. The letter provided contact information for a Ministry of Energy representative and Enbridge Gas representative.</p> | No response received from AFN representative. |

| Line Item | Date of Engagement | Method of Engagement | Summary of Engagement Activity  | Response from Community/Outstanding Issues   |
|-----------|--------------------|----------------------|---|--|
| 2         | April 19, 2022     | Email                | Email from Alderville First Nation (AFN) representative to Enbridge Gas representative advising they approved of the Mohawks of the Bay of Quinte Community Expansion Project if all the necessary studies were completed. AFN representative advised that while the Project was in Crawford Purchase territory, AFN would look to Mohawks of the Bay of Quinte to address their own interests as well as those of the larger Indigenous community.   | No response received from AFN representative.  |
| 3         | April 21, 2022     | Email                | Email from Enbridge Gas representative to Alderville First Nation (AFN) representatives confirming receipt of their April 19, 2022 email regarding AFN's approval of the Mohawks of the Bay of Quinte Community Expansion Project if all the necessary studies were completed.  | No response received from AFN representative.  |
| 4         | May 2, 2022        | Email                | Email from Enbridge Gas representative to Alderville First Nation (AFN) representative providing a notice of study commencement and a letter regarding the Mohawks of the Bay of Quinte Community Expansion Project. Enbridge Gas representative provided a Project overview. The letter provided an overview of the environmental study, supplemental Project information, and information regarding a virtual open house. The letter provided a website link to the virtual open house, noting it would be active from May 16, 2022 to May 29, 2022. The letter requested feedback by June 15, 2022, and advised Enbridge Gas representatives were available for a meeting, if requested. AFN representative advised AFN would let Mohawks of the Bay of Quinte (MBQ) make comments as the Project was near their land. AFN representative noted they may have comments regarding archaeological studies. AFN representative requested archaeological studies when they were completed. | Alderville First Nation (AFN) requested archaeological studies for the Mohawks of the Bay of Quinte Community Expansion Project when they were completed.<br><br>Enbridge Gas advised they would keep AFN updated regarding the Project. |



| Line Item   | Date of Engagement | Method of Engagement | Summary of Engagement Activity  | Response from Community/Outstanding Issues   |
|---|--------------------|----------------------|---|--|
| 5   | May 3, 2022        | Email                | Email from Enbridge Gas representative to Alderville First Nation (AFN) representative advising they would keep AFN updated regarding the Mohawks of the Bay of Quinte Community Expansion Project.   | Alderville First Nation (AFN) requested archaeological studies for the Mohawks of the Bay of Quinte Community Expansion Project when they were completed.<br><br>Enbridge Gas advised they would keep AFN updated regarding the Project. |
| 6   | May 20, 2022       | Email                | Email from Enbridge Gas representative to Alderville First Nation representative notifying the virtual open house for the Mohawks of the Bay of Quinte Community Expansion Project was underway. Enbridge Gas representative provided a website link to access the virtual open house. Enbridge Gas representative advised they were available for questions and feedback.  | No response received from AFN representative.  |
| <b>Beausoleil First Nation (Christian Island)</b> |                    |                      |   |  |
| 7   | April 18, 2022     | Email                | Email from Enbridge Gas representative to Beausoleil First Nation (Christian Island) representatives advising the Mohawks Bay of Quinte First Nation Community Expansion Project was proposing to construct new natural gas pipelines and rebuild an existing station. Enbridge Gas representative provided a letter regarding the Project. The letter advised the Project required the construction of new natural gas pipelines to provide access to gas distribution services to the community of Mohawks Bay of Quinte First Nation and part of Shannonville, Ontario. The letter provided the rationale for Project construction. The letter advised the Project would be constructed in Tyendinaga Mohawk Territory and the Township of Tyendinaga and would begin service in the first quarter of 2024. The letter advised the Project would be located within existing road allowances where possible but noted permanent easement and temporary workspaces may be required. The letter advised Enbridge Gas retained a contractor to undertake and | No response received from BFN representative.  |

| Line Item | Date of Engagement | Method of Engagement | Summary of Engagement Activity   | Response from Community/Outstanding Issues    |
|-----------|--------------------|----------------------|--|---|
|           |                    |                      | <p>environmental study of the construction and operation of the Project as required by the Ontario Energy Board's Environmental Guidelines for the Location, Construction, and Operation of Hydrocarbon Pipelines and Facilities in Ontario, 7th Edition (2016). The letter provided an overview of potentially required authorizations from Federal bodies, Provincial bodies, Municipalities, Indigenous Groups and landowners. The letter requested feedback, including whether the Project may have adverse impacts on Aboriginal or Treaty rights and how the impacts could be avoided, minimized or mitigated. The letter advised Enbridge Gas was delegated the procedural aspects of consultation by the Ministry of Energy on behalf of Ontario. The letter provided contact information for a Ministry of Energy representative and Enbridge Gas representative.</p> |   |
| 8         | May 2, 2022        | Email                | <p>Email from Enbridge Gas representative to Beausoleil First Nation (Christian Island) representatives providing a notice of study commencement and a letter regarding the Mohawks of the Bay of Quinte Community Expansion Project. Enbridge Gas representative provided a Project overview. The letter provided an overview of the environmental study, supplemental Project information, and information regarding a virtual open house. The letter provided a website link to the virtual open house, noting it would be active from May 16, 2022 to May 29, 2022. The letter requested feedback by June 15, 2022, and advised Enbridge Gas representatives were available for a meeting, if requested.</p>   | No response received from BFN representative. |



| Line Item                           | Date of Engagement | Method of Engagement | Summary of Engagement Activity   | Response from Community/Outstanding Issues      |
|-------------------------------------|--------------------|----------------------|--|---|
| 9                                   | May 20, 2022       | Email                | Email from Enbridge Gas representative to Beausoleil First Nation representatives notifying the virtual open house for the Mohawks of the Bay of Quinte Community Expansion Project was underway. Enbridge Gas representative provided a website link to access the virtual open house. Enbridge Gas representative advised they were available for questions and feedback.  | No response received from BFN representative.   |
| <b>Chippewas of Georgina Island</b> |                    |                      |  |   |
| 10                                  | April 18, 2022     | Email                | Email from Enbridge Gas representative to Chippewas of Georgina Island representatives advising the Mohawks Bay of Quinte First Nation Community Expansion Project was proposing to construct new natural gas pipelines and rebuild an existing station. Enbridge Gas representative provided a letter regarding the Project. The letter advised the Project required the construction of new natural gas pipelines to provide access to gas distribution services to the community of Mohawks Bay of Quinte First Nation and part of Shannonville, Ontario. The letter provided the rationale for Project construction. The letter advised the Project would be constructed in Tyendinaga Mohawk Territory and the Township of Tyendinaga and would begin service in the first quarter of 2024. The letter advised the Project would be located within existing road allowances where possible but noted permanent easement and temporary workspaces may be required. The letter advised Enbridge Gas retained a contractor to undertake an environmental study of the construction and operation of the Project as required by the Ontario Energy Board's Environmental Guidelines for the Location, Construction, and Operation of Hydrocarbon Pipelines and Facilities in Ontario, 7th Edition (2016). The letter provided an overview of potentially required authorizations from Federal bodies, Provincial bodies, Municipalities, Indigenous Groups and landowners. The letter requested feedback, including | No response received from CGIFN representative. |

| Line Item                             | Date of Engagement | Method of Engagement | Summary of Engagement Activity  | Response from Community/Outstanding Issues      |
|---------------------------------------|--------------------|----------------------|---|---|
|                                       |                    |                      | whether the Project may have adverse impacts on Aboriginal or Treaty rights and how the impacts could be avoided, minimized or mitigated. The letter advised Enbridge Gas was delegated the procedural aspects of consultation by the Ministry of Energy on behalf of Ontario. The letter provided contact information for a Ministry of Energy representative and Enbridge Gas representative.   |   |
| 11                                    | May 2, 2022        | Email                | Email from Enbridge Gas representative to Chippewas of Georgina Island representatives providing a notice of study commencement and a letter regarding the Mohawks of the Bay of Quinte Community Expansion Project. Enbridge Gas representative provided a Project overview. The letter provided an overview of the environmental study, supplemental Project information, and information regarding a virtual open house. The letter provided a website link to the virtual open house, noting it would be active from May 16, 2022 to May 29, 2022. The letter requested feedback by June 15, 2022, and advised Enbridge Gas representatives were available for a meeting, if requested. | No response received from CGIFN representative. |
| 12                                    | May 20, 2022       | Email                | Email from Enbridge Gas representative to Chippewas of Georgina Island representatives notifying the virtual open house for the Mohawks of the Bay of Quinte Community Expansion Project was underway. Enbridge Gas representative provided a website link to access the virtual open house. Enbridge Gas representative advised they were available for questions and feedback.  | No response received from CGIFN representative. |
| <b>Chippewas of Rama First Nation</b> |                    |                      |   |   |
| 13                                    | April 18, 2022     | Email                | Email from Enbridge Gas representative to Chippewas of Rama First Nation representatives advising the Mohawks Bay of Quinte First Nation Community Expansion Project was proposing to construct new natural gas pipelines and rebuild an existing station. Enbridge Gas representative provided a letter regarding the Project. The letter advised the Project required the construction of new natural   | No response received from CRFN representative.  |



| Line Item | Date of Engagement | Method of Engagement | Summary of Engagement Activity  | Response from Community/Outstanding Issues |
|-----------|--------------------|----------------------|---|--|
|           |                    |                      | <p>gas pipelines to provide access to gas distribution services to the community of Mohawks Bay of Quinte First Nation and part of Shannonville, Ontario. The letter provided the rationale for Project construction. The letter advised the Project would be constructed in Tyendinaga Mohawk Territory and the Township of Tyendinaga and would begin service in the first quarter of 2024. The letter advised the Project would be located within existing road allowances where possible but noted permanent easement and temporary workspaces may be required. The letter advised Enbridge Gas retained a contractor to undertake an environmental study of the construction and operation of the Project as required by the Ontario Energy Board's Environmental Guidelines for the Location, Construction, and Operation of Hydrocarbon Pipelines and Facilities in Ontario, 7th Edition (2016). The letter provided an overview of potentially required authorizations from Federal bodies, Provincial bodies, Municipalities, Indigenous Groups and landowners. The letter requested feedback, including whether the Project may have adverse impacts on Aboriginal or Treaty rights and how the impacts could be avoided, minimized or mitigated. The letter advised Enbridge Gas was delegated the procedural aspects of consultation by the Ministry of Energy on behalf of Ontario. The letter provided contact information for a Ministry of Energy representative and Enbridge Gas representative.</p> |  |

| Line Item                      | Date of Engagement | Method of Engagement | Summary of Engagement Activity   | Response from Community/Outstanding Issues     |
|--------------------------------|--------------------|----------------------|--|--|
| 14                             | May 2, 2022        | Email                | Email from Enbridge Gas representative to Chippewas of Rama First Nation representatives providing a notice of study commencement and a letter regarding the Mohawks of the Bay of Quinte Community Expansion Project. Enbridge Gas representative provided a Project overview. The letter provided an overview of the environmental study, supplemental Project information, and information regarding a virtual open house. The letter provided a website link to the virtual open house, noting it would be active from May 16, 2022 to May 29, 2022. The letter requested feedback by June 15, 2022, and advised Enbridge Gas representatives were available for a meeting, if requested.  | No response received from CRFN representative. |
| 15                             | May 20, 2022       | Email                | Email from Enbridge Gas representative to Chippewas of Rama First Nation representatives notifying the virtual open house for the Mohawks of the Bay of Quinte Community Expansion Project was underway. Enbridge Gas representative provided a website link to access the virtual open house. Enbridge Gas representative advised they were available for questions and feedback.   | No response received from CRFN representative. |
| <b>Curve Lake First Nation</b> |                    |                      |  |  |
| 16                             | April 18, 2022     | Email                | Email from Enbridge Gas representative to Curve Lake First Nation representatives advising the Mohawks Bay of Quinte First Nation Community Expansion Project was proposing to construct new natural gas pipelines and rebuild an existing station. Enbridge Gas representative provided a letter regarding the Project. The letter advised the Project required the construction of new natural gas pipelines to provide access to gas distribution services to the community of Mohawks Bay of Quinte First Nation and part of Shannonville, Ontario. The letter provided the rationale for Project construction. The letter advised the Project would be constructed in Tyendinaga Mohawk Territory and the Township of Tyendinaga and would begin service in the first quarter of 2024. The letter advised the | No response received from CLFN representative. |



| Line Item | Date of Engagement | Method of Engagement | Summary of Engagement Activity   | Response from Community/Outstanding Issues     |
|-----------|--------------------|----------------------|--|--|
|           |                    |                      | <p>Project would be located within existing road allowances where possible but noted permanent easement and temporary workspaces may be required. The letter advised Enbridge Gas retained a contractor to undertake and environmental study of the construction and operation of the Project as required by the Ontario Energy Board's Environmental Guidelines for the Location, Construction, and Operation of Hydrocarbon Pipelines and Facilities in Ontario, 7th Edition (2016). The letter provided an overview of potentially required authorizations from Federal bodies, Provincial bodies, Municipalities, Indigenous Groups and landowners. The letter requested feedback, including whether the Project may have adverse impacts on Aboriginal or Treaty rights and how the impacts could be avoided, minimized or mitigated. The letter advised Enbridge Gas was delegated the procedural aspects of consultation by the Ministry of Energy on behalf of Ontario. The letter provided contact information for a Ministry of Energy representative and Enbridge Gas representative.</p> |  |
| 17        | May 2, 2022        | Email                | <p>Email from Enbridge Gas representative to Curve Lake First Nation representatives providing a notice of study commencement and a letter regarding the Mohawks of the Bay of Quinte Community Expansion Project. Enbridge Gas representative provided a Project overview. The letter provided an overview of the environmental study, supplemental Project information, and information regarding a virtual open house. The letter provided a website link to the virtual open house, noting it would be active from May 16, 2022 to May 29, 2022. The letter requested feedback by June 15, 2022, and advised Enbridge Gas representatives were available for a meeting, if requested.</p>  | No response received from CLFN representative. |

| Line Item                    | Date of Engagement | Method of Engagement | Summary of Engagement Activity  | Response from Community/Outstanding Issues   |
|------------------------------|--------------------|----------------------|---|--|
| 18                           | May 20, 2022       | Email                | Email from Enbridge Gas representative to Curve Lake First Nation representatives notifying the virtual open house for the Mohawks of the Bay of Quinte Community Expansion Project was underway. Enbridge Gas representative provided a website link to access the virtual open house. Enbridge Gas representative advised they were available for questions and feedback.   | No response received from CLFN representative.   |
| 19                           | June 17, 2022      | Email                | Email from Curve Lake First Nation representative to Enbridge Gas representative providing a letter regarding the Mohawks of the Bay of Quinte Community Expansion Project.   | No response received from CLFN representative.   |
| 20                           | June 23, 2022      | Email                | Email from Enbridge Gas representative to Curve Lake First Nation representatives confirming receipt of their June 17, 2022 email regarding the level two letter for the Mohawks of the Bay of Quinte Community Expansion Project. Enbridge Gas representative advised they would review and respond to the letter.   | Enbridge Gas advised they would review and respond to the level two letter regarding the Mohawks of the Bay of Quinte Community Expansion Project. |
| <b>Hiawatha First Nation</b> |                    |                      |   |  |
| 21                           | April 18, 2022     | Email                | Email from Enbridge Gas representative to Hiawatha First Nation representative advising the Mohawks Bay of Quinte First Nation Community Expansion Project was proposing to construct new natural gas pipelines and rebuild an existing station. Enbridge Gas representative provided a letter regarding the Project. The letter advised the Project required the construction of new natural gas pipelines to provide access to gas distribution services to the community of Mohawks Bay of Quinte First Nation and part of Shannonville, Ontario. The letter provided the rationale for Project construction. The letter advised the Project would be constructed in Tyendinaga Mohawk Territory and the Township of Tyendinaga and would begin service in the first quarter of 2024. The letter advised the Project would be located within existing road allowances where possible but noted permanent easement and temporary workspaces may be required. The letter advised Enbridge Gas retained | No response received from HFN representative.  |



| Line Item | Date of Engagement | Method of Engagement | Summary of Engagement Activity   | Response from Community/Outstanding Issues    |
|-----------|--------------------|----------------------|--|---|
|           |                    |                      | <p>a contractor to undertake and environmental study of the construction and operation of the Project as required by the Ontario Energy Board's Environmental Guidelines for the Location, Construction, and Operation of Hydrocarbon Pipelines and Facilities in Ontario, 7th Edition (2016). The letter provided an overview of potentially required authorizations from Federal bodies, Provincial bodies, Municipalities, Indigenous Groups and landowners. The letter requested feedback, including whether the Project may have adverse impacts on Aboriginal or Treaty rights and how the impacts could be avoided, minimized or mitigated. The letter advised Enbridge Gas was delegated the procedural aspects of consultation by the Ministry of Energy on behalf of Ontario. The letter provided contact information for a Ministry of Energy representative and Enbridge Gas representative.</p> |   |
| 22        | May 2, 2022        | Email                | <p>Email from Enbridge Gas representative to Hiawatha First Nation representative providing a notice of study commencement and a letter regarding the Mohawks of the Bay of Quinte Community Expansion Project. Enbridge Gas representative provided a Project overview. The letter provided an overview of the environmental study, supplemental Project information, and information regarding a virtual open house. The letter provided a website link to the virtual open house, noting it would be active from May 16, 2022 to May 29, 2022. The letter requested feedback by June 15, 2022, and advised Enbridge Gas representatives were available for a meeting, if requested.</p>   | No response received from HFN representative. |

| <b>Line Item</b> | <b>Date of Engagement</b> | <b>Method of Engagement</b> | <b>Summary of Engagement Activity</b>  | <b>Response from Community/Outstanding Issues</b> |
|------------------|---------------------------|-----------------------------|--|---|
| 23               | May 20, 2022              | Email                       | Email from Enbridge Gas representative to Hiawatha First Nation representative notifying the virtual open house for the Mohawks of the Bay of Quinte Community Expansion Project was underway. Enbridge Gas representative provided a website link to access the virtual open house. Enbridge Gas representative advised they were available for questions and feedback. | No response received from HFN representative.     |



| Line Item                  | Date of Engagement | Method of Engagement | Summary of Engagement Activity  | Response from Community/Outstanding Issues    |
|----------------------------|--------------------|----------------------|---|---|
| <b>Huron-Wendat Nation</b> |                    |                      |   |   |
| 24                         | April 18, 2022     | Email                | <p>Email from Enbridge Gas representative to Huron-Wendat Nation representatives advising the Mohawks Bay of Quinte First Nation Community Expansion Project was proposing to construct new natural gas pipelines and rebuild an existing station. Enbridge Gas representative provided a letter regarding the Project. The letter advised the Project required the construction of new natural gas pipelines to provide access to gas distribution services to the community of Mohawks Bay of Quinte First Nation and part of Shannonville, Ontario. The letter provided the rationale for Project construction. The letter advised the Project would be constructed in Tyendinaga Mohawk Territory and the Township of Tyendinaga and would begin service in the first quarter of 2024. The letter advised the Project would be located within existing road allowances where possible but noted permanent easement and temporary workspaces may be required. The letter advised Enbridge Gas retained a contractor to undertake and environmental study of the construction and operation of the Project as required by the Ontario Energy Board's Environmental Guidelines for the Location, Construction, and Operation of Hydrocarbon Pipelines and Facilities in Ontario, 7th Edition (2016). The letter provided an overview of potentially required authorizations from Federal bodies, Provincial bodies, Municipalities, Indigenous Groups and landowners. The letter requested feedback, including whether the Project may have adverse impacts on Aboriginal or Treaty rights and how the impacts could be avoided, minimized or mitigated. The letter advised Enbridge Gas was delegated the procedural aspects of consultation by the Ministry of Energy on behalf of Ontario. The letter provided contact information for a Ministry of Energy representative and Enbridge Gas representative.</p> | No response received from HWN representative. |

| <b>Line Item</b> | <b>Date of Engagement</b> | <b>Method of Engagement</b> | <b>Summary of Engagement Activity</b>  | <b>Response from Community/Outstanding Issues</b> |
|------------------|---------------------------|-----------------------------|--|---|
| 25               | May 2, 2022               | Email                       | Email from Enbridge Gas representative to Huron-Wendat Nation representatives providing a notice of study commencement and a letter regarding the Mohawks of the Bay of Quinte Community Expansion Project. Enbridge Gas representative provided a Project overview. The letter provided an overview of the environmental study, supplemental Project information, and information regarding a virtual open house. The letter provided a website link to the virtual open house, noting it would be active from May 16, 2022 to May 29, 2022. The letter requested feedback by June 15, 2022, and advised Enbridge Gas representatives were available for a meeting, if requested. | No response received from HWN representative.     |
| 26               | May 20, 2022              | Email                       | Email from Enbridge Gas representative to Huron-Wendat Nation representatives notifying the virtual open house for the Mohawks of the Bay of Quinte Community Expansion Project was underway. Enbridge Gas representative provided a website link to access the virtual open house. Enbridge Gas representative advised they were available for questions and feedback.  | No response received from HWN representative.     |



| Line Item                              | Date of Engagement | Method of Engagement | Summary of Engagement Activity  | Response from Community/Outstanding Issues     |
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| <b>Kawartha Nishnawbe First Nation</b> |                    |                      |   |  |
| 27                                     | April 21, 2022     | Email                | <p>Email from Enbridge Gas representative to Kawartha Nishnawbe First Nation representative advising the Mohawks Bay of Quinte First Nation Community Expansion Project was proposing to construct new natural gas pipelines and rebuild an existing station. Enbridge Gas representative provided a letter regarding the Project. The letter advised the Project required the construction of new natural gas pipelines to provide access to gas distribution services to the community of Mohawks Bay of Quinte First Nation and part of Shannonville, Ontario. The letter provided the rationale for Project construction. The letter advised the Project would be constructed in Tyendinaga Mohawk Territory and the Township of Tyendinaga and would begin service in the first quarter of 2024. The letter advised the Project would be located within existing road allowances where possible but noted permanent easement and temporary workspaces may be required. The letter advised Enbridge Gas retained a contractor to undertake an environmental study of the construction and operation of the Project as required by the Ontario Energy Board's Environmental Guidelines for the Location, Construction, and Operation of Hydrocarbon Pipelines and Facilities in Ontario, 7th Edition (2016). The letter provided an overview of potentially required authorizations from Federal bodies, Provincial bodies, Municipalities, Indigenous Groups and landowners. The letter requested feedback, including whether the Project may have adverse impacts on Aboriginal or Treaty rights and how the impacts could be avoided, minimized or mitigated. The letter advised Enbridge Gas was delegated the procedural aspects of consultation by the Ministry of Energy on behalf of Ontario. The letter provided contact information for a Ministry of Energy representative and Enbridge Gas representative.</p> | No response received from KNFN representative. |

| Line Item   | Date of Engagement | Method of Engagement | Summary of Engagement Activity   | Response from Community/Outstanding Issues      |
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| 28  | May 2, 2022        | Email                | Email from Enbridge Gas representative to Kawartha Nishnawbe First Nation representative providing a notice of study commencement and a letter regarding the Mohawks of the Bay of Quinte Community Expansion Project. Enbridge Gas representative provided a Project overview. The letter provided an overview of the environmental study, supplemental Project information, and information regarding a virtual open house. The letter provided a website link to the virtual open house, noting it would be active from May 16, 2022 to May 29, 2022. The letter requested feedback by June 15, 2022, and advised Enbridge Gas representatives were available for a meeting, if requested.  | No response received from KNFN representative.  |
| 29  | May 20, 2022       | Email                | Email from Enbridge Gas representative to Kawartha Nishnawbe First Nation representative notifying the virtual open house for the Mohawks of the Bay of Quinte Community Expansion Project was underway. Enbridge Gas representative provided a website link to access the virtual open house. Enbridge Gas representative advised they were available for questions and feedback.   | No response received from KNFN representative.  |
| <b>Mississaugas of Scugog Island First Nation</b> |                    |                      |  |   |
| 30  | April 18, 2022     | Email                | Email from Enbridge Gas representative to Mississaugas of Scugog Island First Nation (MSIFN) representatives and IBA Braiding representative, representative MSIFN, advising the Mohawks Bay of Quinte First Nation Community Expansion Project was proposing to construct new natural gas pipelines and rebuild an existing station. Enbridge Gas representative provided a letter regarding the Project. The letter advised the Project required the construction of new natural gas pipelines to provide access to gas distribution services to the community of Mohawks Bay of Quinte First Nation and part of Shannonville, Ontario. The letter provided the rationale for Project construction. The letter advised the Project would be constructed in Tyendinaga Mohawk Territory and the | No response received from MSIFN representative. |



| Line Item | Date of Engagement | Method of Engagement | Summary of Engagement Activity   | Response from Community/Outstanding Issues      |
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|           |                    |                      | Township of Tyendinaga and would begin service in the first quarter of 2024. The letter advised the Project would be located within existing road allowances where possible but noted permanent easement and temporary workspaces may be required. The letter advised Enbridge Gas retained a contractor to undertake an environmental study of the construction and operation of the Project as required by the Ontario Energy Board's Environmental Guidelines for the Location, Construction, and Operation of Hydrocarbon Pipelines and Facilities in Ontario, 7th Edition (2016). The letter provided an overview of potentially required authorizations from Federal bodies, Provincial bodies, Municipalities, Indigenous Groups and landowners. The letter requested feedback, including whether the Project may have adverse impacts on Aboriginal or Treaty rights and how the impacts could be avoided, minimized or mitigated. The letter advised Enbridge Gas was delegated the procedural aspects of consultation by the Ministry of Energy on behalf of Ontario. The letter provided contact information for a Ministry of Energy representative and Enbridge Gas representative. |   |
| 31        | April 25, 2022     | Email                | Email from Enbridge Gas representative to Mississaugas of Scugog Island First Nation representatives providing a document outlining April 2022 updates for the Mohawks Bay of Quinte Expansion Project.  | No response received from MSIFN representative. |
| 32        | April 27, 2022     | Email                | Email from Mississaugas of Scugog Island First Nation representative to Enbridge Gas representative confirming receipt of the April 25, 2022 email containing a document outlining April 2022 updates for the Mohawks of the Bay of Quinte Expansion Project.  | No response received from MSIFN representative. |

| <b>Line Item</b> | <b>Date of Engagement</b> | <b>Method of Engagement</b> | <b>Summary of Engagement Activity</b>   | <b>Response from Community/Outstanding Issues</b> |
|------------------|---------------------------|-----------------------------|---|---|
| 33               | April 28, 2022            | Email                       | Email from Enbridge Gas representative to Mississaugas of Scugog Island First Nation representative requesting feedback regarding the April 25, 2022 email regarding the document outlining April 2022 updates for the Mohawks of the Bay of Quinte Expansion Project.  | No response received from MSIFN representative.   |
| 34               | May 2, 2022               | Email                       | Email from Enbridge Gas representative to Mississaugas of Scugog Island First Nation (MSIFN) representatives and IBA Braiding, representing MSIFN, providing a notice of study commencement and a letter regarding the Mohawks of the Bay of Quinte Community Expansion Project. Enbridge Gas representative provided a Project overview. The letter provided an overview of the environmental study, supplemental Project information, and information regarding a virtual open house. The letter provided a website link to the virtual open house, noting it would be active from May 16, 2022 to May 29, 2022. The letter requested feedback by June 15, 2022, and advised Enbridge Gas representatives were available for a meeting, if requested. | No response received from MSIFN representative.   |
| 35               | May 20, 2022              | Email                       | Email from Enbridge Gas representative to Mississaugas of Scugog Island First Nation representatives notifying the virtual open house for the Mohawks of the Bay of Quinte Community Expansion Project was underway. Enbridge Gas representative provided a website link to access the virtual open house. Enbridge Gas representative advised they were available for questions and feedback.  | No response received from MSIFN representative.   |
| 36               | May 26, 2022              | Email                       | Email from Enbridge representative to Mississaugas of Scugog Island First Nation representatives providing a May 2022 update document regarding the Mohawks of the Bay of Quinte Community Expansion Project.   | No response received from MSIFN representative.   |



| Line Item                           | Date of Engagement | Method of Engagement | Summary of Engagement Activity   | Response from Community/Outstanding Issues   |
|-------------------------------------|--------------------|----------------------|--|--|
| 37                                  | June 30, 2022      | Email                | Email from Enbridge Gas representative to Mississaugas of Scugog Island First Nation (MSIFN) representatives providing a document outlining June 2022 updates for the Mohawks of the Bay of Quinte Community Expansion Project. Enbridge Gas representative advised tree-related field work was scheduled for June 6, 7, 8, and 9, 2022. Enbridge Gas representative requested the name of the MSIFN participant for the tree field work.  | No response received from MSIFN representative.  |
| 38                                  | June 30, 2022      | Email                | Email from Enbridge Gas representative to Mississaugas of Scugog Island First Nation (MSIFN) representative advising they would call that morning. MSIFN representative confirmed receipt of the email. Enbridge Gas representative advised another Enbridge representative would handle the invoice payment. MSIFN representative advised they would follow up regarding issuing the invoice.   | No response received from MSIFN representative.  |
| <b>Mohawks of the Bay of Quinte</b> |                    |                      |  |  |
| 39                                  | September 1, 2021  | Meeting - Group      | Enbridge Gas representative met with Mohawks of the Bay of Quinte (MBQ) representatives regarding the Mohawks of the Bay of Quinte Community Expansion Project. Topics of discussion included the Project team, Project scope, proposed Project Schedule, next steps and anticipated mitigation and protective measures. Enbridge Gas representative advised they would send a copy of the presentation slides. Enbridge Gas representative noted they would provide a contact list. Enbridge Gas representative advised they would organize a Project kick-off meeting once pre-planning work was completed to further discuss expectations, scope and timelines. Enbridge Gas representative noted they would provide detailed proposed Project mapping when it became available. Enbridge Gas representative advised they would engage with MBQ representatives regarding pre-planning and environmental and archaeological matters. Enbridge Gas representative indicated they would meet with MBQ | <p>Enbridge Gas advised they would send a copy of the September 1, 2021 presentation slides.</p> <p>Enbridge Gas provided the presentation slides via email on September 8, 2021.</p> <p>Enbridge Gas advised they would provide a contact list.</p> <p>Enbridge Gas advised they would organize a Project kick-off meeting once pre-planning work was completed to further discuss expectations, scope and timelines.</p> <p>Enbridge Gas advised they would provide detailed proposed Project mapping.</p> |

| Line Item | Date of Engagement | Method of Engagement | Summary of Engagement Activity  | Response from Community/Outstanding Issues   |
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|           |                    |                      | representatives following the preliminary planning and Project kick-off meeting as needed. Enbridge Gas representative noted they would provide contractor contact list and insurance information.  | <p>Enbridge Gas advised they would engage with Mohawks of the Bay of Quinte regarding pre-planning and environmental and archaeological matters.</p> <p>Enbridge Gas advised they would meet with Mohawks of the Bay of Quinte following the preliminary planning and Project kick-off meeting as needed.</p> <p>Enbridge Gas advised they would provide a contractor contact list and insurance information.</p> <p>Enbridge Gas provided the documents via email on October 5, 2021.</p> |
| 40        | September 8, 2021  | Email                | Email from Enbridge Gas representative to Mohawks of the Bay of Quinte (MBQ) representative following up on their September 1, 2021 meeting. Enbridge Gas representative provided the presentation slides and inquired if MBQ had additional preliminary questions related to the presentation. Enbridge Gas representative provided an overview of action items from the meeting. Enbridge Gas representative indicated they initiated pre-planning work to gain an understanding of the area and advised they would discuss the findings with MBQ representatives once completed. Enbridge Gas representative noted they would work to fulfill the action items and inquired if there were any additional action items. | <p>Enbridge Gas advised they would send a copy of the September 1, 2021 presentation slides.</p> <p>Enbridge Gas provided the presentation slides via email on September 8, 2021.</p> <p>Enbridge Gas advised they would discuss the pre-planning work findings with Mohawks of the Bay of Quinte once completed.</p>  |
| 41        | October 5, 2021    | Email                | Email from Enbridge Gas representative to Mohawks of the Bay of Quinte representative providing a contact sheet and certificates of insurance. Enbridge Gas representative requested their availability for a meeting on November 16 or 17, 2021.   | Enbridge Gas advised they would provide a contractor contact list and insurance information. Enbridge Gas provided the documents via email on October 5, 2021.   |



| Line Item | Date of Engagement | Method of Engagement | Summary of Engagement Activity   | Response from Community/Outstanding Issues    |
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| 42        | March 16, 2022     | Email                | Email from Enbridge Gas representative to Mohawks of the Bay of Quinte (MBQ) representatives providing a screenshot of a map. Enbridge Gas representative inquired if the land belonged to MBQ.  | No response received from MBQ representative. |
| 43        | March 21, 2022     | Email                | Email from Enbridge Gas representative to Mohawks of the Bay of Quinte (MBQ) representatives advising Enbridge Gas contractor would be present in the MBQ community for the next few days for pre-inspection. Enbridge Gas representative advised they were available to answer questions or concerns.   | No response received from MBQ representative. |
| 44        | March 22, 2022     | Email                | Email from Enbridge Gas representative to Mohawks of the Bay of Quinte (MBQ) representatives following up on their March 16, 2022 email regarding a map. Enbridge Gas representative inquired if the land on the map belonged to MBQ.  | No response received from MBQ representative. |
| 45        | March 24, 2022     | Email                | Email from Mohawks of the Bay of Quinte (MBQ) representative to Enbridge Gas representative advising the land from the inquiry belonged to another MBQ representative who inherited it. MBQ representative advised there should be a lease on the land. MBQ representative advised they were available to answer further questions. Enbridge Gas representative confirmed receipt of the response and advised they would be in touch. Enbridge Gas representative advised Enbridge Gas may need extra space around the station.  | No response received from MBQ representative. |
| 46        | April 18, 2022     | Email                | Email from Enbridge Gas representative to Mohawks of the Bay of Quinte representative advising the Mohawks Bay of Quinte First Nation Community Expansion Project was proposing to construct new natural gas pipelines and rebuild an existing station. Enbridge Gas representative provided a letter regarding the Project. The letter advised the Project required the construction of new natural gas pipelines to provide access to gas distribution services to the community of Mohawks Bay of Quinte First Nation and part of Shannonville, Ontario. The letter provided the rationale for Project construction. The letter advised the | No response received from MBQ representative. |

| Line Item | Date of Engagement | Method of Engagement | Summary of Engagement Activity  | Response from Community/Outstanding Issues    |
|-----------|--------------------|----------------------|---|---|
|           |                    |                      | <p>Project would be constructed in Tyendinaga Mohawk Territory and the Township of Tyendinaga and would begin service in the first quarter of 2024. The letter advised the Project would be located within existing road allowances where possible but noted permanent easement and temporary workspaces may be required. The letter advised Enbridge Gas retained a contractor to undertake an environmental study of the construction and operation of the Project as required by the Ontario Energy Board's Environmental Guidelines for the Location, Construction, and Operation of Hydrocarbon Pipelines and Facilities in Ontario, 7th Edition (2016). The letter provided an overview of potentially required authorizations from Federal bodies, Provincial bodies, Municipalities, Indigenous Groups and landowners. The letter requested feedback, including whether the Project may have adverse impacts on Aboriginal or Treaty rights and how the impacts could be avoided, minimized or mitigated. The letter advised Enbridge Gas was delegated the procedural aspects of consultation by the Ministry of Energy on behalf of Ontario. The letter provided contact information for a Ministry of Energy representative and Enbridge Gas representative.</p> |   |
| 47        | April 21, 2022     | Email                | <p>Email from Enbridge Gas contractor representative to Mohawks of the Bay of Quinte (MBQ) representative advising of a planned virtual information session from May 16, 2022 to May 29, 2022. Enbridge Gas contractor representative inquired if MBQ representative preferred a traditional open house over a virtual information session. Enbridge Gas contractor advised they planned to advertise the virtual information session using the May 2022 MBQ newsletter and a local newspaper.</p>  | No response received from MBQ representative. |



| Line Item | Date of Engagement | Method of Engagement | Summary of Engagement Activity  | Response from Community/Outstanding Issues  |
|-----------|--------------------|----------------------|---|---|
| 48        | April 21, 2022     | Email                | Email from Enbridge Gas representative to Mohawks of the Bay of Quinte representative advising they were available to answer questions regarding the planned virtual information session from May 16, 2022 to May 29, 2022 regarding the Mohawks of the Bay of Quinte Community Expansion Project.  | No response received from MBQ representative.   |
| 49        | April 27, 2022     | Email                | Email from Enbridge Gas representative to Mohawks of the Bay of Quinte (MBQ) representative advising Enbridge Gas anticipated the power station on MBQ land would take more room and requested confirmation from MBQ representative that the expansion was acceptable. Enbridge Gas representative noted they could provide power station dimensions upon request. MBQ representative confirmed they wanted to review the power station dimensions. Enbridge Gas representative confirmed receipt of the email and advised they would provide the design specifications when available. | <p>Mohawks of the Bay of Quinte requested the dimensions of the power station located on their land.</p> <p>Enbridge Gas advised they would provide the design specifications when available.</p> |
| 50        | April 28, 2022     | Email                | Email from Enbridge Gas representative to Mohawks of the Bay of Quinte (MBQ) representatives advising they did not have the specifications for the footprint of the power station located on MBQ land. Enbridge Gas representative advised they would provide the design specifications when available.   | <p>Mohawks of the Bay of Quinte requested the dimensions of the power station located on their land.</p> <p>Enbridge Gas advised they would provide the design specifications when available.</p> |

| Line Item | Date of Engagement | Method of Engagement | Summary of Engagement Activity  | Response from Community/Outstanding Issues  |
|-----------|--------------------|----------------------|---|---|
| 51        | April 29, 2022     | Email                | <p>Email from Enbridge Gas representative to Mohawks of the Bay of Quinte (MBQ) representative requesting input regarding the format of an open house event, MBQ's desired level of participation for archaeological and natural environment work and MBQ's requirements for consultation throughout the development process in addition to field work, virtual open houses, environment data sharing, newsletters and review of Environmental Reports. MBQ representative advised their community center was available for an open house event. MBQ representative suggested using poster boards and creating information packets for community members to take home. MBQ representative provided points of contact to assist with the open house event arrangements and environmental work, noting they copied those MBQ representatives. MBQ representative noted they would like an MBQ monitor present for archaeological work and advised they would be the point of contact until MBQ hired a consultation coordinator. Enbridge Gas representative noted they would offer a virtual open house event and inquired if MBQ preferred an in-person open house event.</p> | <p>Mohawks of the Bay of Quinte (MBQ) noted they would like an MBQ monitor present for archaeological work.</p> |
| 52        | May 2, 2022        | Email                | <p>Email from Enbridge Gas representative to Mohawks of the Bay of Quinte representative providing a notice of study commencement and a letter regarding the Mohawks of the Bay of Quinte Community Expansion Project. Enbridge Gas representative provided a Project overview. The letter provided an overview of the environmental study, supplemental Project information, and information regarding a virtual open house. The letter provided a website link to the virtual open house, noting it would be active from May 16, 2022 to May 29, 2022. The letter requested feedback by June 15, 2022, and advised Enbridge Gas representatives were available for a meeting, if requested.</p>   | <p>No response received from MBQ representative.</p>  |



| Line Item | Date of Engagement | Method of Engagement | Summary of Engagement Activity   | Response from Community/Outstanding Issues   |
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| 53        | May 2, 2022        | Email                | Email from Mohawks of the Bay of Quinte (MBQ) representative to Enbridge Gas representative providing internal MBQ correspondence regarding the boundary lines of the Enbridge Gas power station at the corner of York Road and Highway 49, Ontario. MBQ representative inquired what the small structure with cement barriers on the north property line was.   | Mohawks of the Bay of Quinte inquired what the small structure with cement barriers on the north property line was.  |
| 54        | May 3, 2022        | Email                | Email from Enbridge Gas representative to Mohawks of the Bay of Quinte (MBQ) representative inquiring if MBQ needed further information regarding Enbridge Gas' contractors working in the Mohawks of the Bay of Quinte Community Expansion Project area. Enbridge Gas representative inquired if MBQ was interested in an in-person open house event.   | No response received from MBQ representative.  |
| 55        | May 3, 2022        | Email                | Email from Enbridge Gas representative to Mohawks of the Bay of Quinte (MBQ) representatives advising Timmins Martelle Heritage Consultants, representing Enbridge Gas, had proposed a stage one site visit in the Mohawks of the Bay of Quinte Community Expansion Project area for May 10, 2022. Enbridge Gas representative inquired if MBQ wanted to send a representative to accompany Timmins Martelle Heritage Consultants. MBQ representative inquired if the site visit was archaeological or environmental. Enbridge Gas representative advised the site visit was archaeological. | Mohawks of the Bay of Quinte inquired if the May 10, 2022 site visit was archaeological or environmental.<br><br>Enbridge Gas advised the site visit was archaeological. |
| 56        | May 3, 2022        | Email                | Email from Enbridge Gas representative to Mohawks of the Bay of Quinte (MBQ) representatives requesting a phone call to clarify MBQ's inquiries regarding the boundary lines of the Enbridge Gas power station at the corner of York Road and Highway 49, Ontario from the May 2, 2022 email.  | No response received from MBQ representative.  |

| Line Item | Date of Engagement | Method of Engagement | Summary of Engagement Activity  | Response from Community/Outstanding Issues   |
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| 57        | May 6, 2022        | Email                | Email from Enbridge Gas representative to Mohawks of the Bay of Quinte (MBQ) representative following up on their May 3, 2022 email regarding information about Enbridge Gas contractors working in the MBQ area and an in-person open house event for the Mohawks of the Bay of Quinte Community Expansion Project.  | No response received from MBQ representative.  |
| 58        | May 6, 2022        | Email                | Email from Mohawks of the Bay of Quinte (MBQ) representative to Enbridge Gas representative advising another MBQ representative was available to accompany Timmins Martelle Heritage Consultants, representing Enbridge Gas, to the May 10, 2022 stage one archaeological site visit on MBQ territory. MBQ representative advised the representative was not available the afternoon of May 10, 2022. MBQ representative inquired where and when to send the representative regarding the site visit.   | <p>Mohawks of the Bay of Quinte inquired where and when to send their representative for the May 10, 2022 stage one archaeological visit.</p> <p>Enbridge Gas provided information regarding the location, timing and contact information for the May 10, 2022 site visit.</p> |
| 59        | May 9, 2022        | Email                | Email from Enbridge Gas representative to Mohawks of the Bay of Quinte (MBQ) representatives advising they provided the information regarding the MBQ representative for the May 10, 2022 stage one archaeological site visit to other Enbridge Gas representatives. Enbridge Gas representative advised they would provide location and timing information for the site visit. MBQ representative confirmed receipt of the email. Enbridge Gas representative provided information regarding the location, timing and contact information for the site visit. Enbridge Gas representative advised the site visit was rescheduled for May 11, 2022. Enbridge Gas representative inquired if MBQ representative was still available for the rescheduled site visit. MBQ representative advised the MBQ representative was available for the rescheduled site visit and provided their contact information. Enbridge Gas representative confirmed receipt of the email. | <p>Mohawks of the Bay of Quinte inquired where and when to send their representative for the May 10, 2022 stage one archaeological visit.</p> <p>Enbridge Gas provided information regarding the location, timing and contact information for the May 10, 2022 site visit.</p> |



| Line Item | Date of Engagement | Method of Engagement | Summary of Engagement Activity   | Response from Community/Outstanding Issues  |
|-----------|--------------------|----------------------|--|---|
| 60        | May 9, 2022        | Email                | Email from Enbridge Gas representative to Mohawks of the Bay of Quinte (MBQ) representatives requesting a phone call to clarify MBQ's inquiries regarding the boundary lines of the Enbridge Gas power station at the corner of York Road and Highway 49, Ontario from their May 2, 2022 email.  | No response received from MBQ representative.   |
| 61        | May 10, 2022       | Email                | Email from Enbridge Gas representative to Mohawks of the Bay of Quinte (MBQ) representative inquiring if May 26, 2022 would work for an in-person open house event for the Mohawks of the Bay of Quinte Community Expansion Project. Enbridge representative inquired if MBQ representative required key messaging for their social media and newsletters. | No response received from MBQ representative.   |
| 62        | May 11, 2022       | Email                | Email from Enbridge Gas representative to Mohawks of the Bay of Quinte (MBQ) representative confirming the correct land acknowledgment wording for MBQ.  | No response received from MBQ representative.   |
| 63        | May 12, 2022       | Email                | Email from Mohawks of the Bay of Quinte (MBQ) representative to Enbridge Gas representative confirming May 30, 2022 worked for the Mohawks of the Bay of Quinte Community Expansion Project open house event. MBQ representative advised they copied another MBQ representative as an additional point of contact for open house event planning.           | No response received from MBQ representative.   |
| 64        | May 13, 2022       | Email                | Email from Mohawks of the Bay of Quinte representative to Enbridge Gas representatives inquiring what type of venue rental was needed for the May 30, 2022 Mohawks of the Bay of Quinte Community Expansion Project open house event.  | <p>Mohawks of the Bay of Quinte inquired what type of venue rental was needed for the May 30, 2022 Mohawks of the Bay of Quinte Community Expansion Project open house event.</p> <p>Enbridge Gas provided information regarding the logistics and equipment needed for the open house event.</p> |

| Line Item | Date of Engagement | Method of Engagement | Summary of Engagement Activity   | Response from Community/Outstanding Issues   |
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| 65        | May 16, 2022       | Email                | <p>Email from Enbridge Gas representative to Mohawks of the Bay of Quinte (MBQ) representative providing information regarding the logistics and equipment needed for the open house event. MBQ representative confirmed receipt of the email and inquired about the timing of the setup and start of the open house event. Enbridge Gas representative requested MBQ representatives' feedback on the timing of the open house event. MBQ representative inquired what times Enbridge Gas generally held their open house events. Enbridge Gas representative provided an example of typical times for open house events. MBQ representative inquired if Enbridge Gas could provide messaging for social media posts.</p> | <p>Mohawks of the Bay of Quinte inquired what type of venue rental was needed for the May 30, 2022 Mohawks of the Bay of Quinte Community Expansion Project open house event.</p> <p>Enbridge Gas provided information regarding the logistics and equipment needed for the open house event.</p> <p>Mohawks of the Bay of Quinte (MBQ) inquired about the timing of the setup and start of the open house event.</p> <p>Enbridge Gas copied another MBQ representative and inquired what time they should arrive for setup and start of the open house event.</p> <p>Mohawks of the Bay of Quinte inquired what times Enbridge Gas generally held their open house events.</p> <p>Enbridge Gas provided an example of typical times for open house events.</p> <p>Mohawks of the Bay of Quinte inquired if Enbridge Gas could provide messaging for social media posts.</p> <p>Enbridge Gas advised they were preparing messaging for MBQ's social media use.</p> |



| Line Item | Date of Engagement | Method of Engagement | Summary of Engagement Activity   | Response from Community/Outstanding Issues   |
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| 66        | May 17, 2022       | Email                | Email from Mohawks of the Bay of Quinte (MBQ) representative to Enbridge Gas representative inquiring about refreshments and how Enbridge would like to be invoiced for the venue rental for the May 30, 2022 Mohawks of the Bay of Quinte Community Expansion Project open house event. Enbridge Gas representative suggested they could hire a local catering company for refreshments. Enbridge Gas representative advised they could pay for the venue rental with a credit card. Enbridge Gas representative requested the venue name and address. MBQ representative inquired what Enbridge's catering budget was for the event. MBQ representative provided venue details. Enbridge Gas representative advised they were preparing messaging for MBQ's social media use. Enbridge Gas representative provided information that would be displayed during the open house. Enbridge Gas representative inquired if MBQ wanted any additional information presented at the open house. | <p>Mohawks of the Bay of Quinte inquired if Enbridge Gas could provide messaging for social media posts.</p> <p>Enbridge Gas advised they were preparing messaging for MBQ's social media use.</p> <p>Mohawks of the Bay of Quinte inquired how Enbridge would like to be invoiced for the venue rental for the May 30, 2022 Mohawks of the Bay of Quinte Community Expansion Project open house event.</p> <p>Enbridge Gas advised they could pay for the venue rental with a credit card.</p> <p>Mohawks of the Bay of Quinte inquired what Enbridge's catering budget was for the May 30, 2022 Mohawks of the Bay of Quinte Community Expansion Project open house event.</p> |
| 67        | May 18, 2022       | Email                | Email from Enbridge Gas representative to Mohawks of the Bay of Quinte representative inquiring if they could offer a voluntary sign-in sheet and community survey for the May 30, 2022 Mohawks of the Bay of Quinte Community Expansion Project open house event. Enbridge Gas representative provided copies of both documents.  | No response received from MBQ representative.  |

| Line Item | Date of Engagement | Method of Engagement | Summary of Engagement Activity  | Response from Community/Outstanding Issues   |
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| 68        | May 20, 2022       | Email                | Email from Enbridge Gas representative to Mohawks of the Bay of Quinte representative notifying the virtual open house for the Mohawks of the Bay of Quinte Community Expansion Project was underway. Enbridge Gas representative provided a website link to access the virtual open house. Enbridge Gas representative advised they were available for questions and feedback.   | No response received from MBQ representative.  |
| 69        | May 24, 2022       | Email                | Email from Enbridge Gas representative to Mohawks of the Bay of Quinte (MBQ) representative requesting early access to the venue for the May 30, 2022 Mohawks of the Bay of Quinte Community Expansion Project open house event. MBQ representative confirmed they could provide early access to the venue. Enbridge Gas representative confirmed receipt of the email.   | No response received from MBQ representative.  |
| 70        | May 24, 2022       | Email                | Email from Enbridge Gas representative to Mohawks of the Bay of Quinte (MBQ) representatives requesting confirmation it was acceptable if the power station footprint around MBQ's land potentially doubled in size.  | Mohawks of the Bay of Quinte requested the dimensions of the power station located on their land.<br><br>Enbridge Gas advised they would provide the design specifications when available. |
| 71        | May 25, 2022       | Email                | Email from Enbridge Gas representative to Mohawks of the Bay of Quinte (MBQ) representative following up on a May 18, 2022 email regarding a voluntary sign-in sheet and community survey for the May 30, 2022 Mohawks of the Bay of Quinte Community Expansion Project open house event. MBQ representative confirmed Enbridge Gas could use the sign-in sheet and community survey. Enbridge Gas representative confirmed receipt of the email. | No response received from MBQ representative.  |
| 72        | May 26, 2022       | Email                | Email from Enbridge representative to Mohawks of the Bay of Quinte (MBQ) representative inquiring about their availability for an in-person meeting on May 30, 2022. MBQ representative confirmed their availability.   | No response received from MBQ representative.  |



| Line Item | Date of Engagement | Method of Engagement | Summary of Engagement Activity   | Response from Community/Outstanding Issues   |
|-----------|--------------------|----------------------|--|--|
| 73        | May 27, 2022       | Email                | Email from Enbridge representative to Mohawks of the Bay of Quinte (MBQ) representative advising they provided an invitation to the May 30, 2022 in-person meeting. Enbridge Gas representative advised another Enbridge Gas representative would be joining. MBQ representative confirmed receipt of the email.   | No response received from MBQ representative.  |
| 74        | May 30, 2022       | Email                | Email from Mohawks of the Bay of Quinte representative to Enbridge Gas representative providing an invoice for the catering.   | No response received from MBQ representative.  |
| 75        | May 31, 2022       | Email                | Email from Enbridge Gas representative to Mohawks of the Bay of Quinte representative confirming receipt of the catering invoice for the May 30, 2022 Mohawks of the Bay of Quinte Community Expansion Project open house event. Enbridge Gas representative advised another Enbridge Gas representative would be in touch.  | Enbridge Gas advised another Enbridge representative would be in touch regarding the catering invoice from the May 30, 2022 Mohawks of the Bay of Quinte Community Expansion Project open house event. |
| 76        | June 3, 2022       | Email                | Email from Enbridge Gas representative to Mohawks of the Bay of Quinte representative providing the slide deck for the Mohawks of the Bay of Quinte Community Expansion Project.   | No response received from MBQ representative.  |
| 77        | June 6, 2022       | Email                | Email from Enbridge Gas representative to Mohawks of the Bay of Quinte representative advising there was a June 8, 2022 meeting between another Enbridge Gas representative and NPL Canada, representing Enbridge Gas, regarding job opportunities for the Mohawks of the Bay of Quinte Community Expansion Project. Enbridge Gas representative advised they would follow up with more information regarding job opportunities when they received it. | No response received from MBQ representative.  |
| 78        | June 14, 2022      | Email                | Email from Enbridge Gas representative to Mohawks of the Bay of Quinte (MBQ) representatives inquiring about the area of the MBQ land the power station was on. Enbridge Gas representative advised the land may not accommodate the power station expansion. MBQ representative provided a screenshot of the station land with dimensions.  | No response received from MBQ representative.  |

| Line Item | Date of Engagement | Method of Engagement | Summary of Engagement Activity   | Response from Community/Outstanding Issues    |
|-----------|--------------------|----------------------|--|---|
| 79        | June 16, 2022      | Email                | Email from Enbridge Gas representative to Mohawks of the Bay of Quinte (MBQ) representatives confirming they received the screenshot of the station land and dimensions. Enbridge Gas representative advised they forwarded the information to another Enbridge representative. Enbridge Gas representative inquired about a specific part of the screenshot. MBQ representative advised they would follow up. Enbridge Gas representative confirmed receipt of the email.                         | No response received from MBQ representative. |
| 80        | June 17, 2022      | Email                | Email from Mohawks of the Bay of Quinte (MBQ) representative to Enbridge Gas representative advising the land north of the station land was held by MBQ was part of a road allowance. MBQ representative advised MBQ could discuss using the land if it was needed.  | No response received from MBQ representative. |
| 81        | June 27, 2022      | Email                | Email from Enbridge Gas representative to Mohawks of the Bay of Quinte (MBQ) representative inquiring how Enbridge Gas received permission to install a power station on MBQ lands.  | No response received from MBQ representative. |
| 82        | June 27, 2022      | Email                | Email from Mohawks of the Bay of Quinte (MBQ) representative to Enbridge Gas representatives providing an invoice from the Tyendinaga Native Women's Association (TNWA), representing MBQ, for the May 30, 2022 open house event for the Mohawks of the Bay of Quinte Community Expansion Project. MBQ representative advised the TNWA preferred to be paid by cheque. Enbridge Gas representative requested a phone call. MBQ representative provided their contact information for a phone call. | No response received from MBQ representative. |
| 83        | July 11, 2022      | Email                | Email from Enbridge Gas representative to Mohawks of the Bay of Quinte (MBQ) representative following up on their previous inquiry regarding permission to install a power station on MBQ land.  | No response received from MBQ representative. |



## Appendix M

### *Wildlife Species Records*

**Table M1: Species with the Potential and/or Known Occurrences within the Study Area**

| Scientific Name              | Common Name               | SARA <sup>1</sup> | ESA <sup>2</sup> | S-Rank <sup>3</sup> |
|------------------------------|---------------------------|-------------------|------------------|---------------------|
| <b>BIRDS</b>                 |                           |                   |                  |                     |
| <i>Accipiter cooperii</i>    | Cooper's Hawk             | ---               | ---              | S4                  |
| <i>Accipiter gentilis</i>    | Northern Goshawk          | ---               | ---              | S4                  |
| <i>Accipiter striatus</i>    | Sharp-shinned Hawk        | ---               | ---              | S5                  |
| <i>Actitis macularius</i>    | Spotted Sandpiper         | ---               | ---              | S5                  |
| <i>Aegolius acadicus</i>     | Northern Saw-whet Owl     | ---               | ---              | S4                  |
| <i>Agelaius phoeniceus</i>   | Red-winged Blackbird      | ---               | ---              | S4                  |
| <i>Aix sponsa</i>            | Wood Duck                 | ---               | ---              | S5                  |
| <i>Ammodramus henslowii</i>  | Henslow's Sparrow         | END               | END              | SHB                 |
| <i>Ammodramus savannarum</i> | Grasshopper Sparrow       | SC                | SC               | S4B                 |
| <i>Anas acuta</i>            | Northern Pintail          | ---               | ---              | S5                  |
| <i>Anas discors</i>          | Blue-winged Teal          | ---               | ---              | S4                  |
| <i>Anas platyrhynchos</i>    | Mallard                   | ---               | ---              | S5                  |
| <i>Anas rubripes</i>         | American Black Duck       | ---               | ---              | S4                  |
| <i>Archilochus colubris</i>  | Ruby-throated Hummingbird | ---               | ---              | S5B                 |
| <i>Ardea Herodias</i>        | Great Blue Heron          | ---               | ---              | S4                  |
| <i>Aythya affinis</i>        | Lesser Scaup              | ---               | ---              | S4                  |
| <i>Aythya Americana</i>      | Redhead                   | ---               | ---              | S2B,S4N             |
| <i>Aythya collaris</i>       | Ring-necked Duck          | ---               | ---              | S5                  |
| <i>Aythya marila</i>         | Greater Scaup             | ---               | ---              | S4                  |
| <i>Bartramia longicauda</i>  | Upland Sandpiper          | ---               | ---              | S4B                 |
| <i>Bombycilla cedrorum</i>   | Cedar Waxwing             | ---               | ---              | S5B                 |
| <i>Bonasa umbellus</i>       | Ruffed Grouse             | ---               | ---              | S4                  |
| <i>Botaurus lentiginosus</i> | American Bittern          | ---               | ---              | S4B                 |
| <i>Branta bernicla</i>       | Brant                     | ---               | ---              | S4N                 |
| <i>Branta canadensis</i>     | Canada Goose              | ---               | ---              | S5                  |
| <i>Bubo scandiacus</i>       | Snowy Owl                 | ---               | ---              | SNA                 |
| <i>Bubo virginianus</i>      | Great Horned Owl          | ---               | ---              | S4                  |
| <i>Bucephala albeola</i>     | Bufflehead                | ---               | ---              | S4                  |
| <i>Bucephala clangula</i>    | Common Goldeneye          | ---               | ---              | S5                  |
| <i>Buteo jamaicensis</i>     | Red-tailed Hawk           | ---               | ---              | S5                  |
| <i>Buteo lagopus</i>         | Rough-legged Hawk         | ---               | ---              | S1B,S4N             |
| <i>Butorides virescens</i>   | Green Heron               | ---               | ---              | S4B                 |
| <i>Calcarius lapponicus</i>  | Lapland Longspur          | ---               | ---              | S3B                 |
| <i>Cardinalis cardinalis</i> | Northern Cardinal         | ---               | ---              | S5                  |



| Scientific Name                         | Common Name         | SARA <sup>1</sup> | ESA <sup>2</sup> | S-Rank <sup>3</sup> |
|---|---------------------|-------------------|------------------|---------------------|
| <i>Carduelis flammea</i>                | Common Redpoll      | ---               | ---              | S4B                 |
| <i>Carduelis pinus</i>                  | Pine Siskin         | ---               | ---              | S4B                 |
| <i>Carduelis tristis</i>                | American Goldfinch  | ---               | ---              | S5B                 |
| <i>Carpodacus mexicanus</i>             | House Finch         | ---               | ---              | SNA                 |
| <i>Carpodacus purpureus</i>             | Purple Finch        | ---               | ---              | S4B                 |
| <i>Cathartes aura</i>                   | Turkey Vulture      | ---               | ---              | S5B                 |
| <i>Catharus fuscescens</i>              | Veery               | ---               | ---              | S4B                 |
| <i>Catharus guttatus</i>                | Hermit Thrush       | ---               | ---              | S5B                 |
| <i>Certhia americana</i>                | Brown Creeper       | ---               | ---              | S5B                 |
| <i>Charadrius melodus circumcinctus</i> | Piping Plover       | END               | END              | S1B                 |
| <i>Charadrius vociferus</i>             | Killdeer            | ---               | ---              | S5B,S5N             |
| <i>Chen caerulescens</i>                | Snow Goose          | ---               | ---              | S5B                 |
| <i>Circus hudsonius</i>                 | Northern Harrier    | ---               | ---              | S4B                 |
| <i>Cistothorus palustris</i>            | Marsh Wren          | ---               | ---              | S4B                 |
| <i>Coccyzus erythrophthalmus</i>        | Black-billed Cuckoo | ---               | ---              | S5B                 |
| <i>Colaptes auratus</i>                 | Northern Flicker    | ---               | ---              | S4B                 |
| <i>Columba livia</i>                    | Rock Pigeon         | ---               | ---              | SNA                 |
| <i>Contopus virens</i>                  | Eastern Wood-pewee  | SC                | SC               | S4B                 |
| <i>Corvus brachyrhynchos</i>            | American Crow       | ---               | ---              | S5B                 |
| <i>Corvus corax</i>                     | Common Raven        | ---               | ---              | S5                  |
| <i>Cyanocitta cristata</i>              | Blue Jay            | ---               | ---              | S5                  |
| <i>Cygnus columbianus</i>               | Tundra Swan         | ---               | ---              | S4                  |
| <i>Cygnus olor</i>                      | Mute Swan           | ---               | ---              | SNA                 |
| <i>Dolichonyx oryzivorus</i>            | Bobolink            | THR               | THR              | S4B                 |
| <i>Dryocopus pileatus</i>               | Pileated Woodpecker | ---               | ---              | S5                  |
| <i>Dumetella carolinensis</i>           | Gray Catbird        | ---               | ---              | S4B                 |
| <i>Empidonax alnorum</i>                | Alder Flycatcher    | ---               | ---              | S5B                 |
| <i>Empidonax minimus</i>                | Least Flycatcher    | ---               | ---              | S4B                 |
| <i>Empidonax traillii</i>               | Willow Flycatcher   | ---               | ---              | S5B                 |
| <i>Eremophila alpestris</i>             | Horned Lark         | ---               | ---              | S5B                 |
| <i>Euphagus carolinus</i>               | Rusty Blackbird     | SC                | SC               | S4B                 |
| <i>Falco columbarius</i>                | Merlin              | ---               | ---              | S5B                 |
| <i>Falco peregrinus</i>                 | Peregrine Falcon    | SC                | SC               | S3B                 |

| Scientific Name                    | Common Name             | SARA <sup>1</sup> | ESA <sup>2</sup> | S-Rank <sup>3</sup> |
|------------------------------------|-------------------------|-------------------|------------------|---------------------|
| <i>Falco rusticolus</i>            | Gyrfalcon               | ---               | ---              | SNA                 |
| <i>Falco sparverius</i>            | American Kestrel        | ---               | ---              | S4                  |
| <i>Gallinago delicata</i>          | Wilson's Snipe          | ---               | ---              | S5B                 |
| <i>Gallinula chloropus</i>         | Common Gallinule        | ---               | ---              | S4B                 |
| <i>Gavia immer</i>                 | Common Loon             | ---               | ---              | S5B,S5N             |
| <i>Geothlypis trichas</i>          | Common Yellowthroat     | ---               | ---              | S5B                 |
| <i>Haliaeetus leucocephalus</i>    | Bald Eagle              | ---               | SC               | S2N,S4B             |
| <i>Hirundo rustica</i>             | Barn Swallow            | THR               | THR              | S4B                 |
| <i>Hylocichla mustelina</i>        | Wood Thrush             | THR               | SC               | S4B                 |
| <i>Icteria virens virens</i>       | Yellow-breasted Chat    | END               | END              | S2B                 |
| <i>Icterus galbula</i>             | Baltimore Oriole        | ---               | ---              | S4B                 |
| <i>Icterus spurius</i>             | Orchard Oriole          | ---               | ---              | S4B                 |
| <i>Ixobrychus exilis</i>           | Least Bittern           | THR               | THR              | S4B                 |
| <i>Lanius excubitor</i>            | Northern Shrike         | ---               | ---              | SNA                 |
| <i>Lanius ludovicianus migrans</i> | Loggerhead Shrike       | END               | END              | S2B                 |
| <i>Larus argentatus</i>            | Herring Gull            | ---               | ---              | S5B,S5N             |
| <i>Larus delawarensis</i>          | Ring-billed Gull        | ---               | ---              | S5B,S4N             |
| <i>Larus glaucoides</i>            | Iceland Gull            | ---               | ---              | S4N                 |
| <i>Larus hyperboreus</i>           | Glaucous Gull           | ---               | ---              | S4N                 |
| <i>Larus marinus</i>               | Great Black-backed Gull | ---               | ---              | S2B                 |
| <i>Larus minutus</i>               | Little Gull             | ---               | ---              | S1B                 |
| <i>Lophodytes cucullatus</i>       | Hooded Merganser        | ---               | ---              | S5B,S5N             |
| <i>Megaceryle alcyon</i>           | Belted Kingfisher       | ---               | ---              | S4B                 |
| <i>Megascops asio</i>              | Eastern Screech-Owl     | ---               | ---              | S4                  |
| <i>Melanerpes carolinus</i>        | Red-bellied Woodpecker  | ---               | ---              | S4                  |
| <i>Melanerpes erythrocephalus</i>  | Red-headed Woodpecker   | THR               | SC               | S4B                 |
| <i>Melanitta fusca</i>             | White-winged Scoter     | ---               | ---              | S4B,S4N             |
| <i>Meleagris gallopavo</i>         | Wild Turkey             | ---               | ---              | S5                  |
| <i>Melospiza georgiana</i>         | Swamp Sparrow           | ---               | ---              | S5B                 |
| <i>Melospiza melodia</i>           | Song Sparrow            | ---               | ---              | S5B                 |
| <i>Mergus merganser</i>            | Common Merganser        | ---               | ---              | S5B,S5N             |
| <i>Mergus serrator</i>             | Red-breasted Merganser  | ---               | ---              | S4B,S5N             |
| <i>Mimus polyglottos</i>           | Northern Mockingbird    | ---               | ---              | S4                  |
| <i>Mniotilta varia</i>             | Black-and-white Warbler | ---               | ---              | S5B                 |



| Scientific Name                  | Common Name              | SARA <sup>1</sup> | ESA <sup>2</sup> | S-Rank <sup>3</sup> |
|----------------------------------|--------------------------|-------------------|------------------|---------------------|
| <i>Molothrus ater</i>            | Brown-headed Cowbird     | ---               | ---              | S4B                 |
| <i>Myiarchus crinitus</i>        | Great Crested Flycatcher | ---               | ---              | S4B                 |
| <i>Oreothlypis ruficapilla</i>   | Nashville Warbler        | ---               | ---              | S5B                 |
| <i>Pandion haliaetus</i>         | Osprey                   | ---               | ---              | S5B                 |
| <i>Parkesia noveboracensis</i>   | Northern Waterthrush     | ---               | ---              | S5B                 |
| <i>Passer domesticus</i>         | House Sparrow            | ---               | ---              | SNA                 |
| <i>Passerculus sandwichensis</i> | Savannah Sparrow         | ---               | ---              | S4B                 |
| <i>Passerina cyanea</i>          | Indigo Bunting           | ---               | ---              | S4B                 |
| <i>Pelecanus erythrorhynchos</i> | American White Pelican   | ---               | THR              | S2B                 |
| <i>Petrochelidon pyrrhonota</i>  | Cliff Swallow            | ---               | ---              | S4B                 |
| <i>Phalacrocorax auritus</i>     | Double-crested Cormorant | ---               | ---              | S5B                 |
| <i>Pheucticus ludovicianus</i>   | Rose-breasted Grosbeak   | ---               | ---              | S4B                 |
| <i>Picoides pubescens</i>        | Downy Woodpecker         | ---               | ---              | S5                  |
| <i>Picoides villosus</i>         | Hairy Woodpecker         | ---               | ---              | S5                  |
| <i>Pinicola enucleator</i>       | Pine Grosbeak            | ---               | ---              | S4B                 |
| <i>Pipilo erythrophthalmus</i>   | Eastern Towhee           | ---               | ---              | S4B                 |
| <i>Piranga olivacea</i>          | Scarlet Tanager          | ---               | ---              | S4B                 |
| <i>Plectrophenax nivalis</i>     | Snow Bunting             | ---               | ---              | SNA                 |
| <i>Podilymbus podiceps</i>       | Pied-billed Grebe        | ---               | ---              | S4B,S4N             |
| <i>Poecile atricapillus</i>      | Black-capped Chickadee   | ---               | ---              | S5                  |
| <i>Poliophtila caerulea</i>      | Blue-gray Gnatcatcher    | ---               | ---              | S4B                 |
| <i>Pooecetes gramineus</i>       | Vesper Sparrow           | ---               | ---              | S4B                 |
| <i>Porzana carolina</i>          | Sora                     | ---               | ---              | S4B                 |
| <i>Progne subis</i>              | Purple Martin            | ---               | ---              | S4B                 |
| <i>Quiscalus quiscula</i>        | Common Grackle           | ---               | ---              | S5B                 |
| <i>Rallus elegans</i>            | King Rail                | END               | END              | S2B                 |
| <i>Rallus limicola</i>           | Virginia Rail            | ---               | ---              | S5B                 |
| <i>Regulus satrapa</i>           | Golden-crowned Kinglet   | ---               | ---              | S5B                 |
| <i>Riparia riparia</i>           | Bank Swallow             | THR               | THR              | S4B                 |
| <i>Sayornis phoebe</i>           | Eastern Phoebe           | ---               | ---              | S5B                 |
| <i>Scolopax minor</i>            | American Woodcock        | ---               | ---              | S4B                 |
| <i>Seiurus aurocapilla</i>       | Ovenbird                 | ---               | ---              | S4B                 |
| <i>Setophaga coronata</i>        | Yellow-rumped Warbler    | ---               | ---              | S5B                 |
| <i>Setophaga magnolia</i>        | Magnolia Warbler         | ---               | ---              | S5B                 |

| Scientific Name                    | Common Name   | SARA <sup>1</sup> | ESA <sup>2</sup> | S-Rank <sup>3</sup> |
|------------------------------------|---|-------------------|------------------|---------------------|
| <i>Setophaga pensylvanica</i>      | Chestnut-sided Warbler  | ---               | ---              | S5B                 |
| <i>Setophaga petechia</i>          | Yellow Warbler  | ---               | ---              | S5B                 |
| <i>Setophaga pinus</i>             | Pine Warbler  | ---               | ---              | S5B                 |
| <i>Setophaga ruticilla</i>         | American Redstart   | ---               | ---              | S5B                 |
| <i>Setophaga tigrina</i>           | Cape May Warbler  | ---               | ---              | S5B                 |
| <i>Setophaga virens</i>            | Black-throated Green Warbler                                      | ---               | ---              | S5B                 |
| <i>Sialia sialis</i>               | Eastern Bluebird  | ---               | ---              | S5B                 |
| <i>Sitta canadensis</i>            | Red-breasted Nuthatch   | ---               | ---              | S5                  |
| <i>Sitta carolinensis</i>          | White-breasted Nuthatch   | ---               | ---              | S5                  |
| <i>Sphyrapicus varius</i>          | Yellow-bellied Sapsucker  | ---               | ---              | S5B                 |
| <i>Spizella pallida</i>            | Clay-colored Sparrow  | ---               | ---              | S4B                 |
| <i>Spizella passerina</i>          | Chipping Sparrow  | ---               | ---              | S5B                 |
| <i>Spizella pusilla</i>            | Field Sparrow   | ---               | ---              | S4B                 |
| <i>Spizelloides arborea</i>        | American Tree Sparrow   | ---               | ---              | S4B                 |
| <i>Stelgidopteryx serripennis</i>  | Northern Rough-winged Swallow                                     | ---               | ---              | S4B                 |
| <i>Streptopelia decaocto</i>       | Eurasian Collared-Dove  | ---               | ---              | SNA                 |
| <i>Strix varia</i>                 | Barred Owl  | ---               | ---              | S5                  |
| <i>Sturnella magna</i>             | Eastern Meadowlark  | THR               | THR              | S4B                 |
| <i>Sturnus vulgaris</i>            | European Starling   | ---               | ---              | SNA                 |
| <i>Tachycineta bicolor</i>         | Tree Swallow  | ---               | ---              | S4B                 |
| <i>Thryothorus ludovicianus</i>    | Carolina Wren   | ---               | ---              | S4                  |
| <i>Toxostoma rufum</i>             | Brown Thrasher  | ---               | ---              | S4B                 |
| <i>Troglodytes aedon</i>           | House Wren  | ---               | ---              | S5B                 |
| <i>Troglodytes troglodytes</i>     | Winter Wren   | ---               | ---              | S5B                 |
| <i>Turdus migratorius</i>          | American Robin  | ---               | ---              | S5B                 |
| <i>Tyrannus tyrannus</i>           | Eastern Kingbird  | ---               | ---              | S4B                 |
| <i>Vireo gilvus</i>                | Warbling Vireo  | ---               | ---              | S5B                 |
| <i>Vireo olivaceus</i>             | Red-eyed Vireo  | ---               | ---              | S5B                 |
| <i>Zenaida macroura</i>            | Mourning Dove   | ---               | ---              | S5                  |
| <i>Zonotrichia albicollis</i>      | White-throated Sparrow  | ---               | ---              | S5B                 |
| <b>FISH</b>                        |   |                   |                  |                     |
| <i>Acipenser fulvescens pop. 3</i> | Lake Sturgeon (Great Lakes - Upper St. Lawrence River population) | ---               | END              | S2                  |
| <i>Ammocrypta pellucida</i>        | Eastern Sand Darter (Ontario population)                          | THR               | END              | S2                  |



| Scientific Name                      | Common Name   | SARA <sup>1</sup> | ESA <sup>2</sup> | S-Rank <sup>3</sup> |
|--------------------------------------|---|-------------------|------------------|---------------------|
| <i>Anguilla rostrata</i>             | American Eel  | ---               | END              | S1?                 |
| <i>Esox americanus vermiculatus</i>  | Grass Pickerel  | SC                | SC               | S3                  |
| <i>Ichthyomyzon fossor</i>           | Northern Brook Lamprey (Great Lakes - Upper St. Lawrence populations) | SC                | SC               | S3                  |
| <i>Ichthyomyzon unicuspis</i> pop. 1 | Silver Lamprey (Great Lakes - Upper St. Lawrence populations)         | SC                | SC               | S3                  |
| <i>Lepisosteus oculatus</i>          | Spotted Gar   | END               | END              | S1                  |
| <i>Moxostoma carinatum</i>           | River Redhorse  | SC                | SC               | S2                  |
| <i>Percina copelandi</i>             | Channel Darter  | END               | SC               | S2                  |
| <b>MOLLUSC</b>                       |   |                   |                  |                     |
| <i>Ligumia nasuta</i>                | Eastern Pondmussel  | SC                | SC               | S1                  |
| <i>Villosa iris</i>                  | Rainbow   | SC                | SC               | S2S3                |
| <b>MAMMALS</b>                       |   |                   |                  |                     |
| <i>Canis latrans</i>                 | Coyote  | ---               | ---              | S5                  |
| <i>Urocyon cinereoargenteus</i>      | Gray Fox  | THR               | THR              | S1                  |
| <i>Vulpes vulpes</i>                 | Red Fox   | ---               | ---              | S5                  |
| <i>Castor canadensis</i>             | Beaver  | ---               | ---              | S5                  |
| <i>Alces americanus</i>              | Moose   | ---               | ---              | S5                  |
| <i>Odocoileus virginianus</i>        | White-tailed Deer   | ---               | ---              | S5                  |
| <i>Clethrionomys gapperi</i>         | Southern Red-backed Vole  | ---               | ---              | S5                  |
| <i>Microtus pennsylvanicus</i>       | Meadow Vole   | ---               | ---              | S5                  |
| <i>Ondatra zibethicus</i>            | Muskrat   | ---               | ---              | S5                  |
| <i>Peromyscus leucopus</i>           | White-footed Mouse  | ---               | ---              | S5                  |
| <i>Peromyscus maniculatus</i>        | Deer Mouse  | ---               | ---              | S5                  |
| <i>Didelphis virginiana</i>          | Virginia Opossum  | ---               | ---              | S4                  |
| <i>Napaeozapus insignis</i>          | Woodland Jumping Mouse  | ---               | ---              | S5                  |
| <i>Zapus hudsonius</i>               | Meadow Jumping Mouse  | ---               | ---              | S5                  |
| <i>Erethizon dorsatum</i>            | Porcupine   | ---               | ---              | S5                  |
| <i>Lynx canadensis</i>               | Canada Lynx   | ---               | ---              | S5                  |
| <i>Lynx rufus</i>                    | Bobcat  | ---               | ---              | S4                  |
| <i>Lepus americanus</i>              | Snowshoe Hare   | ---               | ---              | S5                  |
| <i>Sylvilagus floridanus</i>         | Eastern Cottontail  | ---               | ---              | S5                  |
| <i>Mephitis mephitis</i>             | Striped Skunk   | ---               | ---              | S5                  |
| <i>Lontra canadensis</i>             | North American River Otter  | ---               | ---              | S5                  |
| <i>Martes pennanti</i>               | Fisher  | ---               | ---              | S5                  |

| Scientific Name                    | Common Name  | SARA <sup>1</sup> | ESA <sup>2</sup> | S-Rank <sup>3</sup> |
|------------------------------------|--|-------------------|------------------|---------------------|
| <i>Mustela erminea</i>             | Ermine   | ---               | ---              | S5                  |
| <i>Mustela frenata</i>             | Long-tailed Weasel                                   | ---               | ---              | S4                  |
| <i>Mustela nivalis</i>             | Least Weasel   | ---               | ---              | SU                  |
| <i>Mustela vison</i>               | American Mink  | ---               | ---              | S4                  |
| <i>Procyon lotor</i>               | Northern Raccoon                                     | ---               | ---              | S5                  |
| <i>Glaucomys volans</i>            | Southern Flying Squirrel                             | ---               | ---              | S4                  |
| <i>Marmota monax</i>               | Woodchuck  | ---               | ---              | S5                  |
| <i>Sciurus carolinensis</i>        | Eastern Gray Squirrel                                | ---               | ---              | S5                  |
| <i>Tamias striatus</i>             | Eastern Chipmunk                                     | ---               | ---              | S5                  |
| <i>Tamiasciurus hudsonicus</i>     | Red Squirrel   | ---               | ---              | S5                  |
| <i>Blarina brevicauda</i>          | Northern Short-tailed Shrew                          | ---               | ---              | S5                  |
| <i>Sorex cinereus</i>              | Masked Shrew   | ---               | ---              | S5                  |
| <i>Sorex fumeus</i>                | Smoky Shrew  | ---               | ---              | S5                  |
| <i>Sorex hoyi</i>                  | Pygmy Shrew  | ---               | ---              | S4                  |
| <i>Condylura cristata</i>          | Star-nosed Mole                                      | ---               | ---              | S5                  |
| <i>Parascalops breweri</i>         | Hairy-tailed Mole                                    | ---               | ---              | S4                  |
| <i>Ursus americanus</i>            | American Black Bear                                  | ---               | ---              | S5                  |
| <i>Eptesicus fuscus</i>            | Big Brown Bat  | ---               | ---              | S5                  |
| <i>Lasionycteris noctivagans</i>   | Silver-haired Bat                                    | ---               | ---              | S4                  |
| <i>Lasiurus borealis</i>           | Eastern Red Bat                                      | ---               | ---              | S4                  |
| <i>Lasiurus cinereus</i>           | Hoary Bat  | ---               | ---              | S4                  |
| <i>Myotis leibii</i>               | Eastern Small-footed Myotis                          | ---               | END              | S2S3                |
| <i>Myotis lucifugus</i>            | Little Brown Myotis                                  | END               | END              | S4                  |
| <i>Myotis septentrionalis</i>      | Northern Myotis                                      | END               | END              | S3                  |
| <i>Pipistrellus subflavus</i>      | Tri-colored Bat                                      | END               | END              | S3?                 |
| HERPETOZOA                         |  |                   |                  |                     |
| <i>Ambystoma jeffersonianum</i>    | Jefferson Salamander                                 | END               | END              | S2                  |
| <i>Chelydra serpentina</i>         | Snapping Turtle                                      | SC                | SC               | S3                  |
| <i>Chrysemys picta marginata</i>   | Midland Painted Turtle                               | SC                | ---              | S4                  |
| <i>Graptemys geographica</i>       | Northern Map Turtle                                  | SC                | SC               | S3                  |
| <i>Heterodon platirhinos</i>       | Eastern Hog-nosed Snake                              | THR               | THR              | S3                  |
| <i>Nerodia sipedon sipedon</i>     | Northern Watersnake                                  | ---               | ---              | S5                  |
| <i>Plestiodon fasciatus</i> pop. 2 | Common Five-lined Skink (Southern Shield population) | SC                | SC               | S3                  |



| Scientific Name                     | Common Name   | SARA <sup>1</sup> | ESA <sup>2</sup> | S-Rank <sup>3</sup> |
|-------------------------------------|---|-------------------|------------------|---------------------|
| <i>Pseudacris triseriata</i> pop. 1 | Western Chorus Frog (Great Lakes / St. Lawrence - Canadian Shield Population) | THR               | ---              | S3                  |
| <i>Thamnophis sauritus</i>          | Eastern Ribbonsnake (Great Lakes population)                                  | SC                | SC               | S3                  |
| <i>Sternotherus odoratus</i>        | Eastern Musk Turtle   | SC                | SC               | S3                  |
| <b>LEPIDOTERA</b>                   |   |                   |                  |                     |
| <i>Callophrys gryneus</i>           | Juniper Hairstreak  | ---               | ---              | S2                  |
| <i>Danaus plexippus</i>             | Monarch   | SC                | SC               | S2N,S4B             |
| <i>Erynnis martialis</i>            | Mottled Duskywing   | ---               | END              | S2                  |
| <i>Pieris virginensis</i>           | West Virginia White   | ---               | SC               | S3                  |
| <b>BOTANICAL</b>                    |   |                   |                  |                     |
| <i>Acer negundo</i>                 | Manitoba Maple  | ---               | ---              | S5                  |
| <i>Acer platanoides</i>             | Norway Maple  | ---               | ---              | SNA                 |
| <i>Acer rubrum</i>                  | Red Maple   | ---               | ---              | S5                  |
| <i>Acer saccharinum</i>             | Silver Maple  | ---               | ---              | S5                  |
| <i>Acer saccharum</i>               | Sugar Maple   | ---               | ---              | S5                  |
| <i>Achillea millefolium</i>         | Common Yarrow   | ---               | ---              | SE                  |
| <i>Alliaria petiolate</i>           | Garlic Mustard  | ---               | ---              | SNA                 |
| <i>Arctium minus</i>                | Common Burdock  | ---               | ---              | SNA                 |
| * <i>Asclepias quadrifolia</i>      | Four-leaved Milkweed  | ---               | END              | S1                  |
| <i>Barbarea vulgaris</i>            | Bitter Wintercress  | ---               | ---              | SNA                 |
| <i>Betula papyrifera</i>            | Paper Birch   | ---               | ---              | S5                  |
| <i>Bidens frondosa</i>              | Devil's Beggarticks   | ---               | ---              | S5                  |
| <i>Bromus inermis</i>               | Awnless Brome   | ---               | ---              | SNA                 |
| <i>Caltha palustris</i>             | Yellow Marsh Marigold   | ---               | ---              | S5                  |
| <i>Carex stricta</i>                | Tussock Sedge   | ---               | ---              | S5                  |
| <i>Cirsium arvense</i>              | Canada Thistle  | ---               | ---              | SNA                 |
| <i>Cornus racemosa</i>              | Gray Dogwood  | ---               | ---              | S5                  |
| <i>Cornus sericea ssp sericea</i>   | Red-osier Dogwood   | ---               | ---              | S5                  |
| <i>Dactylis glomerata</i>           | Orchard Grass   | ---               | ---              | SNA                 |
| <i>Daucus carota</i>                | Wild Carrot   | ---               | ---              | SNA                 |
| <i>Equisetum arvense</i>            | Field Horsetail   | ---               | ---              | S5                  |
| <i>Fragaria virginiana</i>          | Wild Strawberry   | ---               | ---              | S5                  |
| <i>Fraxinus Americana</i>           | White Ash   | ---               | ---              | S4                  |
| <i>Fraxinus nigra</i>               | Black Ash   | ---               | END              | S4                  |
| <i>Fraxinus pennsylvanica</i>       | Green Ash   | ---               | ---              | S4                  |

| Scientific Name                                   | Common Name                               | SARA <sup>1</sup> | ESA <sup>2</sup> | S-Rank <sup>3</sup> |
|---|---|-------------------|------------------|---------------------|
| <i>Geranium maculatum</i>                         | Spotted Geranium                          | ---               | ---              | S5                  |
| <i>Glechoma hederacea</i>                         | Ground Ivy                                | ---               | ---              | SNA                 |
| <i>*Gratiola quartermaniae</i>                    | Limestone Hedge-hyssop                    | ---               | ---              | S2                  |
| <i>Hesperis matronalis</i>                        | Dame's Rocket                             | ---               | ---              | SNA                 |
| <i>Impatiens capensis</i>                         | Spotted Jewelweed                         | ---               | ---              | S5                  |
| <i>*Juglans cinerea</i>                           | Butternut                                 | END               | END              | S3?                 |
| <i>Juniperus virginiana</i>                       | Eastern Red Cedar                         | ---               | ---              | S5                  |
| <i>Laportea canadensis</i>                        | Wood Nettle                               | ---               | ---              | S5                  |
| <i>Leucanthemum vulgare</i>                       | Oxeye Daisy                               | ---               | ---              | SNA                 |
| <i>Lonicera tatarica</i>                          | Tartarian Honeysuckle                     | ---               | ---              | SNA                 |
| <i>Lotus corniculatus</i>                         | Garden Bird's-foot Trefoil                | ---               | ---              | SNA                 |
| <i>Lythrum salicaria</i>                          | Purple Loosestrife                        | ---               | ---              | SNA                 |
| <i>Malus pumila</i>                               | Common Apple                              | ---               | ---              | SNA                 |
| <i>Medicago lupulina</i>                          | Black Medic                               | ---               | ---              | SNA                 |
| <i>Moehringia lateriflora</i>                     | Grove Sandwort                            | ---               | ---              | S5                  |
| <i>Onoclea sensibilis</i>                         | Sensitive Fern                            | ---               | ---              | S5                  |
| <i>Parthenocissus quinquefolia</i>                | Virginia Creeper                          | ---               | ---              | S4?                 |
| <i>Pastinaca sativa</i>                           | Wild Parsnip                              | ---               | ---              | SNA                 |
| <i>Phalaris arundinacea</i>                       | Reed Canary Grass                         | ---               | ---              | S5                  |
| <i>Phleum pratense</i>                            | Common Timothy                            | ---               | ---              | SNA                 |
| <i>Phragmites australis</i> ssp. <i>Australis</i> | European Common Reed                      | ---               | ---              | SNA                 |
| <i>Picea abies</i>                                | Norway Spruce                             | ---               | ---              | SNA                 |
| <i>Picea glauca</i>                               | White Spruce                              | ---               | ---              | S5                  |
| <i>Picea pungens</i>                              | Blue Spruce                               | ---               | ---              | SNA                 |
| <i>Pinus strobus</i>                              | Eastern White Pine                        | ---               | ---              | S5                  |
| <i>Pinus sylvestris</i>                           | Scotch Pine                               | ---               | ---              | SNA                 |
| <i>Poa pratensis</i> ssp. <i>pratensis</i>        | Kentucky Bluegrass                        | ---               | ---              | S5                  |
| <i>Populus tremuloides</i>                        | Trembling Aspen                           | ---               | ---              | S5                  |
| <i>*Potamogeton ogdenii</i>                       | Ogden's Pondweed                          | END               | END              | SH                  |
| <i>Prunus serotina</i>                            | Wild Black Cherry                         | ---               | ---              | S5                  |
| <i>Quercus macrocarpa</i>                         | Bur Oak                                   | ---               | ---              | S5                  |
| <i>Rhamnus cathartica</i>                         | Common Buckthorn                          | ---               | ---              | SNA                 |
| <i>Rhus hirta</i>                                 | Staghorn Sumac                            | ---               | ---              | S5                  |
| <i>Ribes rubrum</i>                               | Northern Red Currant                      | ---               | ---              | SNA                 |
| <i>Rubus allegheniensis</i>                       | Alleghany Blackberry or Common Blackberry | ---               | ---              | S5                  |



| Scientific Name                                      | Common Name            | SARA <sup>1</sup> | ESA <sup>2</sup> | S-Rank <sup>3</sup> |
|--|------------------------|-------------------|------------------|---------------------|
| <i>Rubus sachalinensis</i> var. <i>sachalinensis</i> | Wild Red Raspberry     | ---               | ---              | S5                  |
| <i>Rumex crispus</i>                                 | Curly Dock             | ---               | ---              | SNA                 |
| <i>Toxicodendron rydbergii</i>                       | Rydberg's Poison Ivy   | ---               | ---              | S5                  |
| <i>Salix bebbiana</i>                                | Bebb's Willow          | ---               | ---              | S5                  |
| <i>Sambucus racemosa</i> ssp. <i>Pubens</i>          | Red-berried Elderberry | ---               | ---              | S5                  |
| <i>Sanguinaria canadensis</i>                        | Bloodroot              | ---               | ---              | S5                  |
| <i>Spiraea alba</i>                                  | White Meadowsweet      | ---               | ---              | S5                  |
| * <i>Sporobolus heterolepis</i>                      | Prairie Dropseed       | ---               | ---              | S3                  |
| <i>Syringa vulgaris</i>                              | Common Lilac           | ---               | ---              | SNA                 |
| <i>Taraxacum officinale</i>                          | Common Dandelion       | ---               | ---              | SNA                 |
| <i>Thuja occidentalis</i>                            | Eastern White Cedar    | ---               | ---              | S5                  |
| <i>Tilia americana</i>                               | American Basswood      | ---               | ---              | S5                  |
| <i>Trifolium pratense</i>                            | Red Clover             | ---               | ---              | SNA                 |
| <i>Typha angustifolia</i>                            | Narrow-leaved Cattail  | ---               | ---              | SNA                 |
| <i>Typha latifolia</i>                               | Broad-leaved Cattail   | ---               | ---              | S5                  |
| <i>Ulmus americana</i>                               | American Elm           | ---               | ---              | S5                  |
| <i>Viola canadensis</i> var. <i>rugulosa</i>         | Rugulose Vioet         | ---               | ---              | S4?                 |
| <i>Vitis riparia</i>                                 | Riverbank Grape        | ---               | ---              | S5                  |
| <i>Zanthoxylum americanum</i>                        | Northern Prickly Ash   | ---               | ---              | S5                  |

## Notes:

1 Federal SARA (END = Endangered, THR = Threatened, SC = Special Concern)

2 Provincial ESA (END = Endangered, THR = Threatened, SC = Special Concern)

3 Ontario S-Rank (S5= widespread in Ontario; S4 = apparently secure; S3 = vulnerable; S2 = imperilled; S1 = extremely rare in Ontario; ? = inexact or uncertain; B = breeding status; N = non-breeding status; SH = considered to be possibly extirpated (historical); SNA = not applicable/non-native)

\* Botanical species identified during records review